UNIVERSITY OF SOUTHAMPTON

FACULTY OF HUMANITIES, ARTS & SOCIAL SCIENCES

School of Social Sciences

Determinants and Consequences of Unintended Pregnancy amongst Young Couples in Nepal

by

Mahesh Chandra Puri

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ABSTRACT

FACULTY OF HUMANITIES, ARTS & SOCIAL SCIENCES
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DETERMINANTS AND CONSEQUENCES OF UNINTENDED PREGNANCY AMONGST YOUNG COUPLES IN NEPAL

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This thesis describes, a population based study conducted in 2003 to explore the definitions of terminologies related to pregnancy intentions, to identify the determinants of unintended pregnancy, and to examine the decision making processes associated with abortion and the consequences of unintended pregnancy in five districts of Nepal. The study used both qualitative and quantitative research methods. In the qualitative study, 127 free listing, 66 in-depth interviews with men, women, community leaders and health service providers and 30 case histories were carried out. In the quantitative study, a sample survey with 997 married women aged 15-24 years and 499 married men aged 15-27 years was conducted using a two-stage cluster sampling technique. The Nepal DHS 2001 data were also used to estimate the prevalence of unintended pregnancy and to enable comparison. The qualitative data were analysed using a thematic approach, the quantitative data were analysed using both bivariate and multivariate techniques.

The study revealed that the terminologies related to pregnancy intention used in previous research were generally not understood easily by the respondents. The definition used for measuring unintended pregnancy in the DHS surveys is inadequate. The prevalence of unintended pregnancy in the Nepal DHS was under estimated mainly due to the use of inadequate definition. One in two young women in Nepal ever experienced unintended pregnancy before the age of 24 years, which is quite high. Those women and men who have younger age, higher number of children, smaller desired family size, less methods known, higher level of education, living in the western region, high exposure to mass media, and poor household wellbeing were more likely to experience unintended pregnancy. Despite high prevalence of unintended pregnancy, abortion is low. However, the procedure used for abortion was generally unsafe in the first instance. Multiple factors affect the decision making stage. Various socioeconomic factors, cultural and religious beliefs and health concerns were the major reasons for not terminating an unintended pregnancy. The study revealed that unintended pregnancies have multiple impacts on women's health and their social and family life.

The findings suggest that pregnancy intendedness should not only be measured by the timing of childbearing as used by the most DHS studies; instead, it should include some additional personal, inter-personal, and context specific questions. The results highlighted the need for a comprehensive response to improve the reproductive and sexual health of young couples in Nepal.

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CHAPTER 1
INTRODUCTION

This thesis contributes to a better understanding of the problems related to measuring pregnancy intentions. It also seeks to identify the major determinants and consequences of unintended pregnancy amongst young couples in Nepal. It will also highlight the programmatic implications and areas for future research which will be useful for policy revision and adequately addressing the needs of young couples. In the context of legalisation of abortion recently in the country, this information is also expected to serve as a bench mark for future comparison.

The purpose of this chapter is to give a brief overview of the context of Nepal and the study objectives, research questions and the importance of the study in the country. After a brief discussion on the background of the study, achievement of health programme and research needs, the main objectives and research questions to be addressed in this research are discussed. The last section of this chapter presents a brief overview of the context of Nepal.

1.1 Background

Young couple's behavioural patterns and reproductive health needs are poorly understood and served in Nepal, despite the fact that young people comprise a significant proportion of the population of the country. Teenage mothers and their children face a higher-level risk of morbidity and mortality than their older counterparts. Early childbearing may also impede young women's educational attainment and opportunities as well as employment activities. This, in turn, impacts negatively on the country's development as a whole.

Nepal, being one of the signatories of the International Conference on Population and Development (ICPD) Plan of Action and the World Health Assembly's Reproductive Health Strategy, committed to improve the reproductive health of its people. Accordingly, the Ninth Five Year plan of the government has given emphasis to developing a special programme in population and reproductive health with due focus on young people. This is supported by the development of the 'National Reproductive Health Strategy (NRHS) and National Strategies for Adolescents' Health. In the NRHS,

adolescent reproductive health has been identified as one of the important components of overall reproductive health (MOH, 2001). Together, the low utilisation of reproductive health services and a significant number of unintended pregnancies amongst young couples suggest a strong need for new kinds of health education, counselling of young couples as well as new forms of health service provision. The development of new education programmes and health services should be based on concrete information about actual behavioural patterns amongst those who are facing the problems. However, no past research has been conducted in Nepal to address the problem of unintended pregnancies amongst this segment of population, a situation that urgently needs to be addressed. The study findings will be very useful in refining recently developed national reproductive health policy and national strategies for adolescents' reproductive health, both for the government as well as the NGOs/INGOs and other private organizations working on reproductive health care intervention programmes for young people in Nepal.

1.2 Achievements of the programmes and research need

The fertility rate in Nepal has reduced from 5.1 births per woman in 1984-86 to 4.1 births per woman for the period 1999-2001, but this is still relatively high compared with neighbouring countries. One in six women aged 15-19 years already had at least one child. By the time women reach 24 years; two in three have at least one child. Despite high knowledge of modern contraceptive methods amongst ever-married couples, the use of contraception is still low. Only 39 per cent of currently married women are using a modern method of contraception. Furthermore, contraceptive use amongst young women is very low compared with that amongst older women. For example, only nine per cent of married women aged 15-19 years are currently using a modern method of contraception compared with 52 per cent of women aged 35-39 years. Twenty-eight per cent of currently married women in Nepal have an unmet need for family planning services. Of them, 12 per cent having a need for spacing and 16 per cent having a need for limiting births. The unmet need for spacing is higher amongst younger women compared with older women (Ministry of Health (Nepal) *et al.*, 2002).

Despite a steady increase in contraceptive practice, successive national surveys in Nepal indicate that the prevalence of mistimed and unwanted births amongst women of reproductive age (15-49 years) increased from 25 per cent in 1991 to 35 per cent in 2002. Amongst married young women (15-24 years), about one-third of the births are reported

unwanted (Ministry of Health (Nepal) *et al.*, 2002). A small study conducted by Centre for Research on Environment Health and Population Activities (CREHPA) estimated that 39 per cent of all pregnancies were unintended amongst young couples aged 15-24. Another study conducted amongst young factory workers (14-19 years) revealed that one in every four girls (26 per cent) had experienced at least one unwanted pregnancy (Puri, 2002). Abortion was strictly illegal until September 2002 but reported to be common[1]. Information on the prevalence of induced abortion is not available. However, a hospital-based study by CREHPA showed that 20 per cent of patients admitted for post abortion complications were under the age of 20 years. Most of these young women are married and currently living with their husband (Thapa and Padhye, 2001).

Young people comprise an important group with health needs in Nepal. Approximately 65 per cent of the population is below age 24 (CBS, 2002). Due to the high level of fertility and the young age distribution of the population, the proportion of young people in the total population is likely to increase in the coming years (Pradhan *et al.*, 1996). It is important to address their many needs, particularly those concerned with reproductive health. A number of socio-cultural factors and traditional beliefs operating in Nepalese societies have contributed to a high level of illiteracy, early age at marriage, early and frequent child bearing with their associated complications, unintended pregnancies and unsafe abortion-related health risks for young people (Tamang and Nepal, 1998). In addition, an apparent trend of a lowering of the age of menarche, an increase in age at marriage (which increases the risk of involvement on early sexual experimentation), changes in values brought by increasing urbanisation, exposure to foreign cultures, tourism, the mass media, and a decline in the prevalence of the extended family, add to the health problems of young people (CREHPA, 1996). Although modernization and the fast development of communication systems provide advancement and opportunities for the young people as well, without adequate education and training they will be unable to meet the demands of modern workplaces and will be ill-equipped to deal with and assess the ramifications of change (AGI, 1998).

One of the major concerns raised at the International Conference on Population and Development (ICPD) held in Cairo in 1994 was how to understand and meet the needs of young people for reproductive and sexual health information and services (FCI, 1994).

[1] Abortion was legalised in the country in September 2002 but the service has been only available at a few government and private hospitals from February 2004.

The ICPD emphasised that young people of both sexes are typically poorly informed about how to protect themselves from unwanted pregnancies and STIs, including HIV/AIDS. The consensus that emerged in Cairo was that there was an urgent need to reduce early pregnancies, and to reduce young people's risk in relation to unsafe abortion and STIs. Despite the high level of unwanted pregnancies and morbidity and mortality associated with induced abortion amongst young women, their behaviours, the extent of the problem and relative degrees of risks of unintended pregnancies are not well understood in Nepal. Moreover, the determinants of unintended pregnancy and strategies adopted to deal with it are not well explored. In particular, substantive data are lacking concerning the understanding of the terminologies used by young people themselves regarding pregnancies, and the circumstances leading to unintended pregnancies. Further, neither the pathways that lead to unintended pregnancies and induced abortion, nor the decision-making processes that lead to induced abortion are known. Such data are relevant for designing appropriate national and community based intervention programmes that try to prevent unintended pregnancies and unsafe abortions. The Ministry of Health of Nepal has recently developed a national adolescent health strategy; however, to date, there is no public sector reproductive health programme focusing specially on young people.

1.3 Objectives of the study

The main objective of the study is to identify the major determinants and consequences of unintended pregnancies amongst young married couples (15-24 years) in Nepal. The study also aims to explore the understanding of the terms related to pregnancy intentions from the Nepalese perspective. The ultimate aim is to identify the strategies by which the reproductive and sexual health of these young couples can be improved most effectively. More specifically, the study addresses the following research questions.

1.4 Research questions

i. How do young people and community members (young people aged 15-24, community level health workers, and male and female community leaders) define terms related to pregnancy intentions? What do these actually mean for them? What is the range of vocabularies used for pregnancy and abortion?

ii. What proportion of the total pregnancies experienced among young couples in Nepal are unintended? What factors are associated with unintended pregnancies?
iii. How are decisions made in dealing with unintended pregnancies, especially with reference to seeking induced abortion?
iv. What are the pathways (personal characteristics, relationship, situations, social, and abortion law etc) that lead from unintended conception to induced abortion?
v. What are consequences of unintended pregnancy?

Considering the focus of the study and relative lack of existing information, both qualitative and quantitative research techniques were used. The information was collected in three phases. In the first phase, 127 free listings and 66 in-depth interviews with young married women and men, health services providers, and community leaders were carried out. In the second phase, a sample survey with 997 women aged 15-24 years and 499 men aged 15-27 years was conducted. In the third phase, 30 in-depth case histories with young men and women who had experienced unintended pregnancy were carried out. Detailed descriptions on the areas of study, sample size and selection procedures are presented in Chapter Three.

1.5 Country context

Nepal is a predominately hilly and mountainous small land-locked country bordering with the People's Republic of China in the north and India in the east, south and west. The country has diverse cultures, climates, traditions and languages. A large percentage of the population lives in remote areas, without access to basic infrastructure or services. The country is divided into three geographic regions: the *terai* (plains belt), the hills, and the mountains. As one moves from the *terai* up to the mountains, living conditions and access to health care become increasingly difficult. As a result, there are wide discrepancies in health services in different regions.

The total area of the country is 147, 181 square kilometres. The population is about 23 millions with 781, 686 live births occurring every year (CBS, 2002). The population has more than doubled in the last 35 years. Life expectancy is one of the lowest in the world: 53.5 years for women and 55 years for men (Pradhan *et al.*, 1996). The country has per capita income of about $200 a year, and about 49 per cent of its population live below the poverty line. Development strategies have been hindered, in part, by topography, by

marked caste and class distinction and unequal distribution of power and resources, as well as by severe gender discrimination in spheres of public and private life. Particularly in rural areas, where approximately 86 per cent of Nepalese live, women's access to literacy, property, and economic resources is often limited.

Nepal has one of the highest maternal death rates amongst the South Asian Association for Regional Cooperation (SAARC) countries. Reported maternal mortality ratios (MMRs) vary from 539 per 100,000 live births to 1,500 per 100,000 live births in Nepal whereas it is 390, 380, 420, and 40 per 100,000 live births for Bangladesh, Bhutan, India and Sri Lanka respectively (Pradhan *et al.*, 1996; WHO/UNICEF, 1996). It is estimated that maternal deaths due to unsafe abortion account for more than half of the maternal deaths in the country (CREHPA, 2000). Beside unsafe abortions, Nepal's high maternal mortality and morbidity rates are associated with a number of other factors, such as early, closely spaced, and repeated pregnancies; poor health and nutritional status of women; insufficient facilities of essential obstetric care; inaccessibility of health services; low utilization of health services; harmful traditional beliefs and practices and the low status of women. The vast majority of births (89 per cent) take place at home, often under unhygienic conditions and with untrained attendants (Cobb *et al.*, 2001). Physicians attend only 7.8 per cent of all births and nurses and auxiliary nurse-midwives (ANMs) attend a further 3.1 per cent (Cobb *et al.*, 2001).

Since the late 1960s, His Majesty's Government of Nepal (HMG/N) has recognized the need to balance population growth with economic growth. Family planning services in Nepal were started by the Family Planning Association of Nepal (a non governmental organization) in 1959. The Nepalese government established the Nepal Family Planning and Maternal and Child Health Project in 1968 and gradually expanded to cover all 75 districts in Nepal.

Now the family planning services have become an integral part of government health services. Currently, temporary family planning methods (condoms, the pill, and injectable) are provided on a regular basis through national, regional, zonal, and district hospitals, primary health care centres, or health centres, health posts, sub health posts and peripheral health workers, and volunteers. Services such as Norplant implants and IUD insertions are only available at a limited number of hospitals, health centres, and selected health posts where trained personnel are available. Depending on the district, sterilization

services are provided at static sites through scheduled seasonal or mobile outreach services (Ministry of Health (Nepal)/New Era/ORC Macro, 2002).

The family planning programme of the government supports a variety of approaches, including outreach programs, community-based programs, and private sector involvement. Besides government programmes, a number of non-governmental organizations (NGOs) are also involved in the delivery of family planning services at the grass-roots level. In addition to service delivery, a few NGOs are also involved in behaviour change communication programmes including Information, Education and Communication (IEC) and adult literacy classes with a focus on family planning.

1.6 Organization of the thesis

The thesis is presented in eight chapters, including the present introduction chapter. A review of the relevant literature is presented in Chapter Two. Chapter Three summarizes the study design and methods for data collection. Chapter Four explores the terminologies related pregnancy planning intentions, their meanings and associated problems to measurement. Chapter Five examines the prevalence of unintended pregnancy and identifies the determinants of unintended pregnancy. Decision-making processes on accepting or terminating a pregnancy are presented in Chapter Six. Chapter Seven discusses the consequences of unintended pregnancy. The final chapter (chapter 8) presents the summary, conclusions and recommendations from the study.

CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

The purpose of this chapter is to review the existing literature on the meanings of terminologies related to pregnancy intentions, determinants and consequences and the decision-making context of unintended pregnancy amongst young people and identify the research gaps. This chapter begins with a discussion on the complexities surrounding the terms 'wanted', 'unwanted', 'planned', 'unplanned', 'intended' and 'unintended' pregnancy. Definitions of young people, general overviews about young people, teenage childbearing, knowledge of contraceptives and contraceptive use amongst young people, and sexual behaviour of young people are also discussed in this chapter. In addition, the prevalence and trends of unwanted pregnancies and births, the rate of induced abortion, socio-demographic determinants of unintended pregnancies, the consequences of unintended pregnancies and abortion, and decision-making processes are discussed. Finally, the research gaps in this area are examined.

Very little published literature has been found that focuses on the determinants and consequences of unintended pregnancy amongst married young people in developing countries and particularly in Nepal. These types of literature are scarce in the countries where abortion is not legal. Some studies have been conducted on similar topics but they provide only superficial information and are mainly focussed on unmarried people only. No systematic study on this topic with married young couples (15-24 years) has been conducted before in Nepal. Moreover, the available studies conducted in other countries have not used a particular age limit or boundary to refer to young people, which causes difficulties in comparing results between countries. Furthermore, there is very little known about intended and unintended pregnancy in local socio-cultural contexts, levels and trends of unintended pregnancy and their associated factors. Also very little is known, or at least scientifically not documented, about the pathways that lead from unwanted pregnancies to induced abortion and the decision-making processes on abortion amongst young couples in Nepal and elsewhere. However, in this chapter, an attempt has been made to review such literature as is available.

2.2 Describing the 'wantedness' or 'intendedness' status of pregnancies

The terms 'planned', 'unplanned', 'intended', 'unintended', 'wanted' and 'unwanted' are often used in relation to pregnancy in health policy, health services and health research. However, no one clear acceptable definition of unintended pregnancy and its measurement has been found in the literature. The development of terms related to unintended pregnancy and their measurement could be traced back to the initial population-based surveys of fertility behaviours and intentions, beginning with the Indianapolis Study in 1941. The intended – mistimed - unwanted classification of pregnancies was developed in analysis of fertility surveys conducted in the 1950s and 1960s (Peterson and Mosher, 1999). The first extensive information on unwanted fertility comes from the 'Growth of American Families (GAP) Study' conducted in 1955. In this study, fertility was defined as 'completely planned' when the couple used contraception regularly and conceived only when they stopped contraceptive practice for the purpose of having a child. 'Partially planned fertility' described those couples who did not have more children than they wanted but experienced spacing failures in the sense that some pregnancies occurred considerably earlier (or later) than planned. The concept of 'excess fertility' was reserved for those situations when the couple's most recent pregnancy was unwanted then or later by the wife, the husband, or both. The question asked was "Before your last pregnancy, did you really want another child at some time in the future, or would you just as soon not to have had one"? (David, 1988).

In the Demographic Health Surveys, women are asked a series of questions for each child born in the preceding five years (in some countries two years and in some countries three years) and any current pregnancies to determine whether the particular pregnancy was wanted then (planned), wanted later (mistimed), or not wanted at all (unplanned). This information may in fact underestimate unplanned childbearing since women may rationalize past unplanned births and declare them planned once they have occurred (Ministry of Health (Nepal)/New Era/ORC Macro, 2002). The National Surveys of Family Growth (NSFG) of the USA have used a similar definition to that in the DHS surveys. In the original NSFG, births were categorized as 'unplanned' if the woman had been practising contraception when she became pregnant, if she had not wanted to become pregnant until a later time or if she had wanted no more children ever (Henshaw, 1998). In later surveys of the NSFG (after 1995) several measures of pregnancy

wantedness were included (Peterson and Mosher, 1999). In these surveys, the pregnancies of a young unmarried woman having an abortion would be classified as being mistimed (but wanted) if she said she hoped to marry and have children someday. On the other hand, an accidental pregnancy to an older, married woman who considered her family complete would be classified as unwanted. Sable (1999) argues that, in fact, the opposite is true. The young woman's 'mistimed' pregnancies may truly be unwanted, while the older woman's 'unwanted' pregnancies may be welcomed and carried to term.

In much research literature, the terms 'planned', 'unplanned', 'intended', 'unintended', 'wanted' and 'unwanted' and the concepts of 'planning' or 'intending' are treated as self-evident and unproblematic (Chow *et al.*, 1987; Metson, 1988; Smith, 1990; O'Campo *et al.*, 1993; Warner *et al.*, 1996; Mayer, 1997; McGovern *et al.*, 1997). The approach taken in large surveys such as the World Fertility Surveys, Demographic and Health Surveys and NSFG surveys has been less crude; planning or intention status has tended to be elicited by means of multi-dimensional questions probing not only intentions, but also contraceptive use, reactions to pregnancy, timing of pregnancy plans and family size intentions. However, these questions have been used in various combinations and in different forms, suggesting a lack of clarity about this concept. Most of these questions have been related to the circumstances of births rather than abortions, the assumption being that all abortions are carried out for unplanned/unintended pregnancies (Barrett and Wellings, 2002). Researchers have raised several other issues that undermine the validity of intendedness as it is currently measured. The first problem is recall bias, which is a common problem in retrospective questions about pregnancy intentions. Second, wantedness may change over time. For example, once a woman has a baby, she may be more likely to say that the pregnancy occurred at the right time, regardless of how she felt when she actually became pregnant. Third, because pregnancy intention involves human emotional and psychological factors, it is an extremely complex concept to measure. In addition, an ideal time to have children is too complicated to examine because partners may have different views on timing. Discrepancies between the women's stated and actual contraceptive practice also complicates the issue of measuring intention status (Sable, 1999). Research on how young women themselves and the key stake holders (community leaders, health service providers) understand terms such as 'planned', 'unplanned', 'intended', 'unintended', 'wanted' and 'unwanted' is limited. One USA study, carried out in 1996 with 18 pregnant women using depth interviews, provided

information on how women understood these terms. They found that the definitions of terms related to pregnancy varied substantially amongst women and were highly correlated to social and cultural influences. The concepts of wanted and unwanted pregnancy were qualitatively distinct from the concepts of planned and unplanned pregnancy and were more relevant to the decision to continue or abort the pregnancy. Attitudes of male partners towards the pregnancy were very influential in how women defined their pregnancies (Fischer *et al.*, 1999). Another USA study explored concepts of planning using focus groups of young pregnant African-American women and white women of low or marginal income status in North Carolina (Moss *et al.*, 1997). In 1999, the Family Planning Association of Britain commissioned a market research company to carry out focus groups and interviews with women of different ages and socio-economic status to explore the attitudes to planning (FPA, 1999).

Another study in Britain investigated a new measure of pregnancy planning/intention using in-depth interviews with 47 women recruited purposively from antenatal clinics, termination services and general practitioners. The study found that, when discussing the circumstances of their pregnancies, women tended not to use the above terms spontaneously. When asked to explain the terms, women were able to do so but there was considerable variation in understanding. Women applied the term 'planned' only if they had met four criteria. Intending to become pregnant and stopping contraception were not sufficient criteria, in themselves, to apply the term; partner agreement and reaching the right time in terms of lifestyle/life stage were also necessary. In contrast, 'unplanned' was a widely applied term and covered a variety of circumstances of pregnancy. The other terms were less favoured, 'unwanted' being disliked (Barrett and Wellings, 2002).

Although Barrett and Wellings (2002) study helped to clarify the understanding of these terms, socio-economic and cultural practice is completely different in Nepal compared with that in Britain. Further, the definition of marital status and living arrangements and styles also varies widely between these two countries. Young married women's understanding of these terms is shaped by their circumstances, social values and cultures along with other factors mentioned above, Nepalese young women might have other ways of describing the intendedness of their pregnancies. For these reasons, the findings from previous studies cannot be generalized to Nepal. Therefore, further research is needed to

expand approaches to these concepts and to develop improved ways of measuring them in future studies in different contexts.

2.3 Towards a definition of young people

Adolescence has been defined by the World Health Organization as being between the ages 10 and 19 years while youth is defined as the 15-24 year age group (WHO, 1993). However, the meaning of the term 'adolescent' varies from one culture to another and little agreement can be found as to when adolescence begins and ends. Adolescence is sometimes divided into early, middle and late periods roughly grouped as 10-14, 15-17 and 18-19 years. These periods roughly correspond with phases in physical, social and psychological development in the transition from childhood to adulthood (UNICEF/WHO, 1995). Although the decade of life from 10-19 years provides us with a formal temporal definition of an adolescent, the development stage known as adolescence has attributes and characteristics that mark it out as a special phase of life. It is important to realise that the changes in physical, social and psychological development which are part of adolescence may not necessarily correspond neatly with specific ages since there is considerable variation in their timing from individual to individual (UNICEF/WHO, 1995). In recent articles the term 'young people' has been commonly used instead of 'adolescent' since it is more neutral in meaning. The latter term carries an implication of homogeneity amongst people within certain age brackets, which may lead to certain assumptions and associations regarding their behaviour and attitudes (Ingham, 1992). Therefore, this study also uses the term 'young people' rather than adolescent. The principal research subjects for this study are married young couples, therefore, the age range used here is 15-24 years for women and 15-27 years for men and this refers to author's general definition of young people from Chapter Three.

2.4 Young people in Nepal

In Nepal, about 65 per cent of the total population are below the age of 24 years (CBS, 2002) and the proportion of those aged between 15 and 19 years increased by more than 27 per cent during 1981-91 (CBS, 1995). Traditionally boys and girls are married at a young age; this applies particularly to girls who marry shortly after puberty, or sometimes even before. Choosing a partner is traditionally regarded as the parents' responsibility, and frequently neither the bride nor groom has any real say in the choice. Despite laws

stipulating the legal age at marriage 20 years without the consent of guardians, early marriage continues to be the norm in most ethnic groups. One Nepalese study has shown that 34 per cent of 15 year old girls are already married (CREHPA, 1996). The median age at first marriage for women aged 15-49 is 16.6 years. The median age at first marriage has risen slowly over the last 25 years or so from 16.1 years amongst the cohort of women currently age 45-49 to 16.8 years amongst the cohort of women age 20-24. Rural women marry about a year earlier than urban women. On average men marry about three years later than women (Ministry of Health (Nepal)/New Era/ORC Macro, 2002). According to the 2001 DHS, there has been no change in the median age at marriage amongst males from 1996 to 2001. Similar trend has been observed in South Asian countries (Bott and Jejeebhoy, 2003).

The fertility of young women is high in Nepal compared with neighbouring countries. Of all young married females aged 15-19, about 24 per cent bear children. The Nepal DHS study (2001) reveals that one in six teenage women have at least one child. The proportion of teenage women who have two or more children is negligible until age 18 and then increases substantially to 12 per cent amongst women age 19. More than half of women have had two or more children by the age of 24 years. Similar patterns have been observed in other developing countries. For example, some eight to 15 per cent of young women had a child by the age of 15 in Cameroon, Liberia, Malawi, Mali, Nigeria, and Bangladesh. The proportion of young women who have a child by the age of 18 is much higher, ranging between 15 and 20 per cent in most Latin American countries and in some countries of North Africa, the near East and Asia (Singh, 1998).

Some major social and health conditions and their contributing factors for young people in Nepal are summarised in Table 2.1. As shown in the table, young people are facing problems of nutritional anaemia, early marriage and early childbearing, which result in complications of pregnancy and childbirth, unintended pregnancy, unsafe abortion, domestic violence and sexual coercion. Reproductive Tract Infections (RTIs) and Sexually Transmitted Infections (STIs) including HIV/AIDS are emerging as major health problems amongst young people. The major contributing factors for these problems are socio-cultural factors, ignorance, lack of quality health services, poverty, level of education and gender discrimination (Tamang and Nepal, 1998). Although this

information identifies the various problems including unintended pregnancy and unsafe abortion faced by young people in Nepal, no study has looked into depth of the problems.

Table 2.1 Young people's health and social conditions and their contributing factors: Nepalese context

Prevailing social and health conditions for young people	Contributing factors
Early marriage	Socio-cultural / traditional; economic (dowry system)
Early and frequent child bearing	Family pressure, fear of childlessness, son preference, ignorance and non-use of contraception, poor inter-personal communication between couples
Complications of pregnancy and childbirth	Lack of knowledge about sign and symptoms of complications, careless, early marriage and child bearing, lack of access to safe mother hood services
Nutritional anaemia	Gender discrimination, poverty; work burden/ heavy domestic chores, menstrual problem, lack of knowledge about nutritional diet
Unintended pregnancy and unsafe abortions	Legal restriction to abortion in the past; lack of knowledge about safe abortion practices, lack of access to safe abortion services, reluctance/ fear of utilizing the services in time
Domestic violence and sexual coercion	Rigid gender roles, isolation of women, poverty, low status of women, view of domestic violence as a private family matters, lack of sex education, lack of clarity in the law, socio-cultural and traditional
Urinary tract infection and reproductive tract infection	Unhygienic sanitation practices during menstruation, absence of counselling services and parental guidance, reluctance to consult clinics
Sexually transmitted infections and Acquired Immune Deficiency Syndrome	Lack of knowledge about transmission routes and prevention, routes and prevention, sexual abuse and exploitation at place of work and at residence, unprotected sex and infection through migrants male partners, girls trafficking

Source: Tamang and Nepal, 1998

2.5 Knowledge of contraceptives and use

The use of effective methods of contraception is the main way to prevent unintended pregnancy and abortion for which knowledge is necessary; however, the link between knowledge and behaviour is not automatic (Deschner and Cohen, 2003). Knowledge does not always affect behaviour (WHO, 1997). Demographic and Health Surveys (DHS) have shown consistently high levels of knowledge about contraceptive methods amongst young people in developing countries, especially in Asia, northern and southern Africa and Latin America, but relatively low levels of contraceptive use. Using the DHS data from 37

countries, Blanc and Way (1998) showed that the majority of young people could name at least one contraceptive method. However, higher variability has been observed in the levels of knowledge amongst adolescent women in sub-Saharan Africa than in other regions. The levels are lowest in Madagascar and Nigeria, where fewer than half of young people know about any method, and highest in Kenya, Rwanda and Zimbabwe, where at least 90 per cent of young people are familiar with at least one contraceptive method (Blanc and Way, 1998). The same study reported that in Asia, the Near East and North Africa, knowledge levels exceed 90 per cent amongst young women surveyed in all countries except in Pakistan (67 per cent) and in the Yemen (56 per cent). A similar pattern is evident in Latin America and the Caribbean. In Nepal, almost all young married women aged 15-24 years have heard of at least one modern family planning method (Ministry of Health (Nepal)/New Era/ORC Macro, 2002).

Despite the high level of knowledge, the Contraceptive Prevalence Rate (CPR)[1] is very low in developing countries, especially in Asia, northern and southern Africa, and Latin America amongst young people. For example, the CPRs amongst Nepalese married women aged 15-19 years and 20-24 years are nine per cent and 21 per cent respectively (Ministry of Health (Nepal)/New Era/ORC Macro, 2002) whereas it is two per cent in Nigeria, Rwanda, and Senegal and 23 per cent in Cameroon amongst young people aged 15-19 years (Blanc and Way, 1998; CPS, 2003).

Table 2. 2 Contraceptive use among married young women in selected Asian countries

Country/Survey date	Use of any modern method of contraception	
	Married women aged 15-19 years (in per cent)	Married women aged 20-24 years (in per cent)
Nepal, 2001	9.0	21.0
India, 1998-99	5.0	21.0
Pakistan, 1990-91	2.0	4.0
Bangladesh, 1999-2000	31.0	40.0
Philippines, 1998	11.0	23.0
Indonesia, 1997	44.0	59.0
Vietnam, 1998	18.0	43.0
Cambodia, 2000	6.0	9.0

Source: Centre for Communication Programmes, the John Hopkins University, 2003

[1] Contraceptive Prevalence Rate is defined as the proportion of women and men who reported they were using a family planning method at the time of interview.

In other Asian countries, it ranges from two per cent in Pakistan to 44 per cent in Indonesia among married women aged 15- 19 years. In countries in Latin America and the Caribbean, CPR amongst young women were comparatively low, exceeding 10 per cent only in Colombia (Blanc and Way, 1998). With regard to contraceptive method mix, young married couples in Nepal are mainly using condoms followed by injectables and oral pills respectively. The use of other long term reversible methods such as IUD and implants are negligible. The contraceptive method mix varies substantially across the developing countries (CPS, 2003).

Why has such poor correspondence between knowledge and use of contraception been found amongst young people? Several studies have been conducted on the reasons for not using contraception with unmarried young people but very few in-depth studies have been carried out on the issue amongst married young people. Most of the evidence comes from the World Fertility Surveys (WFS) or the DHS. Studies conducted amongst unmarried young women have indicated that perceived side effects of contraceptives have a significant negative impact on use (Gorgen *et al.*, 1993; Gage, 1998). Because of overt social disapproval or shame about asking for contraception at young ages and a lack of privacy at clinics, many young women do not attempt to procure contraceptives (Gage, 1998). Analyses of data from the DHSs and other studies show alienation of the service providers and their attitude often hinders young people (especially those who are unmarried) for obtaining contraceptives from maternal and child health clinics, which are the primary sources of contraceptives. Moreover, erroneous beliefs about contraceptives, unavailability of contraceptive methods when needed and objection from the partner are also reasons for non-use of contraceptives amongst young people (Gage, 1998).

In Nepal, very few married young couples are using contraception but the proportion of unwanted births especially those that are mistimed is thought to be high. The question still remains as to whether the limited use of contraception can be explained by the lack of quality family planning services because of problems of accessibility and the fear of side effects or whether there are other, more personal and interpersonal factors that can explain low uptake. These could include difficulties in talking about sex and sexuality, power roles in relationships, limited spousal communication, lack of negotiation skills, and the role of older relatives especially the roles of mother in law, perceived cost and benefit of use and other unidentified socio-cultural factors which might be impeding young people

to use contraception. No systematic in-depth study has been conducted on this issue in Nepal.

2.6 Young people's sexual behaviour

In the absence of effective contraception, the probability of becoming pregnant is related to the frequency of intercourse. Information on sexual activity, therefore, can be used to refine measures of exposure to pregnancy. Studies on young peoples' sexual behaviour in different parts of the world show that young people's premarital sexual encounters are generally unplanned, infrequent and sporadic (WHO, 1993). For the majority of Nepalese young people, sexual activity commences at an early age. Unlike in many other countries, the onset of sexual activity occurs largely within the context of marriage, is consistent with the strong emphasis placed on female 'purity' and 'chastity', and is sanctioned by family elders. For example, the median age at first sexual intercourse amongst Nepalese women aged 15-49 is 16.7 years which is nearly identical to the median age at first marriage (Ministry of Health (Nepal)/New Era/ORC Macro, 2002).

Again, very few studies have been carried out to understand the sexual behaviour amongst young people in Nepal, but available studies have indicated that an increasing proportion of young people are involved in premarital sexual activity and engage in risky sexual behaviour. For example, a study conducted amongst unmarried men aged 18-24 years residing in a border towns of Nepal showed that more than half (54 per cent) of young men are sexually active. Amongst the study group, one in four residents (27 per cent) said that they had had casual sex in the 12 months preceding the date of survey (Tamang *et al.*, 2001). Moreover, amongst the sexually active unmarried men, a large majority (77 per cent) had their first sexual contact while they were 19 years or below. Another study conducted amongst young factory workers in Nepal showed that one in five men and one in every eight women aged 14-19 years are sexually active (Puri, 2002). Similarly, another study conducted by CREHPA amongst 300 unmarried young people aged 13-19 years found that one in every ten boys are sexually active (CREHPA, 1996). A study conducted in the three districts of Kathmandu, Makawanpur and Chitwan showed that about 20 per cent of unmarried young people are sexually active. Of them 16 per cent reported multiple partners (Gurbacharaya and Subedi, 1992). Despite good levels of awareness of condoms, HIV/AIDS and other STIs, the use of the condom is very low in Nepal (Gurbacharaya and Subedi, 1992; UNFPA, 1999; Tamang *et al.*, 2001; Puri, 2002).

Very little is known about the sexual behaviour of married young people in Nepal. The Demographic Health Surveys of Nepal have asked few questions to married women about their sexual behaviour. The studies revealed that 63 per cent of women aged 15-19 and 67 per cent of the women aged 20-24 were sexually active in the four weeks before the date of survey. Although very few married men (two per cent) have reported extra-marital sexual relationships, the proportion reporting sexual intercourse outside marriage is slightly higher amongst younger men age 15-24 years. Similar to unmarried women, almost all married young women (15-24 years) have heard about condoms but less than five per cent used them during last sex and most of them used for family planning purposes rather than protecting from HIV/AIDS or other STIs. Similarly, less than 10 per cent of young married men had used a condom during their last sexual intercourse either with spouse or any other partner (Ministry of Health (Nepal)/New Era/ORC Macro, 2002).

Studies of sexual behaviour are prone to methodological problems and are consequently difficult to validate. Comparison of the results of studies is also problematic. Most past studies were conducted in small areas and amongst particular groups of the population, therefore, the results may not give a general picture of the country. Further, socio-cultural values and norms of researchers and the manner in which the study was conducted may have influenced results. However, compared to many developing countries, Nepalese youth demonstrate moderately low levels of sexual experiences and extra marital sexual relations, yet the findings nonetheless confirm growing concerns within Nepal regarding unprotected premarital and extra marital sex combined with unprotected marital sex and other risky behaviours. It is recognized that exposure to intercourse and sexual behaviour has a relationship with the level of unintended pregnancy. However, this information is not the central focus of this study. Information related to sexual behaviour is drawn from other studies whenever needed to triangulate the findings of this study.

2.7 Prevalence and trends of unintended pregnancies and births

Unintended pregnancies are common in both developing and developed countries. In developed countries, of the 28 million pregnancies occurring every year, an estimated 49 per cent are unintended (AGI, 1999). In developing countries, of the 182 million pregnancies occurring every year, an estimated 36 per cent are unintended. Using data from the WFS, Bongaarts (1997) demonstrated that average unintended fertility rose from

0.82 to 1.2 births per women between two surveys (between the periods of the WFS conducted around 1980s and the Demographic Health Survey conducted around 1990s) in 20 developing countries included in his analysis. Although intended childbearing almost invariably declines as countries move through the fertility transition, the trend in unintended fertility is found to have an inverted U shape. During the first half of the transition, unintended fertility tends to rise, and it does not decline until near the end of transition. This pattern is attributed to the combined effects of an increase in the duration of exposure to the risk of unintended pregnancies and a rise in contraceptive use as desired family size declines (Bongaarts, 1997). Bongaarts also argued that the substantial variation in unintended fertility amongst countries is caused by variation in the degree of implementation of preferences, the effectiveness of contraceptive use, the rate of induced abortion, and other proximate determinants, such as age at marriage, duration of breast feeding, and frequency of sexual relations. The unintended fertility rate in Nepal has declining (2.9 births per woman in 1996 to 2.5 births per woman in 2001) due to above mentioned factors. However, actual total fertility rate is 1.6 children higher than the desired total fertility rate (Ministry of Health (Nepal) *et al.*, 2002).

What about unintended fertility amongst young women? Very little published literature has been found on married young women's childbearing and its associated factors. The available literature has shown that the number of young women giving birth is very large. In fact, slightly more than 10 per cent of all births worldwide are from young age mothers. However, in the past 20-30 years, early childbearing has been declining in many countries of Asia, North Africa and the Middle East. In seven countries of this region, the proportion of women aged 20-24 who had their first child as a young is 15-35 percentage points lower than that of women now aged 40-44. For example, in Indonesia, 51 per cent of women aged 40-44 had their first child during their adolescent years as compared with 33 per cent of younger women (UNESCO, 2002). In most of the sub-Saharan Africa and Latin America, 15-20 per cent of all births are to women aged 15-19. In Asia, North Africa and the Middles East, however, the proportion of births to young women is much lower, ranging from three to 14 per cent in all.

Table 2.3 shows that the levels of unintended pregnancies amongst young women vary across the region. The World Health Organization (1997) has estimated that between 20

and 60 per cent of the pregnancies amongst young women (15-24 years of age) are unintended.

Table 2.3 Prevalence of unintended pregnancies amongst young women aged under 20 years

Region/country	Prevalence of unintended pregnancy (in per cent)	Sources
World (15-24 years of age)	20-60	WHO, 1997
European countries, Canada and USA	9-65	UNESCO, 2002
Latin America and Caribbean	25-50	AGI, 1998
North Africa and the middle east	15-30	AGI, 1998
India, Indonesia, Pakistan	10-16	AGI, 1998
Nepal	23	Nepal DHS, 2001
Rest of Asia	20-45	AGI, 1998

Surveys undertaken in European countries, Canada and the United States of America within the context of the WFS revealed that, amongst the 13 countries, the percentages of interviewees' life time pregnancies that had been unintended ranged from 9 per cent in Spain to 65 per cent in Bulgaria. In all but four of the countries, the proportion amounted to one-quarter or more. In nine countries, however, no more than 16 per cent of the pregnancies were reported to have been unintended. Another study that analysed the data from 53 countries (47 developing and 6 developed) indicated that the proportion of teenage mothers who had not intended to give birth varies widely within and between regions. In Latin America and the Caribbean, between one-quarter and one-half of young mothers say that their birth was unintended; in North Africa and the Middle East, the proportion ranges between about 15 per cent and 30 per cent. Some 10-16 per cent of teenage births in India, Indonesia and Pakistan are unintended compared with 20-45 per cent in the rest of Asia (Table 2.4). The variation is even greater in Sub-Saharan Africa- from 11-13 per cent in Niger and Nigeria to 50 per cent or more in Botswana, Ghana, Kenya, Namibia and Zimbabwe. A large shares of adolescent births in developed countries also are unintended - for example, 66 per cent in the United States (AGI, 1998)

The 2001 DHS study in Nepal estimated that more than 23 per cent of births in the five-year period preceding the survey were unintended amongst women under the age of 20

years (Ministry of Health (Nepal)/New Era/ORC Macro, 2002). Another study has showed that about 20 per cent of the married women aged 15-24 years have reported at least an experience of unintended pregnancies (Tamang *et al.*, 2002). Similarly, another study conducted amongst 500 patients attending pregnancy test in a government hospital in Nepal showed that 70 of the young women aged 15-24 years reported that their current pregnancies were unintended (Sharma, 2002). Due to the limitation in the methodologies and the questionnaire used to measure the unintended pregnancy, the findings cannot be generalized, however it indicates that there is substantial proportion of young women experiencing unintended pregnancies in Nepal.

2.8 Unintended pregnancy and induced abortion

Induced abortion is defined as the intentional removal of a foetus from the uterus by any of a number of techniques (UNFPA, 1999). Unintended pregnancies and induced abortion occur in every society and, inevitably, all governments and health care systems face the challenges of providing some elements of abortion care; this may range from life-saving care to safe and legal abortion on demand. The way in which they respond to this challenge depends on the degree to which they and their societies acknowledge the occurrence of unintended pregnancies, unsafe abortion, their religious and cultural beliefs and gender relations. The safety of abortion care available to a woman has a direct impact on her health (Tamang, 1996).

The use of abortion to deal with unintended pregnancies occurs not only in countries where it is legal and safe but also where it is illegal and often unsafe (Bongaarts, 1997). Reliable statistics on numbers of abortions are available for only a few countries, and are often not segregated by age. Under reporting is most severe where abortion is illegal. Ethical, moral, and religious values and societal attitudes make many women reluctant to report legal and illegal abortions. Despite the shortcoming of relevant data, the overall picture of unintended pregnancies and abortion is clear. As shown in Table 2.4, worldwide, of the approximately 210 million pregnancies occurring every year, an estimated 38 per cent are unintended. Of them, 22 per cent end in abortion (AGI, 1999). By geographic region, these estimates span an even wider range. The estimated proportion of unintended pregnancies that end in abortion is high in East Asia compared with other regions of the world. In Africa, 30 per cent of the 40 million pregnancies occurring each year are unplanned. Of them, 12 per cent end in abortion (AGI, 1999).

Despite the illegal status of abortion until September 2002 in Nepal, induced abortion is fairly widespread in the country to deal with unintended pregnancies. Unqualified persons perform most of the induced abortion cases with crude and primitive methods. Precise information on the prevalence of induced abortion is not available. A hospital-based study

Table 2.4 Estimated percentage of unplanned pregnancies and induced abortions amongst all women by region

Region	Number of pregnancies (in million)	Per cent of unplanned pregnancies	Per cent of unplanned pregnancies that ended in abortion
Worldwide	210	38	22
Developed countries	28	49	36
Developing countries	182	36	20
Africa	40	30	12
East Asia	40	39	30
Rest of Asia	83	34	17
Latin America and the Caribbean	18	52	23
Eastern Europe	7	33	21
United States, Canada, Australia, New Zealand and Japan	10	45	23

Source: AGI, 1999

conducted in Nepal, during a one-year period in 1984-85 at five major hospitals in and around Kathmandu valley, reported 1576 cases of abortions. Of these, 1411 cases (89.5 per cent) were spontaneous abortions, 124 cases (7.9 per cent) were induced abortions, 41 (2.6 per cent) were possibly induced abortions (Thapa *et al.*, 1992). Another hospital-based study conducted amongst 1241 abortion cases recruited in government hospitals and private clinics in Kathmandu valley found that 234 (18.8 per cent) were induced abortions (Tamang, 1996). Another study, conducted in 1994 amongst 13,229 women in the reproductive age group, a total of 109 induced abortion cases were identified in a period of approximately 30 months, which is very low compared with other studies (UNFPA, 1999). Studies conducted by CREHPA (1998, 1999) have shown that between 20 per cent and 60 per cent of all obstetric and gynaecological admissions in major hospitals of the country were abortion complication cases.

As mentioned earlier, adequate data and information are not available by specific age groups in Nepal. However, a hospital-based study conducted by CREHPA has showed

that, out of all the patients admitted at the hospital due to induced abortion complications, one-fifth were under 20 years of age (Tamang and Nepal, 1998). Similar findings have been observed in some parts of Africa. At certain hospitals in Africa, two-thirds of all cases of abortion complications amongst women are under the age of 20 years (WHO, 1997). In Congo, Kenya, Liberia, Mali, Nigeria, and Zaire between 38 per cent and 68 per cent of women seeking treatment for abortion complications are under 20; in Malaysia the proportion is more than 25 per cent and in Brazil, Chile, Guatemala, Peru and Thailand, more than 10 per cent. In Canada in 1984, 24 per cent of women undergoing legal abortion were under 20 years old (WHO, 1993).

The main limitations of these studies are that the base population (that is, the number of women at risk for induced or spontaneous abortion) was not known. The women who are hospitalised may be a mere fraction of the base population. These studies most probably exclude many categories of women, such as those who a) did not want to go hospital for fear of prosecution, b) did not have access to a hospital, c) died before making it to hospital, d) had no or only minor complications that were treated locally, and e) could afford private clinical facilities. Therefore, on the one hand, very limited data are available on abortion, which makes it difficult to estimate prevalence; on the other hand, estimates are prone to methodological problems.

2.9 Socio-demographic determinants of unintended pregnancy

2.9.1 Maternal age

Generally, age is a measure of both biological and social maturity. The age of a woman at the time of conception could influence whether the pregnancy is mistimed or unwanted, because age may indirectly reflect a woman's level of material, biological, social, and emotional preparedness for the responsibilities of childbearing. Studies have documented the association between age of the woman at the time of pregnancy and an unintended pregnancy (Pratt and Horn, 1985; Forrest, 1994; Allaby, 1995). In general, unintended births increase with mother's age but mistimed pregnancies are more frequent amongst younger age groups compared with older age groups. Maternal age varied positively with unwanted pregnancies whereas it varied inversely with mistimed pregnancy (Adetnunji, 1998). For example, Adetunji (1998) has found that in Latin America and the Caribbean, teenage mothers were four to five times more likely to have mistimed pregnancies than

women of age 35-49 years. Even after controlling for other socio-demographic variables, maternal age is a statistically significant predictor of mistimed and unwanted pregnancy in all the 10 selected developing countries included in his analysis. Similarly, a study conducted in Nigeria shows that the higher the age of the respondents the greater the likelihood that they would report previous unwanted pregnancies (Okonofua *et al.*, 1999).

In Nepal, unwanted births increase from 25 per cent amongst mother below 25 years of age to a high of 71 per cent amongst mothers age 40-44 (Ministry of Health (Nepal)/New Era/ORC Macro, 2002). But the prevalence of mistimed pregnancy is higher amongst younger women compared with their older counterparts. In Bangladesh, similar findings have been observed (National Institute of Population and Training (NIPORT) *et al.*, 2001). In India, two per cent of the married women aged less than 20 reported unwanted pregnancy compared with 42 per cent of the women aged 40-44 (International Institute for Population Science (IIPS) and ORC Macro, 2000) but again mistimed pregnancy is higher amongst young women compared with older women. This type of finding seems logical. Studies have shown that young women in many societies including Nepal, India, Pakistan and Bangladesh would liked to wait longer before getting married or begin childbearing to study and pursue employment (Bott and Jejeebhoy, 2003). Moreover, young married women have limited power related to fertility decision making. Therefore, young people are more likely than older women to suffer mistimed pregnancies.

2.9.2 Marital status

The definition of marriage is changing rapidly in various culture, however, studies conducted in developed countries have found that a woman's current marital status is consistently a strong predictor of mistimed and unwanted pregnancies (Cartwright, 1988; Denton and Scott, 1994; Forrest, 1994). Never married women are usually more likely than ever-married ones to report mistimed or unwanted pregnancies. Similarly, using the DHS data of 10 selected developing countries, Adetunji (1998) found that unwanted childbearing was significantly associated with marital status in the sub Saharan African countries; the Dominican Republic, Indonesia, and Morocco. However, the relationship between marital status and mistimed childbearing was significant only in four sub-Saharan African countries, the children of women who were not married were at increased odds of being considered mistimed. In contrast, a Nigerian study showed that

marital status of women was not a significant predictor for reporting an experience of unwanted pregnancy (Okonofua *et al.*, 1999).

Fertility planning data are not analysed according to marital status in Nepal. The successive Nepal DHS studies, fertility planning related questions were asked to only those who were ever married and currently pregnant at the time of survey. Therefore, little is known about the association between unintended pregnancy and marital status in the country including its neighbouring countries - India and Bangladesh.

2.9.3 Number of children

Little is known about the relationship between unintended pregnancy and number of children amongst married young women. Most of the evidence on this relationship comes from adult women in general. Studies have shown that generally the higher the parity the greater the likelihood of pregnancies will be unintended. For example, Adetunji (1998) found that the number of living children was a strong predictor of reporting a child as unintended in all ten developing countries (Ghana, Kenya, Senegal, Zimbabwe, Egypt, Indonesia, Morocco, Colombia, Dominican Republic and Peru) included in his analysis. A mother with one child or no living children at the time of conception was associated with the likelihood of being classified as having an unintended pregnancy compared with a mother with two or more children. The odds of mothers with six or more living children reporting children as unintended were two to 13 times higher than those of mothers with one child only or no living children. The odds ratios varied slightly across regions; in Sub-Saharan Africa, the odds of a child being classified as unintended if the mother had six or more surviving children were on average six to seven times greater than those of a child preceded by one child only or no living children; in Latin America and the Caribbean, the odds ratio ranges from two in the Dominican Republic to 10 in Colombia and Peru, whereas in North Africa/Asia, the odds ratios are about six in Indonesia and Morocco and 13 in Egypt (Adetnunji, 1998). Similarly, the Nepal Demographic and Health Survey 2001 has shown that the proportion of unintended births increases with birth order, from 24 per cent amongst birth order two, to 58 per cent amongst four or above. Similar findings have been found in India and Bangladesh also (International Institute for Population Science (IIPS) and ORC Macro, 2000; National Institute of Population and Training (NIPORT) *et al.*, 2001).

2.9.4 Level of education

Education can be interpreted as a measure of self-efficacy, competence and capacity to make informed decisions. It has been argued that educated women are less fatalistic and are more attuned to scientific reasoning than the less educated. It is believed that education shifts the allegiance of a person in a developing country environment from a traditional culture to a modern culture (Adetnunji, 1998). It is expected that an educated woman would not have a pregnancy that she was not prepared for, if she had access to means of avoiding it. For example, a study between 1973 and 1988 in the United States showed that education is negatively associated with unintended pregnancies. In other words, the incidence of unwanted births decreases as the number of years of schooling increases (Linda, 1991). In the 41 developing countries that participated in the WFS, women with elementary education or less were much more likely than the better-educated ones to have an unplanned pregnancies or an unwanted birth (Bongaarts, 1997).

Similarly, Adtetunji (1998) found an inverse relationship between mother's education and unwanted pregnancies in Latin America and the Caribbean. In India, women with high school level education are two times less likely than illiterate ones to have an unplanned pregnancy (International Institute for Population Science (IIPS) and ORC Macro, 2000). However, a study by Anderson (1981) amongst ever married women showed that its relationship with educational status is weak, especially when marital duration is taken into account. In contrast, a Nigerian study showed that better educated women have higher odds of reporting unwanted pregnancies than those with lower levels of education or without education. Specifically, women with a university education were, on average, three times more likely to report an unwanted pregnancy compared with women with no education (Okonofua *et al.*, 1999).

Although Nepal's DHS studies have collected data on education level and fertility planning, the results are not included in the report. The relationship between level of education and fertility planning and outcomes amongst young women is not known in this country.

2.9.5 Social deprivation

Social deprivation is often considered as one of the determinants of unintended pregnancy. Generally social deprivation includes the elements such as parents' income, ethnicity/caste or social class, educational level, health status and employment status of the young women (Tabberer *et al.*, 2000). For example, in the United States and Britain, there is a clear negative relationship between economic status and having a child before age of 20, which are generally unintended. Another study conducted across the five developed countries (Canada, France, Britain, Sweden and the US) found that teenage childbearing is more likely amongst women with low levels of income than their better-off peers. Levels of teenage childbearing are also strongly related to race, ethnicity and immigrant status (Olausson *et al.*, 2001; Singh *et al.*, 2001). In contrast, a Nigerian study revealed that respondents in professional jobs (teaching and medicine) were significantly more likely to report an unwanted pregnancy compared with unemployed women (Okonofua *et al.*, 1999). No study in Nepal has looked into the relationship between social deprivation and unintended pregnancy amongst young women.

To understand the relationship between the planning status of a pregnancy or birth and its associated factors, one must consider that the mother subjectively defines planning status on the basis of her circumstances, her family's circumstances and her expectations regarding a child's needs. Hence, wanted children probably are born to women who consider their circumstances adequate; unwanted children, to women who consider their circumstances inadequate; and mistimed children, to women who consider their current circumstances inadequate but anticipate improvement. Therefore, contextual information is very important to identify the factors associated with the planning status of the pregnancy. Earlier studies in Nepal have not focussed on understanding the contextual factors of young women that may determine the level of unintended pregnancy and its co-factors.

2.10 Causes of unintended pregnancy

Unintended pregnancy can result generally from non-use of contraceptive services, contraceptive failure and, less commonly less rape or incest (AGI, 1999). Although contraceptive failure and the failure to use contraception are responsible for the vast majority of unplanned pregnancies, the reasons why contraceptive methods fail for some

couples or why they choose not to use contraception are less clear (Klima, 1998). However, various studies conducted amongst women of reproductive age have shown that fear of the technology, lack of affordable and accessible contraception services, lack of knowledge on reliable and suitable contraception, fear of side effects, limited numbers of male contraceptive methods, restraint by partners, family, or the community and sexual inequality in many cultures and failure to understand the risk of pregnancies or the impact of another child on the family economy are hindering young women's ability to control own fertility (Kabir, 1989; Blanc and Way, 1998; Klima, 1998; Senanake, 2001). For example, in 60 per cent of developing countries, half of the population does not have easy access to contraceptive services. In Latin America, three out of four women who are not planning their families would like to do so and two out of six births are unintended. In India, which has had a government family planning programme for 50 years, there are at least 30 million women who would like to limit their pregnancies but lack the means to do so. In Nepal, about 37 per cent of the women want to delay or not to have additional children but are not using any method of contraception. In other Asian countries like Pakistan, the proportion is even higher. In Africa, particularly, there is high unmet need for family planning (Senanake, 2001).

Another reason for having an unintended pregnancy is failure of contraception. Efficacy rates for various contraceptive methods are dependent on the correct and consistent use of the method as well as the failure rate inherent in the method itself, even with perfect use. For example, one reason the intrauterine device (IUD) is highly effective is that it has almost no dependence on user-compliance for effectiveness. On the other hand, methods such as oral contraceptives and barrier methods are highly dependent on the user for correct usage and have lower effectiveness rates. Young people are more likely to use spacing methods for obvious reason and, therefore, more likely to suffer from method failure. For example, a study conducted in the United States showed that contraceptive failures result in about 50 per cent of all unintended pregnancies (Forrest, 1994). Similarly, another US study conducted amongst adolescent women who were not married but were cohabiting revealed a failure rate of about 47 per cent in the first year of contraceptive use, while amongst married women aged 30 and older this was only eight per cent (Fu *et al.*, 1999). A Nepalese study found that 20 per cent in rural and 16 per cent in urban women (aged 15 - 49) reported method failure as the reason for their unintended pregnancy (Tamang *et al.*, 2002).

In addition, studies have shown that young people are naturally impulsive and less likely to plan than older people, and so the act of intercourse may be unexpected even for married people in some cultures. They are sexually active and fecund, and therefore may have high pregnancy rates (Bankole *et al.*, 1999). Sexuality is a taboo subject to discuss in most societies. Therefore, young people rarely discuss this topic with their partners or other persons in or out side the family resulting in lack of basic information on sexual and reproductive health (Stone *et al.*, 2003).

Why do Nepalese young married women have low use of contraceptives compared with older women whereas unintended pregnancy is high amongst this group? Whether it is only because of inaccessibility of contraceptive methods to these groups, or lack of quality of care in the services, or there are other factors which hinder young people from avoiding unintended pregnancy. No detailed study has been carried out in Nepal to identify the cause of intended pregnancy amongst young married women.

2.11 Consequences of unintended pregnancy

Various investigations have found that women with an unintended pregnancy are less likely than others to seek and receive prenatal care and more likely to engage in behaviours that may increase their risks of health problems associated with pregnancy and birth (Baydar, 1995). Studies have also indicated that unintended pregnancy has implication on women's health and family economy. Unintended pregnancy can have negative health and socio-psychological consequences not only to a woman but also to the society at large (IPPF, 1988)). Studies have shown that unplanned pregnancy often forces women to confront difficult issues including abortion, abandoning a child, infanticide or raising the child without the necessary financial, physical, and emotional support (Kabir, 1989; Shane, 1997; Klima, 1998; Tamang *et al.*, 1998; Cobb *et al.*, 2001; Senanake, 2001; Binn-pike *et al.*, 2002).

Unwanted pregnancies in younger ages, even within marriage, can be a problem. Abortion, whether or not legally available, is a frequent consequence of unintended pregnancy (AGI, 1998; WHO, 2001). In the case of an inexperienced young couple, abortion is likely to take place later in the pregnancies and is often unsafe, which puts greater risk on their health and life. If the procedure is illegal, it is often performed under unsafe conditions increasing the risk even further (WHO, 1993). For example, a hospital-

based Nepalese study showed that 20-60 per cent of women admitted in gynaecology department at the government hospitals are due to complications from induced abortion. Of them, one-fifth were under 20 years of age (Tamang and Nepal, 1998). Similar findings have been observed in some parts of Africa as well. At certain hospitals in Africa, two-thirds of all cases of abortion complications amongst women are under the age of 20 years (WHO, 1997). Even in the countries where abortion is legal, young women delay seeking abortion services and as a result, often face health complications. For example, in India, women delay abortion seeking because of not initially recognizing the pregnancy, postponing communicating the news of an unwanted pregnancy to a decision maker, lack of awareness of available abortion services, lack of resources, access available services and fear of social stigmatisation, and many of them face post abortion complications (Sinha *et al.*, 1998; Johnston, 2002).

These findings suggest that each unintended pregnancy puts women at risk for morbidity and mortality (Klima, 1998). In the developing countries, not only the mother's health but also child or infant survival and wellbeing are linked with unwanted pregnancy. Furthermore, unintended pregnancy may result in the early discontinuation of breast-feeding, thereby make vulnerable the health of the weaned child as well (Klima, 1998). Jouce *et al.* (2002) found that, in the USA, unwanted pregnancy is associated with prenatal and postpartum maternal behaviours that adversely affect infant and child health. Similarly, a cohort study conducted in the USA showed that unintended pregnancy was significantly associated with pre-term delivery. Women with unintended pregnancies had almost twice the risk of a pre term delivery as women with intended pregnancies (Orr *et al.*, 2000). Like wise, the Ecuador Demographic and Maternal-Child Health Survey (1994) has shown that infants from unwanted pregnancies were more likely than infants from planned pregnancies to have low birth weight (Eggleston *et al.*, 2001). However, in this study the mechanism through which pregnancy intention status affects birth weight was not explored.

As a consequence of unintended pregnancy young women not only face greater health risks but also curtailed educational and employment opportunities. It has been stated repeatedly in the literature that an early pregnancy - especially if unplanned - tends to create poverty, because it hinders the opportunity to economic progress by truncating the mother's education, reducing the mother's employment prospects, lowering family

income, and compromising the mother's personal development (Singh and Wulf, 1990; Ferrando, 1993; Spitz *et al.*, 1996). Adolescent fathers, if they accept responsibility for the child, must also turn their energies to parenting rather than to education or skills development. Grandparents must share scarce resources. Further, societies must grapple with the increased population growth that results from larger family sizes and shortened spans between generations (IPPF, 1988). Most evidence from studies conducted in Eastern Europe and Scandinavia indicate that children born from unwanted pregnancies perform less well in school than children from wanted pregnancies. Further evidence from Scandinavia indicates that the father–daughter relationship is especially problematic for unwanted daughters and this too may influence their educational attainment (Myhrman *et al.*, 1995). In contrast, few studies have shown no effects of wantedness on the baby care or maternal employment (Baydar, 1995).

Although earlier studies have explored the impact of unintended pregnancy on health outcomes on mother and child wellbeing, no empirical evidence was found on the perceived consequences for young women who experience unintended pregnancy. The perceived consequences may affect health seeking behaviour and decision making on whether or not to continue with the pregnancy.

2.12 Decision making processes associated with abortion

In general, women with an unintended pregnancy may have only two options: accept the pregnancy and go for full term delivery or undergo abortion. Very little is known about how Nepalese young women cope with such a situation. When and how is a decision taken to abort an unwanted pregnancy? Who are involved in such decision making processes? What is the role of the husband in such decisions and what is the pathway to accepting or rejecting abortion? This information is important, as it would provide opportunities to design interventions which could potentially reduce the prevalence of unsafe abortion. It would also help in planning information, education and communication (IEC) and advocacy campaign to try to eradicate the barriers faced by couples. In Nepal hardly any systematic studies have been carried out on this issue; a few studies, which have some information on the matter either in Nepal or elsewhere, are reviewed in this section.

Abortion is unusual event among medical procedures in that it involves legal, political, economic, theological and moral as well as psychological issues, which impinge on the woman undergoing the procedure (Alder, 1982). In fact, when an unwanted pregnancy occurs then the individual has to make a choice whether or not the pregnancy is continued and they are very much shaped by the social contexts. Decision making processes, and their outcomes, are patterned by a range of interrelated variables; for example, interpersonal variables (relationship with partner, family members and peers), institutional variables (law on abortion right, access to and visibility of services), ideological/cultural variables (prevalent views about the acceptability of abortion, and women's 'right to choose') and social positional variables (position in relation to labour market, educational and economic opportunities). Holmberg and Wahlberg (2000) argued that the decision making process amongst young people (specially unmarried) can be understood by three concepts: reactions (including feelings, apprehensions, and moral conflicts), impact factors (including quality of relationship, consideration for female partner, and psychosocial factors) and tools for process (including communication, secrecy/confidentiality, and organized support). The few available studies have shown that pregnancy decisions appear to be heavily influenced by the views, or likely reactions, of others including relatives, peers as well as partners (Holmberg and Wahlberg, 2000; Tabberer *et al.*, 2000). There is some evidence that a proportion of couples attempt to rationally evaluate the costs and benefits of childbearing and then try to reach a decision (Luker, 1975; Bruch, 1980). In Nepal, little is known about this issue. It is frequently believed that the young women's social networks (with partner, parents, family members and peers, health professionals) and the local circumstances (law on abortion, attitude of communities towards abortion, etc.) also play an important role in decision making on abortion in Nepal.

2.12.1 Women's roles

Nepal is a patriarchal family structure country and discussion on matters related to sexuality, reproduction, abortion etc are considered as taboo. The situation is further compounded by the legal restriction on abortion. Within the patriarchal family structure, women have relatively little power, but young married women are particularly powerless, secluded and voiceless (Karve, 1965; Jejeebhoy and Sathar, 2001). Women then have little choice about whom and when to marry, whether or not to have sexual relations, and

when to bear children, whether to keep the baby or terminate the pregnancy. In fact, there are strong pressures on women to prove their fertility as soon as possible after marriage; social acceptance and economic security in her marital home are established largely through fertility, and particularly through the birth of a son (Jejeebhoy, 1998). Young married women lack decision-making authority in matters related to sex. There is not much communication or intimacy between a young women and her husband. Contraceptive and family size decisions typically rest with the husband alone or in conjunction with older members of his family.

As mentioned earlier, no study has been addressed this issue in Nepal. Experiences from India show that, in most cases, the husband is the most important person who take the decision but in some cases women take decisions themselves without consulting with their partner. For example, in an Indian study, in 15 out of 49 cases (30 per cent) the decision to abort the unwanted pregnancy was taken by the women themselves without consulting their husband (Sinha *et al.*, 1998). Generally, women take the decision themselves under two circumstances. First, when the husband overtly disapproved of it. Secondly, women themselves assume that their husband wouldn't allow them for an abortion. Hence, they do not ask or inform him about the pregnancy and take the decision to abort it secretly. In the majority of such cases, unsafe abortion practices are adopted (Khan and D'Costa, 2002). The following description given by one of the respondents of a study conducted in Bangladesh reflects the process involved in such situation.

> "*.....I did not inform to my husband about the pregnancy. I took tamarind and green pineapple to get rid of the pregnancy. Old people used to say that if green pineapple or tamarind water taken, women would have menstruation. I took both nothing happened to me and I had to keep the pregnancy*".

The Indian study found that the education of the women plays a greater role in the decision-making process for abortion. If the woman is illiterate, even up to primary level, the husband-wife power equation is relatively more balanced and women could argue and convince their husband to accept abortion of unwanted pregnancy. In case of illiterate women, the authority lies exclusively in the husband and he finally decides what to do in the case of such pregnancies (Sinha *et al.*, 1998).

The age of the women is another factor which influences decision-making about abortion. Middle aged women, who generally know how their husband will react to the suggestion of abortion of unwanted pregnancy, are ready to take risks in their own hands and decide

to abort it without informing their husband. However, such initiatives were mostly taken by middle-aged women (30 years and above).

2.12.2 Role of partners

Some research has shown that the role of partners can be important about whether to continue or end a pregnancy. For example, in Uttar Pradesh of India, though many persons were consulted before deciding for an abortion, the husband was the most important person who finally made the decision in the majority of the cases (Sinha *et al.*, 1998) . Out of 49 cases wanting to abort their unplanned pregnancy, 32 (65 per cent) women reported that they first discussed it with their partner and then husbands decided to go for an abortion. A middle aged illiterate informant who experienced abortion twice, with a further one she attempted to abort but could not succeed, said:

> *"....I have had abortion twice. Both the times it was my husband's decision. Whatever he says, I always agree with him. He is the head of the household. He should take the decision. Both the times when he came to know that I am pregnant he suggested me to undergo an abortion...".*

Similarly, studies in Bangladesh have shown that husbands play a key role in deciding whether or not to accept an unwanted pregnancy. Even in case when women themselves decide to abort the unwanted pregnancy, they have to inform their husbands before undergoing the process (Khan and D'Costa, 2002). Another study conducted in Vietnam revealed that half of the respondents said that they discussed the matter together, but the husband decided (Johansson *et al.*, 1998). A woman with three daughters provides an illustration:

> *"Actually, it is husband who is the most important person...As for my family, for example, let's suppose that I am pregnant and I say that as I work hard, I cannot give birth to this child, I have to get an abortion. But if my husband disagrees, and says no, we have only three daughters, and he obliges me to give birth and he will be responsible, then I have to listen to him. If I resist, we would have arguments, quarrels....."*

Henderson (1999) and Tabberer *et al.* (1999) observed similar findings in the UK. They found out that partners' views are important towards the abortion decision - if the partner expressed the opposite response, indicating strong support for continuation of pregnancy, the pregnancy may be continued but if the partners' views favoured the termination of the pregnancy then it may be terminated (Henderson, 1999; Tabberer *et al.*, 2000). These findings suggest that the role of the male partner is crucial and the dominant effect in the

decision-making, but these studies lack information on the type of care and support - such as financial, emotional and psychological. Most of the studies reviewed above are weak and superficial on this issue.

2.12.3 Roles of parents and other relatives

The roles of relatives, especially parents and other family members, are not well understood in developing countries. Again, very few systematic studies are conducted in Nepal about the role of family members in the decision making process on abortion. But it is believed that family members especially mothers-in-law, have a significant influence in the decision-making process. A study conducted amongst young migrant workers in Nepal has also shown that the young women told mothers, sister-in-laws relatives about their unwanted pregnancies and sought advice from them (Puri, 2002). Similarly, in an Indian study, mothers-in-law or sisters-in-law were consulted first in seven cases out of 49 induced abortion cases. In the remaining four cases, neighbours or other relatives were consulted. Also, studies in Bangladesh showed that neighbours, sisters-in-law, friends and in some cases health workers provide networks of informal support system in seeking abortion (Khan and D'Costa, 2002).

Amongst pregnant young women working in an export promotion zone in the Republic of Korea, one-third consulted parents or relatives (WHO, 2001). Some research conducted in developed countries found that parents are influential at broader level with regards to teenage motherhood and abortions but it depends on the perceived reaction of young women towards their pregnancy by their parents. Young women who felt that their parents and other relatives will be supportive in their pregnancy were more likely to consult with their parents than others. For example, a study conducted in California amongst young women aged 14-21 who sought abortion found that 38 per cent spoke to their mothers and only 10 per cent told to their fathers (Pope *et al.*, 2001). A study conducted amongst 168 unmarried young women in three areas of Britain showed that over half of the women spoke to their mother and a fifth spoke to their father about their pregnancy (Allen and Dowling, 1998). Similarly, Harden and Ogden (1999) found that teenagers may not consult with their parents or other relatives if they expect negative reactions regarding their pregnancy. In contrast, Vietnamese study found that, except for the husbands, no one else was reported to have any major influence on the decision to terminate pregnancy. The authors that found that parents and parents in law, especially

the woman's mother, and mother-in-law, were sometimes told, but not consulted about the abortion, or they were not informed at all (Johansson *et al.*, 1998)

In summary, the available limited literature suggests that, in certain circumstances, young women do consult about the termination their pregnancies with their parents and other relatives, but generally only with those people who might agree with their decision. However, the nature of the involvement and the extent of the influence on decision-making process are not clear.

2.12.4 The role of peers

Although empirical evidence of peer influence on decision-making on abortion is very limited, it is frequently cited as one of the important factors related to decision making especially amongst young people. For example, a study conducted amongst young women aged 15-18 in four countries has shown that 45 per cent of them have discussed their unwanted pregnancy with their friends and sought for their advice (AGI, 2002). Allen *et al.* (1998) found that over one-third of the young unmarried UK women spoke about the unwanted pregnancy with their friends and seek advice. Smetana and Adler (1979) also found that young UK women give emphasis on the advice of their friends in the making decisions (Boyle, 1991). Similarly, Whitehead (2001) found that the family and friends of teenage pregnant UK women also have a big impact of their own pregnancy. She further argues that peer group conformity may well be a part of the influencing process, as may the setting of precedents by other. However, in the USA, Luker points out that this influence may relate to the ways in which young women choose their friends. She argues that young women who are acquainted with single teenage mothers are more likely to decide against having an abortion. This may be an example of social learning, on the fact that friends may exert good or bad influences (Luker, 1996).

These studies suggests that the interaction with friends and their behaviour influences the decision whether or not to have abortion, however; the influencing mechanisms, level and nature of support of their friends that affect the decision-making of the young women are not clear. Moreover, most of these findings come from very different cultural and sexual orientation contexts (mainly from western culture), which may be not be applicable in the case of Nepalese young people.

2.12.5 The role of service providers

A few studies have documented that women in developing countries consult about their unintended pregnancy with health service providers (qualified or not qualified) and seek their advice. For example, a hospital based study in Nepal showed that the most frequent providers of abortion services to the 165 women interviewed were the local birth attendants or 'sudenis', accounting for 42 per cent of the total cases. Paramedical health workers and nurses provided abortion services to 18 and six per cent respectively. Medical doctors provided services for only 14 per cent of the respondents (Thapa *et al.*, 1992). Similarly, an Indian study showed that only limited proportion of women consulted medical professionals (nurse or doctor) before going for abortion (Sinha *et al.*, 1998). In contrast, another study conducted amongst young women (14-19 years) in Nepal found that young women are quite reluctant to talk about the unwanted pregnancy and other reproductive health matters with health service providers; fewer than five per cent of the young women had ever discussed these issues with health services providers (Puri, 2002). Cross national research in four developed countries including Britain, amongst health professional and campaigners found that the young women consult about their unintended pregnancies with health service providers but the decision to have an abortion is ultimately the woman's own with the exception of anti-abortion activists (Welsh *et al.*, 2001). Similarly, another study found that if the young women wanted to continue the pregnancy, most health professionals only provide support to the woman's decision but few reported that they had also discussed the option of a termination of pregnancy (Allen and Dowling, 1998).

Again, no clear evidence has been found in the literature as to whether or not, and how, a consultation with health service providers influences the decision making process on abortion of the young women. Instead, the studies suggest that choosing an abortion provider can be influenced by multiple factors. For example in India, study results show that people who obtain abortion from illegal and unregistered facilities generally have different characteristics and priorities from those who use legal facilities. Low income women and women who live in rural areas are severely limited with choices for abortion services, causing such women to be more likely to access abortion from providers of unsafe abortion. In rural areas, uncertified providers thrive because they can offer

abortion services at an affordable price, and are often located closer to women's residence than legal providers (Johnston, 2002).

In Nepal, no in-depth study has been carried out into the roles of husbands, family members, relatives, health service providers and social networks in decision-making processes associated with abortion. Studies in other settings (for examples in India and Vietnam) have indicated that the process involved in deciding abortion for an unwanted pregnancy is not simple one (Johansson *et al.*, 1998; Ganatra and Hirve, 2002). Within the close net of relatives and friends considerable discussion takes place to decide what to do with an unintended pregnancy. In India, apart from husband, often sister-in-law, neighbour and close friends are involved in the process (Sinha *et al.*, 1998). In some cases mother-in-law and parents and village health workers are also consulted. Considering the religious and legal sensitivity attached to abortion, generally these discussions kept secret and a very low profile. Unless, women want to undergo abortion secretly from their husband (believing that they may not agree to abortion), they are the first person with whom women discuss their problem. Therefore, interactions with husband, family members, mothers-in-laws in particular and peers can be highly significant in shaping the decision whether or not to continue a pregnancy (Sinha *et al.*, 1998; Ganatra and Hirve, 2002). But in Nepal a range of factors can militate against young couples being able to make decisions in contexts that maximize choice. It is, therefore, important not to adopt a model for research that assumes young couples necessarily have, or perceive there to be, different options available to choose between, and that they are empowered to act in relation to these options.

2.13 History of legality of abortion in Nepal

From ancient times, abortion was restricted in Nepal either on the grounds of law or culture, religion, customs, and traditions. No precise legal provision regarding abortion can be found before the Shah Era of 1853. The civil code (*Mulki Ain*) introduced in a written form for the first time in 1853, has a separate legal provision on abortion. As per this provision, both the woman and the person performing the abortion could be imprisoned. The revised Civil Code 1963 made abortion even more restrictive and increased jail punishment (Tamang *et al.*, 2000). This legal restriction on abortion was continued until 2002.

The legislative effort to amend the law on abortion in Nepal was started in 1994. Some abortion related research that was initiated in 1984 was really useful and instrumental in initiating discussions and pressurizing policy makers to liberalize the abortion law. After extensive discussions amongst people from different sectors in the country, a private bill to amend the existing abortion laws was registered in Parliament in 1996. Parliamentary consideration of this amendment has been impeded by several political crisis followed by change of government and the tenure over of the Member of Parliament who introduced the private bill in the Parliament.

Again in 1997, a bill addressing a number of issues relating to women's right to property inheritance, child marriage, polygamy, rape and the proposed amendment of the abortion law was introduced (as an 11th amendment of the Civil Code). The bill remained pending for a long time in human rights committee of the parliament.

Following changes in the government in 2001, the new Prime Minister took an initiation on this issue and brought it into the discussion in the parliament. Finally, the House of Representatives passed the 11th amendment of the civil code on March 14, 2002, six years after it was registered in the Parliament and the royal seal of approval was given by the King in October 2002. The new legislation is an outcome of persistent advocacy efforts of many rights based organizations and activities supported by research studies and public opinion polls. The current abortion act guarantees conditional abortion rights to women. It legalized abortions on the following conditions:

- Up to 12 weeks of gestations for any woman
- Up to 18 weeks of gestations if the pregnancy is the results of from rape or incest
- And at any time during pregnancy, with the recommendation of an authorised medical doctor, if the life and physical or mental health of the mother is at risk or if the foetus has a disorder that is expected to results in severe mental or physical handicap.

Legalisation of abortion has created a new paradigm and challenges for Nepal. As in many countries where abortion laws were revised from a highly restrictive to a liberal abortion law, the demand for abortion by Nepalese couples is bound to increase initially and for some years and then stabilize. Although not all unintended pregnancies end with induced abortion, it is likely that a significant proportion of the women with unintended pregnancy would seek to terminate their pregnancy in the changed circumstances.

2.14 Research gaps in the literature

Research on young couple's behavioural patterns and their reproductive health needs is lacking in Nepal. Although some studies have been carried out after the WFS survey in the areas of unintended childbearing especially in developed countries, but very few studies have focussed on married young people. The focus of previous research (mainly after ICPD 1994) has been largely on unmarried young women. Although Demographic and Health Surveys provided information on young couples, information related to unintended pregnancies and abortions are very limited.

In the literature, there is a clear lack in one agreed definition of the terminologies regarding to 'pregnancy intentions' or 'planning'. Very few studies have explored this area but these are carried out in the countries with completely different socio-economic and cultural and value systems compared than Nepal. It is believed that the understanding of the terms regarding pregnancy can be shaped by the circumstances, social values and cultures along with other factors; the findings of the earlier studies cannot be generalized in Nepal. No previous study in Nepal has attempted to explore in this area.

Studies have shown that young married women particularly in Asia and sub-Saharan Africa are less likely than unmarried to be using modern methods. Despite high levels of knowledge, a very low proportion of married women are using contraception. Several reasons for not using contraception have been identified for unmarried young people and older married women but not for married young couples. Married young couples in Nepal (similar to other developing countries of Asia and Africa) may experience pressure to have children quickly and may also experience a provider's bias, particularly against methods that are thought to impair future fertility. The impact of side effects of contraception on its use may be related to the context in which they occur. Previous evidence on the low use of contraception are not adequate to come to a conclusion in Nepal.

The probability of becoming pregnant is related to the frequency of intercourse. Therefore, information on sexual behaviour of the couples is very important. Very limited studies on sexual behaviour of young people in Nepal revealed a moderately low level of sexual experience and extra marital sexual relations compared with other developing countries. However, the findings nonetheless confirm the growing concerns within Nepal

regarding unprotected sexual activities. Further study, especially on the sexual behaviour of married women in Nepal, is required to understand their inability to protect themselves from unintended pregnancy as well as STIs and HIV/AIDS.

As documented in the literature, unintended pregnancies are common in both developed and developing countries. The extent of the problem varies from one country to another. In Nepal, the successive DHS surveys have documented the levels of unintended pregnancy but no analysis has been carried out for trend over the years and their associated factors. In addition, to understand the relationship between the planning status of a pregnancy or birth and its associated factors, one must consider that the mother subjectively defines planning intention on the basis of her family's circumstances and her expectations regarding a child's needs. Therefore, the contextual factors are very important in this aspect, about which little is known in Nepal. Moreover, as discussed earlier, the DHS surveys have used a conventional definition for 'pregnancy intention/planning' which urgently needs to be refined. The further research will assist in understanding the extent of the problem after the refinement of the conventional definition to measure 'pregnancy intentions'.

No contraception, how widely it is used, can eliminate the need for abortion. Abortion was illegal in Nepal up to 2002 but it has always been reported to be very common. Earlier studies have shown some estimates of abortion rates in the country but most of these studies are prone to methodological problems, therefore, the results couldn't be generalized to the whole population. No systematic study on the estimation of abortion rate has been conducted in the country.

Very rare studies have covered the issues involved in the decision-making process and dynamics in the context of unintended pregnancies and their outcomes in Nepal. Studies in other settings have indicated that deciding on abortion is complex process. Interactions with husband, family members, and friends can be highly significant in shaping the decision. Despite these, other factors such costs, existing laws, attitude etc can intervene during decision making stage. However, there is limited evidence at present that suggests they do so decisively.

Nepal is in transitional period in the history of legality of abortion. Legalisation of abortion has created a new paradigm and challenges for Nepal. After the legalisation,

demand for abortion by Nepalese couples has increased however government has just started service from selected hospitals which is far below than the demand. It is very important to document the relevant information on unintended pregnancy and abortion in this transitional period so that changes can be measured over time.

To better understand the underlying factors behind unintended pregnancies and its consequences amongst married young couples, there is a need for more research in Nepal that specially focuses on the contexts and the circumstances surrounding unintended pregnancy, abortion behaviour, reproductive negotiation of young married women, pathways leading to abortion, decision-making process on abortion. To develop effective strategies for the prevention of unintended pregnancies, we need to understand why and how the issue of unwanted pregnancies arises and what will be consequences of it. The research reported in thesis does not intend to answer all these research gaps. An attempt has been made to focus more on the issues related to pregnancy intention, the extent of problem and its determinants, decision making processes on abortion and the consequences of unintended pregnancy amongst young couples.

CHAPTER 3
STUDY DESIGN AND METHODS

This chapter provides an overview of study design and methods used in this research. It details and justifies the study methods chosen, the study area selected, the sample size used and describes the respondents selection procedure. It also discusses the research instruments, recruitment and training of the research assistants, the fieldwork, data management and analysis, potential sources of bias and errors, and ethical considerations.

3.1 Study methods

This research explores sensitive issues such as unintended pregnancies and induced abortion. Considering the focus of the study and the relative lack of existing data, both qualitative and quantitative research approaches were used. In qualitative, free listing and in-depth interviews were used and in the quantitative research approach, a sample survey was conducted.

There are various reasons for using both qualitative and quantitative approaches in the study. First, the study explored understandings of the terminologies regarding pregnancies, the meanings attached to those terminologies and collected the local vocabularies used for pregnancy planning and abortion. In addition, it also explored the decision-making process regarding abortion and the pathways that lead from unintended conception to induced abortion. It is crucial to obtain such data on the wider social contexts in which the events occurs. Although much can be learned from quantitative data, such information does not provide insight into the contexts in which certain behaviours or decisions occurs. A key supposition underpinning this research is the recognition of the importance of the socio-cultural context surrounding reproductive and fertility planning decision-making. A woman or a couple may take decisions alone or jointly, but they do so in specific social contexts. Deciding for or against any action can be understood as the process through which women or couples interact and negotiate with a range of social factors that surround their pregnancy. Qualitative research approaches are more suitable to obtain these types of information.

Second, the study aims to estimate the prevalence of unintended pregnancy amongst young couples and identify the factors associated with it. To obtain this information, a sample survey was required. This not only provides descriptive data on unintended pregnancy but also allows for statistical modelling to identify the covariates of unintended pregnancy. In addition, this is useful to identify the respondents for case histories in the second phase of the qualitative study.

Third, the data collected from both the research techniques were useful to complement each other and enable the triangulation of the information, and hence increased the validity of the resulting analyse. Table 3.1 summarizes the research questions and data collection tools for the study.

Table 3.1 Data collection matrix: Young person's pregnancy study in Nepal, 2003

Research questions	**Data collection tools**		
	Free listing	**In-depth interviews**	**Sample survey**
How do young people and community members (young people aged 15-24, community level health workers, male and female community leaders etc.) define terms related to pregnancies intentions? What do these actually mean for them? What are the local vocabularies used for unplanned, unintended and/or unwanted conception and induced abortion?	√	√	
What proportion of the total pregnancies amongst the young couples in the sample are unintended? What factors are associated with unintended conceptions?		√	√
How are decisions made (decision-making process) in dealing with unintended pregnancies, especially with reference to induced abortion?		√	√
What are the pathways (personal characteristics, relationship, situations, social, family environment and legal etc) that lead from unintended conception to induced abortion or births?		√	√
What are consequences of unintended pregnancy?		√	√

3.2 Study area

Out of 75 districts in the whole of Nepal, the study was conducted in five districts, namely Ilam, Morang, Chitwan, Kaski and Lalitpur. The sites were selected purposively to represent regions of different levels of development, urban and rural settings, cultural and ethnic diversity and contraceptive prevalence rate. It is believed that unintended fertility is an index of fertility intention. Couples who plan to have fewer children will be more likely to consider a pregnancy unintended. Therefore, demand for contraception, as expressed by the CPR; was also considered as one of the indicators in the district selection for this study. Key indicators of the selected districts are presented in Table 3.2.

All the districts chosen for this study have higher CPR than national figures and tend to be more urbanized. However, considering the resources and time available for the study, it is believed that these districts represent a suitable mix of major caste/ethnicity, development regions, urban and rural setting and socio-economic diversity of the country. In addition, the political problem and difficult terrain situation of the country (making travel very time consuming) rendered it impossible to do the fieldwork in the Midwestern and Far western regions of the country. Therefore, those areas were purposively excluded from the sample. Considering area coverage and sample size, the results of the study can not be generalized to the whole country.

Table 3.2 Key indicators of the selected districts: Young person's pregnancy study in Nepal, 2003

Key Indicators	Ilam	Morang	Chitwan	Kaski	Lalitpur	National
	Study area 1*	Study area 2*	Study area 3*	Study area 4*	Study area 5*	
Total population	28,2806	84,3220	47,2048	38,0527	337,785	22,736,934
Number of households	54565	167875	92863	85075	68922	4311747
Number of Village Developments Committees	48	65	37	43	41	3914
Number of municipality	1	1	2	2	1	58
Per cent of population living in urban area	5.7	19.8	18.9	51.9	48.2	14.2
Major ethnicity/caste	Brahmin/ Chhetri Rai/Kirat/ Limbu	Maithali Brahmin/ Chhetri	Brahmin/ Chhetri Tharu	Brahmin/ Chhetri Gurung	Newari Brahmin/ Chhetri	Brahmin/ Chhetri/ Magar/ Maithali
Literacy rate	52.5	47.5	55.7	58.1	63.8	53.7
CPR	40.4	55.7	51.7	42.5	85.9	39.3

Source: Population Census 2001 and 1991, CBS, Nepal and Department of Health Services, Ministry of Health, Nepal

**See Annex I for more details of study area.*

Ilam district is located in the Eastern Development Region (see annex I) of Nepal. Its neighbouring districts are Panchthar to the North, Morang to the West, Jhapa to the South and West Bengal of India (Darjeeling) to the East. The area of this district is extended from hill to mountain region. The district headquarters has good road links with the capital city and border towns with India (CBS, 2002). In general, the district can be considered amongst the better off areas of Nepal.

Morang district is located in the Terai to the Eastern Development Region (see Annex I) of Nepal bordering with India, Jhaha and Sunsari districts. Electricity and telephones are available here especially in the urban area, although there is not comprehensive coverage. The district has very good road and transportation facilities to India.

Chitwan district is located to the Central Development Region (see Annex I) of Nepal bordering with India, Tanahu, Makwanpur and Dhading districts. This is a gateway district to India and other Tarai towns of Nepal. The district has mixed ethnicity with diverse cultures. The residents of this district are the permanent migrants from other hill and regions of the country. Electricity and telephones are available here especially in the urban areas.

Kaski district is located in the hills in the western development region (see Annex I). It lies on the lap of Mt. Machhapuchre and Annapurna within the Mahabharat range. It is one of the main tourist destinations of the country. This district is well connected by roadways from the Indian border, Sunauli and the capital city Kathmandu.

Finally, Lalitpur is the second biggest city of Nepal and located within the Kathmandu Valley (see Annex I). It is located in the Central Development Region of Nepal and is one of the most urbanised cities. Communication facilities are extensive and include national and international television, fax and internet. Residents in the urban area are widely exposed to the tourist trade.

A map of Nepal showing the headquarters of the selected districts is presented in Annex I.

3.3 Composition of young couples in the population

There was no precise information available on the number of young married women between 15 and 24 years of age for the study sites. Assuming the average number of young married women of 0.30 per household (based on population census 2001), it was estimated that there should be about 140,790 (469,300 x 0.30) young married women between 15-24 years of age in the study areas. Almost the same numbers are expected for men.

3.4 Qualitative study

In the qualitative study, free listing, in-depth interviews and case histories were conducted. Free listing and in-depth interviews were carried out at the beginning of the research. As Table 3.3 shows, after the preparatory phase, free listing and in-depth interviews were conducted. As mentioned in Chapter One, the study aimed to collect local vocabularies used for pregnancies and abortion and meaning attached to them. Free listing is considered as one of the best research tools to collect such information; therefore, it was conducted at the beginning of the data collection process. In-depth interviews with four different types of respondents were conducted simultaneously with the free listing. Another objective of this research is to gather the detailed information on the definition on the wantedness of the pregnancies, the situation/circumstances of women having unintended pregnancies and the perceived socio-psychological and health consequences of unintended pregnancies. It was intended to help the development of the survey questionnaire.

After analysis of the first phase qualitative information, the modification and pre-testing of the survey questionnaire was carried out in the fourth month of the study. A sample survey was conducted in the second phase of data collection. The last month of data collection (six) was devoted to collecting case histories. Case histories were conducted in the last phase (third phase) because it was hoped to understand the personal experience of young couples on the effects of unintended pregnancies, the decision making process of abortion, and pathways that lead from unwanted pregnancies to induced abortion. The sample survey identified the respondents who have had experience of unintended pregnancy and abortion so that information rich cases could be selected for the case histories.

Table 3.3 Activity schedule for data collection: Young person's pregnancy study in Nepal, 2003

Activity	Months					
	Feb	Mar	Apr	May	June	July
Preparatory phase I - Translation of key questions and topic guidelines for free listing and in-depth interviews - Recruitment & training of research assistants	—	—				
Data collection phase I - Free listing - In-depth interviews		—	—			
Preparatory phase II - Analysis of first phase data and modification of survey questionnaire - Finalisation of topic guidelines for case studies			—	—		
Data collection phase II -Survey					—	
Data collection phase III In-depth case studies					—	—

3.4.1 Types of respondents

Four types of respondents were involved in the study. They were: young married women aged 15-24 years, men aged 15-27 years, health service providers, and community leaders. The free listing and in-depth interviews were carried out with all four types of respondents. There are five main reasons to cover four categories of people in this study. First, understanding of the terminologies related to pregnancy intention can vary according to personal, local cultural context, socio-economic and legal circumstances. Second, although unintended pregnancy can occur throughout reproductive age, it is most common in the young age. Third, contraceptive usages as well as use of reproductive health services are very low amongst young married people, but the reasons for it were not well-studied and documented in Nepal. Fourth, the male partners and health services providers may have important roles in fertility decision-making; therefore, without knowing their perception and attitude the study can not be considered as the full picture of the problems. Fifth, gathering information from different perspectives can increase the validity, reliability and value of the study findings.

The quantitative survey and the case histories were conducted with young married men and women only.

3.4.2 Free listing

A productive open-ended technique is free listing, where the informants are asked to list items (e.g. local terminologies related to pregnancies, abortion). Free listing is a useful tool for getting inventories of vocabulary and perceived beliefs. It is helpful in the exploration of the systematic relationship amongst terms and the beliefs related to causes and solutions.

The main reason for employing free listing exercise was to gather the local vocabularies related to 'pregnancy' and 'abortion' and understand meanings attached to them. Free listing generated a list of abortion service providers, gathered information on the possible reasons for unintended conceptions and the perceived extent of the problems. This information was useful in designing the survey research instruments and triangulating the information collected from the sample survey and in-depth interviews.

3.4.3 Size of the sample for free listing

The targeted sample size for the free listing exercise was 60-80 respondents from four categories of respondents. No consensus has been found in the literature about the required sample size for such work. However, it is generally considered that the exercise should be continued until data saturation is attained. From the author's previous experience (having used this tool before in a study entitled "Networking study amongst female sex workers and injecting drug users in Kathmandu Valley: a focussed ethnographic study" conducted for Family Health International), after 15 interviews on a topic, 90 per cent of the responses were similar to those obtained from previous respondents in the free listing exercises (CREHPA, 2002). On this basis, the target was to interview 60-80 respondents from the four major categories mentioned above (15-20 in each category) but, altogether 127 respondents were covered for the free listing exercise. Of them, 40 were young married women aged 15-24 years, 30 were young married men (15-27 years), 26 were health services providers and 31 were community leaders (Table 3.4).

3.4.4 In-depth interviews

In-depth interviews are usually the most appropriate method for getting extended narratives and descriptions of events, actions and behaviours, along with the attitudes and knowledge/information connected with them. In-depth interviews are of a semi-structured conversational style rather than having a structured question-answer format. Generally, the interviewer prepares a number of topics to be investigated. In this method, the interviewer encourages the respondents to talk freely and guides the discussion towards new topics from time to time. The order in which topics are discussed usually does not matter but, for reasons of comparability, it is important to ensure that all topics of interest are covered. It is preferable to start the interview with subjects that are not sensitive and that are likely to be of interest to the respondent. With particularly complex or sensitive topics, it may be advisable to conduct repeated interviews with the same respondents to allow greater trust and rapport to evolve (Campbell *et al.*, 1999).

In-depth interviews were conducted in two phases - before and after the quantitative survey. In phase one, in-depth interviews were conducted amongst the selected respondents who have been selected for the free listing exercise. This phase of interviews was useful to gather the detailed information on the definition on the wantedness of the pregnancies, the situation/circumstances of women having unintended pregnancies and the perceived socio-psychological and health consequences of unintended pregnancies. The results were also used to modify the survey questionnaire. In the third phase, in-depth case histories were conducted amongst those young couples who reported an experience of unintended pregnancy in the quantitative survey. In-depth case histories provide experience of the consequences of unintended pregnancies, the decision making process of induced abortion or birth, and pathways that lead from unwanted pregnancies to induced abortion or birth.

3.4.5 Size of the sample for in-depth interviews

Approximately 60 in-depth interviews and about 30 in-depth case histories were targeted in this study. Again, there is no consensus amongst researchers about how many in-depth interviews are sufficient for a study like this. Campbell (1999) and Morton (1985) have suggested that the sample sizes for in-depth interviews are usually

small, typically in the range of 10-60 respondents. It is considered that the sample sizes proposed in the study will be sufficient because the objective of in-depth interviews is to elicit as much narrative as possible from "information rich cases" rather than be concerned with the representativeness of the results. In-depth interviews helped to understand young couples' perspectives on unintended pregnancies and to gain a rich description of the contexts and situations in which these events and actions are take place. Repeated contact with the same respondents allowed a deeper understanding of the key issues. This provided an opportunity for the researcher to probe for explanations, resolve apparent contradictions and obtain additional examples of events or actions. Therefore, great care was taken in the selection of the respondents, rather than focussing solely on the size of the sample. Altogether 66 in-depth interviews and 30 case histories were conducted. Out of 66 in-depth interviews, 17 were young married women, 17 young married men, 16 were health service providers, and remaining 16 were community leaders. Out of 30 case histories, 11 were men aged 15-27 years and 19 women aged 15-24 years who had ever experienced an unintended pregnancy (Table 3.4). The educational and occupational level of the respondent in the sample varied widely.

3.4.6 Respondent selection procedure: Qualitative study

Respondents for both of the qualitative research tools were selected purposively. One of the main advantages of purposive selection is that the researcher can choose a sample of great diversity. Diversity in the sample will give the researchers an understanding of the difference in the social processes and actions taken by the individual according to their own contexts. It also enables the researcher to select "information rich cases" with maximum variation in sampling, which will provide detailed understanding of the research topics (Morton-Williams, 1985; Campbell *et al.*, 1999). The nature of this tool, that requires several visits and an intensive time commitment, as well as the sensitive nature of the areas, renders purposive selection as the best sampling strategy for in-depth interviews. Table 3.4 presents the research tools, type of respondent for each tool, selection method, and the targeted and achieved sample size for the various components of study.

Respondents for the qualitative study were selected from five districts to ensure diversity in level of socio-economic development, ethnicity and the prevalence of

contraceptive use amongst young couples. The rationale for selecting diverse group in terms of socio-economic status and ethnicity was based on the aim to understand the terminologies related to pregnancy intentions and their meanings that could be applied in different sectors of Nepalese society. First of all, five districts were selected purposively. In the next stage, clusters (village development committees in rural and ward in urban) were selected randomly followed by respondents considering the age (in the case of married men and women only), ethnicity, place of residence, occupation, educational level and level of knowledge about the area of the respondent. Respondents for case histories were selected from those who ever experienced an unintended pregnancy in the quantitative study.

Table 3.4 Research tools and respondent selection procedure, targeted and achieved sample size: Young person's pregnancy study in Nepal, 2003

Tools	Types of respondents	Selection method	Targeted sample size	Achieved sample size
Phase I Free listing	Young married women aged 15-24	Purposive	15-20	40
	Spouses of young women	Purposive	15-20	30
	Community level health workers (HA, AHW, ANM, MCHW)	Purposive	15-20	26
	Community leaders	Purposive	15-20	31
Total			**60-80**	**127**
Phase I In-depth interviews	Young married women aged 15-24	Purposive	15	17
	Spouses of young women	Purposive	10	17
	Community level health workers (HA, AHW, ANM, MCHW)	Purposive	15	16
	Community leaders	Purposive	15	16
Total			**55**	**66**
Phase II Sample survey	Households		3333	4129
	Young married women aged 15-24	Two-stage cluster sampling	1000	997
	Spouses of young women aged 15-27	Every second household	500	499
Total			**1500**	**1496**
Phase III In-depth case histories	Young married women who had reported an experience of unintended pregnancy in the quantitative survey	Purposive, identified from quantitative survey	20-25	19
	Spouses of young married women who themselves or their wives have reported an experience of unintended pregnancy in the quantitative survey	Purposive	10-15	11
Total			**30-40**	**30**

3.5 Quantitative study

In the quantitative study, a sample survey was conducted. The main purpose of the survey was to generate quantitative information on the proportion of young couples experiencing unintended pregnancies and births, and identify the factors related to unintended pregnancy. It was also intended to produce data on the possible strategies a couple may adopt to deal with unintended pregnancy or births, and the decision making process in dealing with unintended pregnancy and its associated factors.

The survey was conducted through face-to-face personal interviews using a structured questionnaire. Young married women aged 15-24 years and their spouses were contacted separately for the interview. With regards to men, the age limit was 15 to 27 years. Twenty seven years is considered as an appropriate cut off point for men in the sample because the difference in median age at first marriage between men and women in Nepal is three years (Ministry of Health (Nepal)/New Era/ORC Macro, 2002).

3.5.1 The design of the quantitative study

The selection of the sample involves a two-staged cluster design. The primary sampling unit (PSU) for the study was ward or groups of wards in rural areas and sub wards in urban areas. A ward is the smallest administrative unit; a VDC consists of 9 wards and a municipality may consist of more than 9 wards. According to the Population Census 2001, the average number of households per ward for the rural areas ranged between 80 and 200; and in urban areas it is very large. In rural areas, it is possible to prepare a complete household listing, but not in urban areas. Therefore, it was necessary to subdivide each urban ward into sub wards. Information on the subdivisions of the urban wards was obtained from the Living Standards Measurement Survey (CBS, 1998).

3.5.2 Sample size

The sample survey successfully interviewed 997 young married women aged 15-24 years and 499 young married men aged 15-27 years (in most of the cases the husbands of the young married women) as intended. Due to refusal in the middle of the interviews one man and three women were removed from the analysis. The sample size was calculated based the estimated proportion of young women having unintended pregnancies. There was no precise information available on the prevalence of

unintended pregnancy amongst this target population in Nepal. In the Nepal DHS (2001), 23 per cent of young women aged 15-19 reported unintended pregnancies using the conventional definition of unintended pregnancy. In the absence of accurate data concerning the prevalence of unintended pregnancy in the study areas, the DHS estimate of 23 per cent was used for calculating the sample size for the study. To obtain this level of prevalence from the target population with 95 per cent confidence intervals and precision level of ± 4 per cent, the desired sample size is 850 women after adjusting for cluster effects (design effect). From past experience (Tamang *et al.*, 1998; Tamang *et al.*, 2001; Puri, 2002) the refusal rate was expected to be very low. All the possible ways, such as good explanation to the respondents about the importance of the study, assurance of confidentiality, consideration of age and sex of the interviewer, training of the interviewer, allocation of adequate time in building rapport and provision of repeated visits, etc., were adopted to minimize refusal rates. However, to increase the statistical validity, to allow for refusals and non-response of 15 per cent (5 per cent refusal and 10 per cent non-response) more than the total required sample were selected for an interview. This gave a total ideal sample of about 1000 young women. The calculation of sample size with different levels of target precision and prevalence is presented in Annex II.

From the Nepal population census (2001), it is estimated that on average there will be 0.30 young married women per household. Based on this information, a total of 3333 households (1000/0.30) need to be surveyed to obtain the sample size of 1000 young married women and 500 men (i.e. about 667 households per district). In practice, 4129 household needed to be covered to interview targeted number of the men and women. The number of the households, men and women covered varied according to their size of the household in the respective districts.

When the sample size is fixed in advance, the total number of sample clusters that need to be selected depends upon the cluster size (the number of households to be selected from each cluster). The cluster size in the presence of intra-class correlation[1] jointly produces an effect on the efficiency of the sample design known as the design effect, or

[1] This is the degree to which an element in the same cluster is likely to have the same characteristic compared with another element selected at random in the population

cluster effect. Therefore, one cannot select too many or too few households from each of the clusters.

Well designed surveys which produce reasonably precise estimates without excessive standard errors have a clustering effect in the range of 1.5 to 3.0, and certainly not greater than 4.0. This suggests that a cluster size of 20-33 in intra-class correlation is 0.05. The evidence from the Nepal DHS (2001) suggests that the clustering effect for family planning practice and reproductive health related variables is ranges between 1.5 and 2.5 if we take 25 completed interviews per PSU. Based on this, selection of 20-33 households per cluster would result in an acceptable level of clustering effect for the major variables under study. Therefore, it was decided to take around the mid-point figure of the given range, i.e., 27 ((20+33)/2) households from each selected sample cluster.

Based on this, a total of 124 (3333/27) clusters needed to be sampled in the study areas. With this, the expected number of young married women in the sample for the study area was 1000 (3333 x 0.30). As mentioned earlier, the spouses of every second young women selected in the sample were also interviewed.

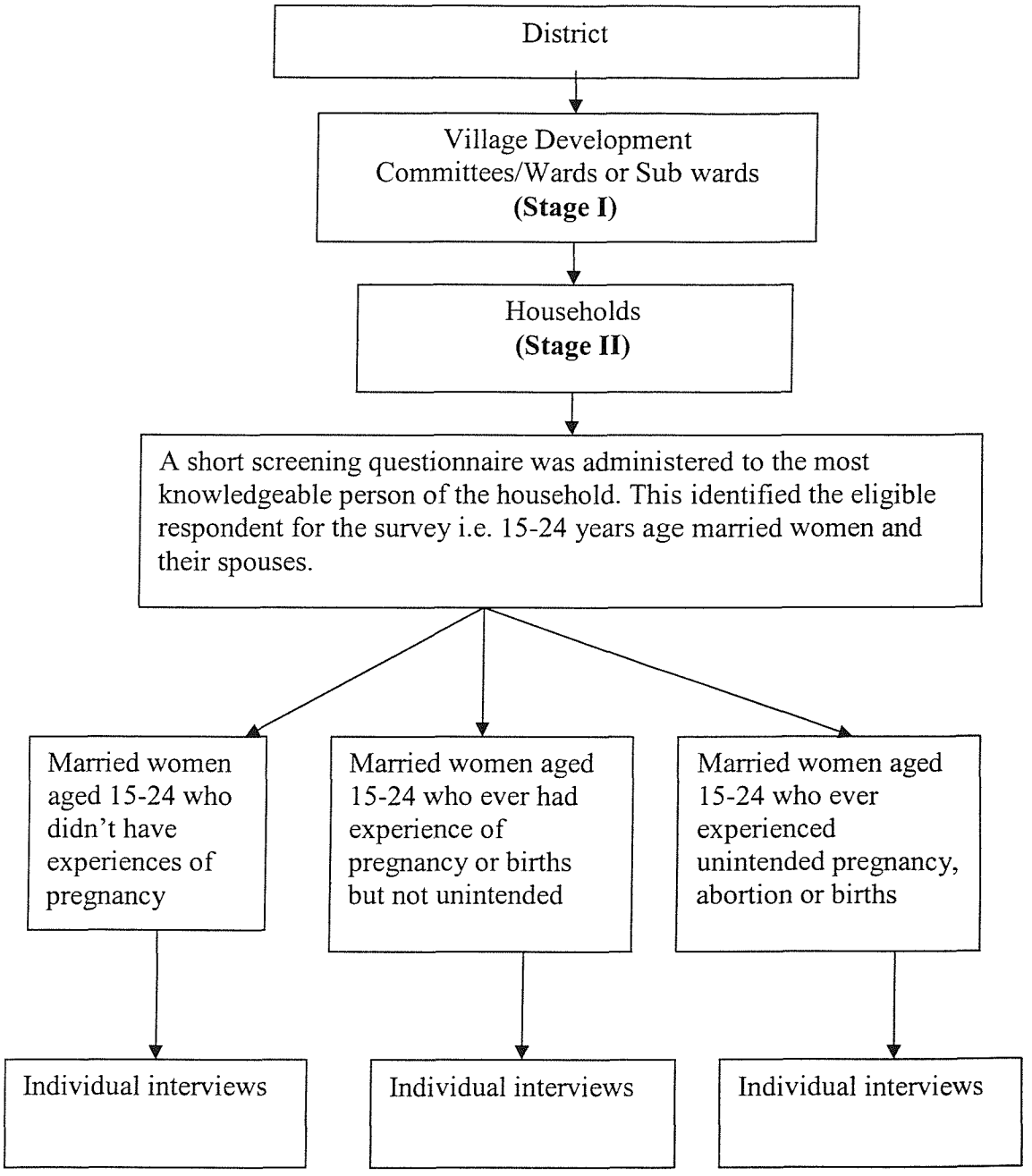
3.5.3 Sample selection procedures

A two-stage cluster random sampling technique was employed in the study. In the first stage, sample clusters were selected. The Probability Proportionate to Size (PPS) technique was used at this stage of selection. With the application of this technique, every sample cluster (ward) has an equal chance of being selected. A total number of 124 clusters (wards or sub wards) from five districts were selected in this stage. The ward wise household count for the 2001 Population Census of Nepal served as the sampling frame for selecting clusters. Selection of clusters was done centrally. A sample of the selection procedure in this stage is presented in Annex III.

In the second stage, sample households were selected from the sample clusters. This stage of selection was done in the field by the survey team. Before selection, up to date list of households was prepared with the help of the most knowledgeable person (s) of the cluster (chairperson of village development committee or village secretary). The list has served as sampling frame for selecting households. A systematic random sampling

technique (SRS) was applied to the list to select predetermined number of sample households from each cluster, i.e. 27 households per cluster. An example of selecting the required number of households in the cluster using SRS is presented in the Annex IV.

Figure 3.1 Selection procedures of the respondents for the survey: Young person's pregnancy study in Nepal, 2003



After selecting a house, a short household questionnaire was administered to the most knowledgeable person of the household. This identified the eligible respondent for the survey i.e. 15-24 years age married women and their spouses aged between 15 to 27 years. Then, individual interviews were conducted amongst the eligible respondents in the household; otherwise the interview was terminated after completing the short screening questionnaire. The detailed planning of the interviews for the sample is presented in figure 3.1.

3.6 The research instruments

In the qualitative study, a list of key questions was prepared for the free listing exercise. The questions were first developed in English and translated into Nepali. Altogether eight including one ice-breaking question, were asked in the free listing exercise. The main questions were on:

- Opinions on health services in their areas
- Local terms used for pregnancy and abortion,
- Reasons for having unintended pregnancy
- Reasons for not using family planning methods by the young couples
- Places for the consultation after having unintended pregnancy
- Places for abortion services
- Key decision makers in abortion

Questions asked in the free listing exercise are presented in Annex V.

Similarly, four different topic guidelines for the different types of respondents were developed for in-depth interviews. The guidelines included the main topics to be discussed, core questions and some probing questions if needed. These were first developed in English and translated into Nepali. The guidelines were pre-tested in both urban and rural areas and necessary modifications were made. The following topics were covered in the interviews:

- Family background and sources of information
- Views on contraception and services
- Timing of child bearing
- Understanding of the terminologies related to pregnancy intention
- Attitude to early pregnancy and abortion

- Reasons for and consequences of unintended pregnancy and abortion
- Use of reproductive services
- Need for reproductive services

The topics for the in-depth interviews varied slightly for the different types of respondent. The first three topics usually occurred in the order above but the order of the remaining topics varied depending on what the respondent had to say.

For case histories, similar guidelines to those prepared for in-depth interviews were used. However, some topics, such as understanding of the terminologies related to pregnancy intention, were removed and the core questions related to their personal experiences were added. The guidelines for in-depth interviews and case histories are presented in Annexes VI, VII and VIII respectively.

For the quantitative survey, a structured questionnaire was developed before launching the first phase of fieldwork. The questionnaire was modified according to the findings of the first phase of qualitative study. Most of the questions were close-ended, although a few open-ended questions were also used. To increase the probability of good response rates, wording, item content, response format and scaling, item sequence and question format were carefully considered while designing the questionnaire. The questionnaire was developed in English and then translated into Nepali. The questionnaire was pre-tested in neighbouring areas of a sampled district and any necessary modifications were made. Questionnaires used for individual interviews with women and men are presented in Annexes IX and X respectively.

3.7 Recruitment and training

In order to obtain the respondents' confidence and to increase the honesty of the responses, young (about same age as respondents), university graduate and experienced interviewers were hired for the fieldwork. Altogether 28 research assistants (18 females and 10 males) were hired with the help of CREHPA. CREHPA has a pool of experienced researchers for collecting information on sensitive issues. First, six research assistants were hired and trained in conducting free listing and in-depth interviews. After the completion of phase one fieldwork, an additional 22 research assistants were hired. Most of the researchers had university graduate level of education and were

experienced in using both quantitative and qualitative research tools. They received a one-week extensive training on sampling procedures and the administration of structured questionnaires. The training involved class lectures, mock interviews, role-plays and field trials. The research assistants who were trained in conducting qualitative research earlier also participated in the later training and worked as team leaders in the second and third phases of data collection.

3.8 The fieldwork planning and logistics

The fieldwork was carefully planned and was conducted in three phases. The first phase of the fieldwork was carried out in February-April 2003. In the first phase, free listing and in-depth interviews were carried out with samples from the different sectors (individual young married women and men aged 15-24 years, community level health workers, male and female community leaders) in all the selected districts for this study. Six research assistants conducted the first phase of the data collection. Two teams comprising one male and two females were formed to cover one district per team. At the start, joint fieldwork was carried out in two districts (in Lalitpur and Chitwan). The author accompanied the research team in the first two districts and conducted few interviews. Regular contact was maintained during the fieldwork in the first two districts and modification in the fieldwork strategies and research instruments were made if required.

The free listing exercise and in-depth interviews were carried out at a time and place convenient to the respondents. Almost all health service providers were interviewed at their workplace. Every day, a debriefing meeting was organized to discuss the major themes emerging from the interviews. Problems encountered during the fieldwork and possible solutions were also discussed at the meeting. There were minor differences in interviewing style but the content of the interviews and themes emerging from them were consistent. Tape recorders were used for the in-depth interviews (if respondent agreed) and field notes were made as much as possible. Transcription and expansion of field notes were done on the same day of the interviews. Only one in-depth interview was conducted per day by an interviewer to maintain the quality of the data.

The second and third phases of fieldwork were carried out from June to July, 2003. In the second phase, the sample survey was carried out with the help of 28 research

assistants. Altogether there were four teams each covering one district with joint fieldwork being was conducted in one district. Similar sex researchers with the respondents conducted individual interviews. Efforts were made to interview both wife and her spouse at the same time but in many occasions it was not possible. However, the respondents who interviewed first in the house were requested not to share the content of interviews with her/his spouse to avoid possible influence in the responses. The research assistants responsible for the sample survey were closely supervised in order to ensure the quality of their work. For quality control, no more than four individual survey interviews per day by each interviewer were conducted. Spot checks and re-administration of selected questions were carried out for selected respondents. Regular meetings were arranged to discuss progress and problems faced in the actual fieldwork, and trouble-shooting tips were given if necessary.

In the third phase, case studies were carried out immediately after the sample survey. One research assistant in each district (who was also involved in the first two phases of the fieldwork) conducted the case histories. They worked closely with the quantitative survey team. The author visited the team in all the districts, and provided support to the research assistants. The author read transcripts of case histories as much as possible in the field and provided feed-back to the research assistants.

3.9 Data management and analysis

Table 3.5 shows the steps of qualitative data-gathering and management process in sequence of the present study. Review of the data (transcripts and free list data) and discussion of themes was an on going process during interviewing. However, the systematic data analysis was carried after completion of the fieldwork. First, all the transcriptions were translated from Nepali into English for the analysis. Two translators translated interview from Nepali into English. The author checked all translations. The second step was to get familiar with the data and the main themes were identified. Next step was 'coding' of the textual data. Based on the themes identified in the first stage, a coding list was prepared and coded the texts accordingly (see Annex XI). In the third stage, 'charting, which means rearranging the data according to the thematic content in a way that allows within and between respondents was done. Finally, interpretation of the information was carried out. The computer software package Atlas/ti was used to carry

out some of the above techniques in the analysis. The information collected in free listings was analyzed by using ANTHROPAC computer software.

For the quantitative survey data, all completed questionnaires were entered into a database immediately after these have been manually edited and validated. In the case of open-ended questions, coding was done after the completion of fieldwork. Computer software dBase IV was used for data entry. Data entry validity checks were performed for all the questionnaires. After cleaning, data were analysed using STATA, SPSS. The detailed discussions on the types of the data and methods analysis are presented in the respective sections of every chapter.

Table 3.5 Qualitative data gathering location and data management process: Young person's pregnancy study in Nepal, 2003

Location	Data Management
Face-to-face interview situation in field sites	Researchers took down 'rough notes', during the interviews. Researchers tape recorded the in-depth interviews
Immediately after interviews	Researchers reviewed their notes; checked that they were legible
Back at the workplace (or at home of researcher)	Expanded the 'rough notes' and descriptive details, including description of the interview situation, description of the informant as fully as possible. Transcribed the interviews. The transcriptions are in the local language used in the interview itself. The author read the expanded notes and provided feedback to the researchers.
At the workplace	Expanded notes (written in Nepali language) were translated into English and entered as a text file in the computer.
At the workplace	The translations were compared with Nepali language interview file; and made corrections and added additional comments or explanations.
At the workplace	The author read carefully all the interviews and major themes were identified. Based on the themes codes were developed and marked with appropriate codes for each segment of the text using Atlas/ti computer software
At the workplace	The data entry person entered the appropriate codes into the interview file, using the agreed code list in Atlas/ti computer program,

3.10 Potential sources of bias and errors

In view of the social unacceptability of induced abortion, a major potential obstacle for this study is the difficulty of eliciting unintended pregnancy and abortion histories from the respondents. Some women may be reluctant to admit to the researchers that they have experienced unintended pregnancies, or have terminated pregnancies or had unwanted births. In this context, it was envisaged that some of the potential respondents may be reluctant to participate in the study, especially for case histories, and some of the respondents may not be willing to provide complete information. This would introduce some errors in the results. To over come this, 15 per cent over sampling was done. Beside this, other possible measures such as assurance of confidentiality of the responses, allocation of adequate time in building rapport with the respondents and the provision of repeated visits were also planned. Fortunately, non response rate was very low. In fact, only one man and three women in whole sample refused to give an interview.

The study intended to explore report of past behaviour, which may lead to bias due to recall problems. However, this problem was minimised by using standardised research instruments and highly experienced interviewers on asking questions on sensitive topics, probing and triangulating responses.

In addition, the study did not cover mid-western and far-western region of the country mainly due to the security problem and difficult terrain situation. Furthermore, the limited resources and time available, the sample size could not be made nationally representative. Qualitative findings presented in this thesis are based on purposively selected few sample. Therefore, the results of the study can not be generalized to the whole country and should be interpreted carefully.

3.11 Ethical considerations

At the beginning of the research, an ethical committee was formed. The members of the committee were drawn from the government, Tribuhwan University and a national level non-profit research organization. The research obtained an ethical approval from this committee. Participants of the study were fully informed about the nature of the study, the research objectives, the confidentiality of the data and potential benefit in

participating in the study. Respondents gave full consent for their voluntary participation in the study. Respondent's consent was also sought to record the in-depth interviews. Information obtained from the respondents was kept confidential and not presented in a form that disclosed individual identity.

3.12 About the collaborative organisation

The study was conducted with the collaboration with Centre for Research on Environment Health and Population Activities (CREHPA) where the author is associated. CREHPA is a not for profit research organisation registered under Society's Act 2034, HMG as an NGO. It is also registered with the Social Welfare Council. Most of the founder members of CREHPA and regular professional staff have many years of research experiences in the field of population and reproductive health research and community development. CREHPA provided all logistics and secretarial support during the fieldwork and data entry.

CHAPTER 4

EXPLORING THE TERMINOLOGIES RELATED TO PREGNANCY PLANNING INTENTIONS AND THEIR MEANINGS

4.1 Background

The terms 'planned', 'unplanned', 'intended', 'unintended', 'wanted' and 'unwanted' are frequently used in relation to pregnancy in reproductive health policy, health services and health research (Barrett and Wellings, 2002). These terminologies are also often used in the reports of Demographic Health Surveys and the World Fertility Surveys. However, there is no agreed meaning of these terms that has been found in the literature. Limited research suggests that an understanding of these terms varies according to the background of the respondents and is very much shaped by their circumstances, social values and cultures (Ineichen, 1986; Lester and Farrow, 1988; Macintyre and Cunningham-Burley, 1993; Finlay, 1996; Moss *et al.*, 1997; Fischer *et al.*, 1999; FPA, 1999; Katbamna, 2000; Barrett and Wellings, 2002; Gerber *et al.*, 2002). An accurate measurement of pregnancy intentions is important in understanding the impact of pregnancy related behaviours, forecasting fertility, estimating unmet need for contraception, and understanding the impact of pregnancy intentions on maternal and child health (Westoff and Ryder, 1977; Brown and Eisenberg, 1995; Finlay, 1996; Bankole and Ezeh, 1999; Zabin, 1999; Klerman, 2000). However, the definition used for measuring pregnancy intentions in the DHS and other fertility surveys (such NSFG study in USA) has been the subject of recent conceptual and methodological critiques (Bachrach and Newcomer, 1999; Luker, 1999; Peterson and Mosher, 1999; Sable, 1999; Trussell *et al.*, 1999; Zabin, 1999). Pregnancy intentions are increasingly viewed as being embedded in emotional, cognitive, cultural and contextual dimensions and current measures may not capture this complexity (Santelli *et al.*, 2003). In most of the DHS studies, the main question asked was:

> *"At the time of you become pregnant with (name), did you want to become pregnant then, or did you want to wait until later, or did you not want to have any (more) children at all?"*

In most of the studies, based on the response of above question, pregnancies have been categorised as wanted, mistimed and unwanted. There are four main problems in this conventional measure of pregnancy intention. First, because pregnancy intention involves human emotional and psychological factors, and is influence by their circumstances,

social values and cultures, it is an extremely complex concept to measure. Second, wantedness of a pregnancy may change over the time period, which further complicates the issue. For example, pregnancy intentions are likely influenced by the presence of the infant (Joyce *et al.*, 2000). Third, an ideal time to have children is too complicated to examine because partners may have different views on timing. Discrepancies between the women's stated and actual contraceptive practice also complicates the issue of measuring intention status (Sable, 1999). The fourth problem is recall bias, which is a common problem in retrospective questions about pregnancy intentions.

It may be inappropriate to design, deliver and evaluate programmes without understanding the meanings of these terminologies and the ways of accurate measurement. Therefore, clarification of issues of meaning and measurement is fundamental to developing a more complete understanding of pregnancy intentions, which would help to improve public health and clinical prevention programmes aimed at preventing their occurrence.

A few studies have provided information on how women understood the terminologies related to pregnancy intentions. These studies revealed that the definitions of the terms related to pregnancy intention varied substantially (Moss *et al.*, 1997; Fischer *et al.*, 1999; Barrett and Wellings, 2002). Although these studies helped to clarify the understanding of these terms (see details in Chapter Two) to some extent, the socio-economic circumstances, social values and cultures, are completely different in Nepal compared with those countries where earlier studies were conducted. Nepalese people may have their own definition and understanding and ways of understanding of these terms. No prior study has addressed this issue in Nepal. Moreover, none of the prior studies have collected the opinions of men, health services providers and community leaders in this matter. Since the reporting on pregnancy intentions may vary according to the personal, partnership, social legal realities, covering multiple categories of respondents may give better understanding of the multiple dimensions of pregnancy intentions. Attitudes and behaviours of male partners may influence women's intentions, sexual behaviour, contraceptive use and parenting (Koreman *et al.*, 2002). However, most of the current surveys ask women only to indicate their male partner's intentions, which may not be completely accurate. Therefore, incorporating the understanding and intentions of male partners is also important in measuring pregnancy intention. Unintended pregnancy can

occur throughout reproductive years but is most common amongst young women (Pulley *et al.*, 2002). Therefore, this study covered four categorises of respondent, including men, and focussed on young married people in Nepal.

This chapter aims to explore the meanings of the terms related to pregnancy intentions and examine the relationship between the terminologies from the perspectives of young married men and women, health service providers and community leaders in Nepal. It also explores the local vocabularies for 'pregnancy' and 'abortion' that are applicable to different local contexts.

After a brief review of data sources and methods of analysis used in this chapter, findings from the free listing related with the issues such as local words used for pregnancy and abortion are presented. In subsequent section, spontaneous and probed meanings of the terminologies related to pregnancy intentions and perceptions of relationship between them are examined. Finally, a discussion and conclusions are presented.

4.2 Data sources and method of analysis

Information presented in this chapter is based on two qualitative research tools: the free listing and the in-depth interviews. As described in Chapter Three, free listing and in-depth interviews were carried out with 127 and 66 respondents respectively before the quantitative survey. Four different types of respondents - young married men aged 15-27, women aged 15-24 years, community leaders and health service providers - were interviewed. The detailed description of the sampling procedures and their justification are presented in Chapter Three.

Eight major topics were covered in the in-depth interviews. Until the third topic i.e. timing of childbearing, the interviewer avoided the terminologies relating to pregnancy intention that have been used in the past. It was expected that, until this topic (topic three), respondents would spell out in their own 'local terms' related to pregnancy. Through this, researchers tried to see what terms they used to describe pregnancy intention and how they used these terms. Based on their responses, further probing was conducted to understand the meanings of different terms related to pregnancy intentions. If they did not use the term then the interviewer introduced them and asked for the meanings. The following main six core questions were asked to the respondents at this

stage of the interviews (see section three in Annexes VI and VII).

What does *yogit garbha* (planned pregnancy) mean to you?
What does *unyogit garbha* (unplanned pregnancy) mean to you?
What does *chaheko garbha* (intended pregnancy) mean to you?
What does *nachaheko garbha* (unintended pregnancy) mean to you?
What does *ecchit garbha* (wanted pregnancy) mean to you?
What does *unecchit garbha* (unwanted pregnancy) mean to you?

Frequencies, percentages, average rank and Smith's Salience were the main out put produced from the free listing data. Data collected through free listing were analyzed using the Anthropac computer software package (Borgatti, 1996). The analytic techniques used to analysis the in-depth interviews was content analysis, a strategy for eliciting themes from text based data. First of all, the interviews were translated from Nepali into English. After reviewing the transcript of interviews, the major themes and concepts were identified. The main themes that emerged from the data were developed into codes for organizing and analysing subsequent interviews. The development of the coding structure was an iterative process in which the author developed an initial code book based on early interviews, tried using the book to code subsequent interviews, made modifications, and recoded data. In the next step, all the interviews were coded and linked with the background characteristics of respondents. Charts were prepared for every theme and relevant quotations were extracted with number and, finally, interpretation was carried out. In-depth interview data were analysed using Atlas/ti, a computer software application designed for the analysis of text based data. Atlas/ti assists the researchers in organizing, searching, and retrieving text based data by codes. Once the transcripts were coded, all the relevant quotation (across the interviews) for given codes could be retrieved with their background characteristics in a single report. From these reports, the researchers explored emergent themes in-depth, considering the range of views expressed within a theme, as well as the relationship(s) between themes. An example of coding and extracting quotations using Atlas/ti and key background characteristics of the respondents are presented in Annexes XI, XII, XII and XIV respectively.

4.3 Findings from the free listing exercise

This section presents the findings from the free listing, which was used to collect the local

vocabularies for pregnancy and abortion from young married women, men, health service providers and community leaders.

4.3.1 Local terminologies for pregnancy

Table 4.1 presents the results of the free listing exercise. A total of 42 different terms were used for 'pregnancy'. The top 10 frequently mentioned terms according were *pet bokeko* (carrying a child in the abdomen), *garvawati* (pregnant), *dui jeu* (two bodies), *mahinawari rokeko* (ceasing of menstruation), *petma bacha aunu* (having a child in the stomach), *bhudi bokeko* (carrying a child in the abdomen), pregnant, *bhari jeu* (heavy body), *garva bokeko* (carrying a child) and *Amma Hunewala* (Becoming mother). *Pet bokeko* (104 respondents) was the most frequently mentioned term to refer to 'pregnancy' in all the study areas. A little fewer than 50 per cent cited a term *garvawati* (58 respondents), whereas one-quarter of the respondents mentioned *dui jeu* (40 respondents) and *mahinawari rokeko* (31 respondents). Since the respondents were from different ethnic groups, they mentioned the terms in their language such as *pwathe du* mentioned by the Newari ethnic group from Lalitpur, *dhidar* by the Tharu (terai) and *dojiya* by the Rajbanshi (terai) community. Some educated respondents used English word 'pregnancy'. No marked variation in the response was observed by the age, level of education and occupation of the respondents.

The average rank shown in Table 4.1 refers to how early in the listing each person, on average, mentioned a particular response. Therefore, the term that has lowest rank indicates that the term was mentioned by most respondents first (Borgatti, 1996). In this study, *pet bokeko* (1.885) tended to be mentioned first by more respondents than the term *garvawati* (2.052) although the difference is small. Amongst the respondents who mentioned *garva bokeko* (1.444), nearly all of them always mentioned the term first on their list, although the number of respondents who mentioned this term is very small (nine respondents).

'Smith's Salience' is a variable that takes the frequency of mention, and then weights that frequency by the average rank (Borgatti, 1996). That means that if two items had equal numbers of mentions then an item would still have higher salience if it was mentioned earlier in people's lists.

Table 4.1 Top ten frequently mentioned local terms used for pregnancy: Young person's pregnancy study in Nepal, 2003

SN	Terms for pregnancy	Approx English translation	Frequency (N=127)	Percentage	Average rank	Smith's salience
1.	*Pet bokeko*	Carrying a child in the abdomen	104	82	1.885	0.636
2.	*Garvawati*	Pregnant	58	46	2.052	0.316
3.	*Dui jeu*	Two bodies	40	31	2.750	0.182
4.	*Mahinawari rokeko*	Ceasing of menstruation	31	24	2.387	0.151
5.	*Petma bacha aunu*	Having a child in the stomach	29	23	2.621	0.137
6.	*Bhudi bokeko*	Carrying a child in the abdomen	23	18	2.870	0.100
7.	Pregnant	-	19	15	3.105	0.082
8.	*Bhari jeu*	Heavy body	16	13	3.125	0.068
9.	*Garva bokeko*	Carrying a child	9	7	1.444	0.060
10.	*Amma Hunewala*	Becoming mother	6	5	3.00	0.027

Table 4.1 shows that *pet bokeko* was mentioned by the maximum number of respondents and was mentioned earlier in the list than nearly all the other terms, so p*et bokeko* is the most common and salient way of saying pregnancy with a salience of 0.636.

The result shows that the terms mentioned by the four different types of respondents were similar. Most of the respondents from all the four groups mentioned *pet bokeko* frequently (table not shown). When the terms were asked to the young married men and the young married women, most of them mentioned *pet bokeko* and *garvawati* first in their list.

The highest salience amongst the service providers was for the terms *pet bokeko* and *garvawati,* as being very similar. Similarly, the young married men had higher salience for the terms *pet bokeko* and *garvawati.* In other words, these terms were the most commonly said and mentioned first on the list of their pregnancy terms. However, the young married women and community leader had a high salience for the term *pet bokeko.*

4.3.2 Local terminologies for abortion

A total of 37 different local terms were used for 'abortion'. The top 10 frequently mentioned terms used were *bacha falne* (to throw the child), *tuhinu* (abortion), *curette garne* (to undergo curettage), *bacha khera jane* (to have a miscarriage), *garvapatan*

(abortion), abortion, *bacha giraune* (to throw the child), *garva falne* (to throw the foetus), *Jharne* (to drop the foetus) and *Bachha Khasalne* (to take out the foetus). The term *bacha falne* was cited by 82 respondents, followed by the term *tuhinu* (65 respondents) and *curette garne* (43 respondents). It should be mentioned here that the respondents have listed the terms used both for induced and spontaneous abortion. The terms such as *Tuhinu* and *Bachha Khera Jane* were used for spontaneous abortion. The remaining terms presented in Table 4.2 were used for induced abortion. Similar as for the case of pregnancy, respondents also mentioned the terms used for abortion in their own language as well. Some educated respondent also used English word 'abortion'.

The terms *bacha falne* (1.805) and *tuhinu* (1.815) mentioned for the term abortion were listed first by the respondents although there was not much of a difference in the average rank between the two terms. *Bacha khera jane* (1.968) was also mentioned first by the participants but the number who mentioned this term was small.

Smith's Saliences for *bacha falne* and *tuhinu* were 0.493 and 0.389 respectively. This suggests that most of the participants frequently used these two terms frequently and listed the term first.

Table 4.2 Top ten frequently mentioned local terms used for abortion: Young person's pregnancy study in Nepal, 2003

SN	Terms for pregnancy	Approx English translation	Frequency (N=127)	Percentage	Average rank	Smith's salience
1.	*Bacha falne*	To throw the child	82	65	1.805	0.493
2.	*Tuhinu*	Abortion	65	52	1.815	0.389
3.	*Curette garne*	To undergo curette	43	34	2.581	0.195
4.	*Bacha khera jane*	To have a miscarriage	31	25	1.968	0.182
5.	*Garvapatan*	Abortion	29	23	2.310	0.138
6.	Abortion	-	15	12	2.400	0.076
7.	*Bacha giraune*	To throw the child	9	7	2.556	0.046
8.	*Garva falne*	To throw the foetus	7	6	2.286	0.034
9.	*Jharne*	To drop the foetus	5	4	1.600	0.032
10.	*Bachha Khasalne*	Take out the foetus	5	4	1.800	0.030

The analysis shows that the most frequently mentioned terms were similar in all the four categories of respondents covered in the study. However, the average rank differed a bit amongst some of the categories of respondents. For example, the average rank shows that *bacha falne* was mentioned first in the list by the young married men and young married

women whereas, *tuhinu* was tended to be mentioned first by the service providers and community leaders. *Bacha falne* had a high salience amongst the young married men (0.460) and young married women (0.566). However, *tuhinu* had a high salience amongst the service providers' (0.663) and both *bacha falne* (0.533) and *tuhinu* (0.523) had high salience amongst the community leaders.

4.4 Spontaneous use of the terminologies related to pregnancy intentions and their meanings: findings from the in-depth interviews

This section discusses spontaneous use of the terminologies regarding pregnancy intention during the interviews. It also discusses the context in which the terms were used. Information for this section was obtained from the in-depth interviews with all four types of respondents covered in this study.

4.4.1 Planned and unplanned pregnancies

None of the young married women, health services providers and community leaders covered in the study used the terms 'planned' and 'unplanned' pregnancy spontaneously during the interviews. Very few young married men (two out of 17) used these words. Young men used the term 'planned' *(yogit)* while explaining about the appropriate time and capabilities of the couple to bear a child.

4.4.2 Intended and unintended pregnancies

Compared with the terms 'planned' and 'unplanned' many respondents used the terms 'intended' or 'unintended' spontaneously during the interviews. Twenty-one out of 66 respondents covered in the in-depth interviews used these terms in different contexts. Six out of 17 young women used the term 'intended' *(chaheko)* unprompted during the interviews. They used the word in the context of the ideal time for child bearing and desire of husbands and parents-in-law to bear the child. As one of the women cited:

> *"Since there were no kids in the family, my parents in law and my husband's intended (chahana) to have one".*
>
> *-Sumnima*

Similarly, four out of 17 young men used the term *chaheko* spontaneously. The context of using the terms was similar as to young women. For example, one of them said:

> *".... parents in law intends (chahera) to see their grandchildren so they don't use*

contraception...".

-Ramu

About half of the health service providers (7 out of 16) used the term 'intended' *(chaheko)* spontaneously whereas only one used the term 'unintended' *(nachaheko)*. They used the term 'intended' *(chaheko)* when they talked about son preference, barriers in using contraceptives and ideal time of childbearing for a couple. The term 'unintended' *(nachaheko)* was used only in relation to inter-spousal communication. Compared with the health service providers, very few community leaders used the term 'intended' *(chaheko)* spontaneously during the interviews. Only three out of 16 used this term while explaining the non-use of contraceptive in the context of birth spacing, parents-in-law's desire of having child and son preference. None of the community leaders used the term 'unintended' *(nachaheko)* spontaneously. Little difference was found in the context of using these terminologies by the socio-demographic backgrounds of the respondents.

4.4.3 Wanted and unwanted pregnancies

As regards the words 'wanted' and 'unwanted', only four young women used the term 'wanted' *(eccha)* without being probed. They used the term when trying to explain the desire of in-laws and family members including husband to have a child in the family. Only one young man used the term '*wanted*' spontaneously. He used the term 'wanted' *(eccha)* while explaining the right time for a woman to give birth.

The term 'wanted' *(echhit)* was used by only two health providers and two community leaders while explaining the right time for a couple to bear a child, the barriers in using family planning methods and desire of parents-in-law for grandchildren. For example, one of the community leaders said:

"...Apart from age the other factors for time to bear children is when the family also want (echhit) it. The parents-in-law also have a desire (echhit) to play with their children...".

-Prabhat

None of the health service providers and community leaders used the term 'unwanted' *(anichhit)* spontaneously.

4.5 Meanings of the terminologies related to pregnancy intentions used by respondents when prompted

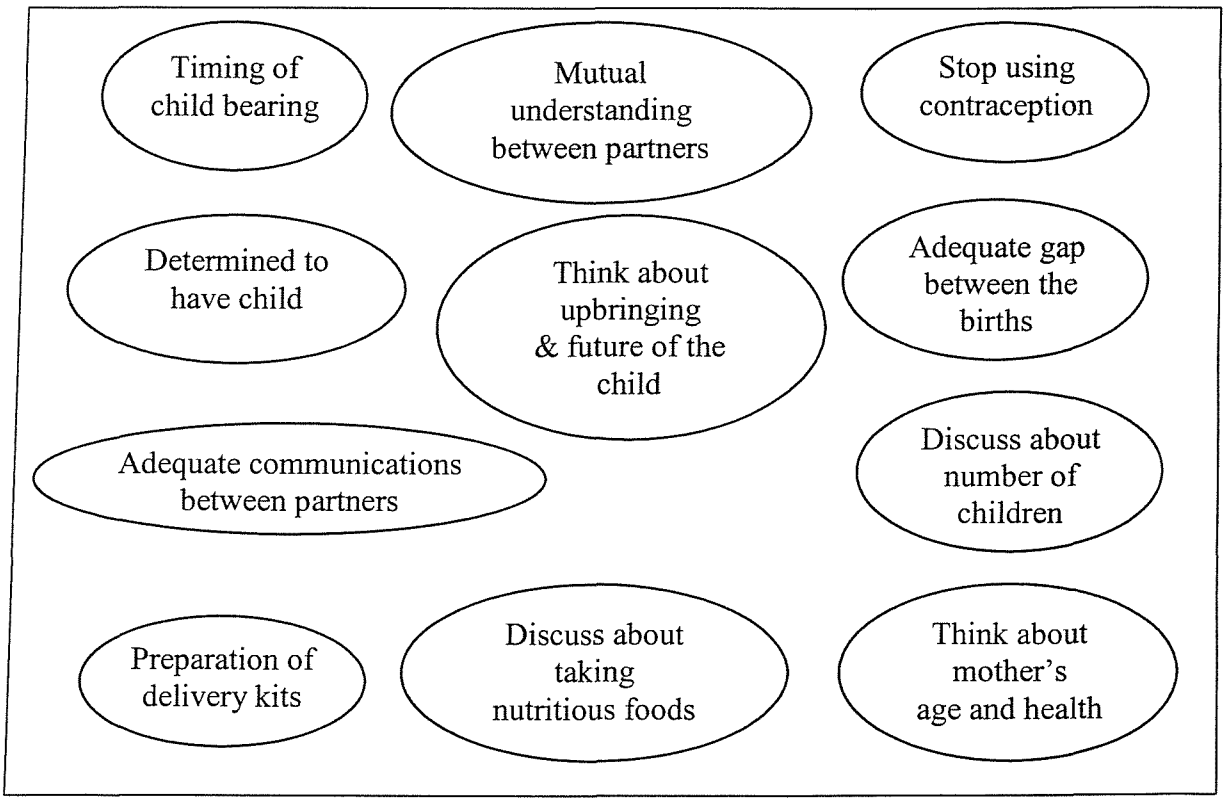
This section discusses about the meanings of the terms related to pregnancy intentions.

As mentioned earlier, the interviewers used the terms and asked their meanings if the respondents did not use them spontaneously.

4.5.1 Definitions offered for 'planned' pregnancies

Respondents are most likely to say a 'planned' pregnancy was a pregnancy which a couple had thought about the timing of childbearing and had mutual understanding between husband and wife beforehand and decided to become pregnant. Other definitions such as stop using contraception, think about the upbringing and future of the child, determine to have child, adequate time gap between the births, adequate communication between husband and wife, think about place of delivery, discuss about number of children, preparation of delivery kits, discuss about taking nutritious food during pregnancy, thinking about mother's age and health beforehand were also offered (Diagram 4.1).

Diagram 4.1 Definitions offered for 'planned' pregnancies: Young person's pregnancy study in Nepal, 2003



Young women were most likely to say that the timing of the childbearing (9 out of 17) and mutual understandings between the partners (7 out of 17) are the two main criteria to be termed as 'planned' pregnancy. For example, one of the women who emphasised the

timing of childbearing said:

> " *When couples plan to bear child at a particular period of time that is after completing their education. That type of pregnancy is called planned pregnancy".*
> *-Avha*

Other criteria put forward by the women to be a 'planned' pregnancy were: couple thinking to have a baby, deciding to have a baby, plan keeping in mind about upbringing and the future of the child and stop using family planning methods.

Opinions of young married men on 'planned' pregnancy were more or less similar to those of young married women. In addition to the criteria provided by the young women, men emphasized inter-spousal communications, mother's health and nutritious food that should be taken during pregnancy. For example, a young man said:

> *"Planned pregnancy means adequate discussion of husband and wife beforehand about right time to bear a child... birth spacing... whether or not to give birth... viewing the condition of the mother's health, what to feed during pregnancy...".*
> *-Kishore*

Health service providers also laid down similar criteria as mentioned by the young women and men in regard to be a 'planned' pregnancy. They are most likely to say a 'planned' pregnancy was a pregnancy which occurred at the right time (13 out of 16) followed by make plan beforehand to take care of the child and thinking about his/her future (4 out of 16). For example, one of the health service providers said:

> *"Before a couple gets pregnant, they think systematically about giving birth, how to look after the child and what types of education should be given to the child. This is called planned pregnancy".*
> *-Nirmal*

Health service providers had clear explanations about the right time compared with young men and women. According to them, the right time referred to the completion of their studies or establishing themselves in their job, a certain number of years gap after marriage, and improvement of economic condition of the family. In addition, health service providers said that in 'planned' pregnancy, couples are determined to have the child, thought about mother's health and place of delivery and discussed number of children beforehand. Interestingly, only a few service providers viewed that couples become happy from the pregnancy if it was 'planned'.

In addition to the conditions laid down by three other categories of respondents for a 'planned' pregnancy, community leaders added only one new criterion for it. According to

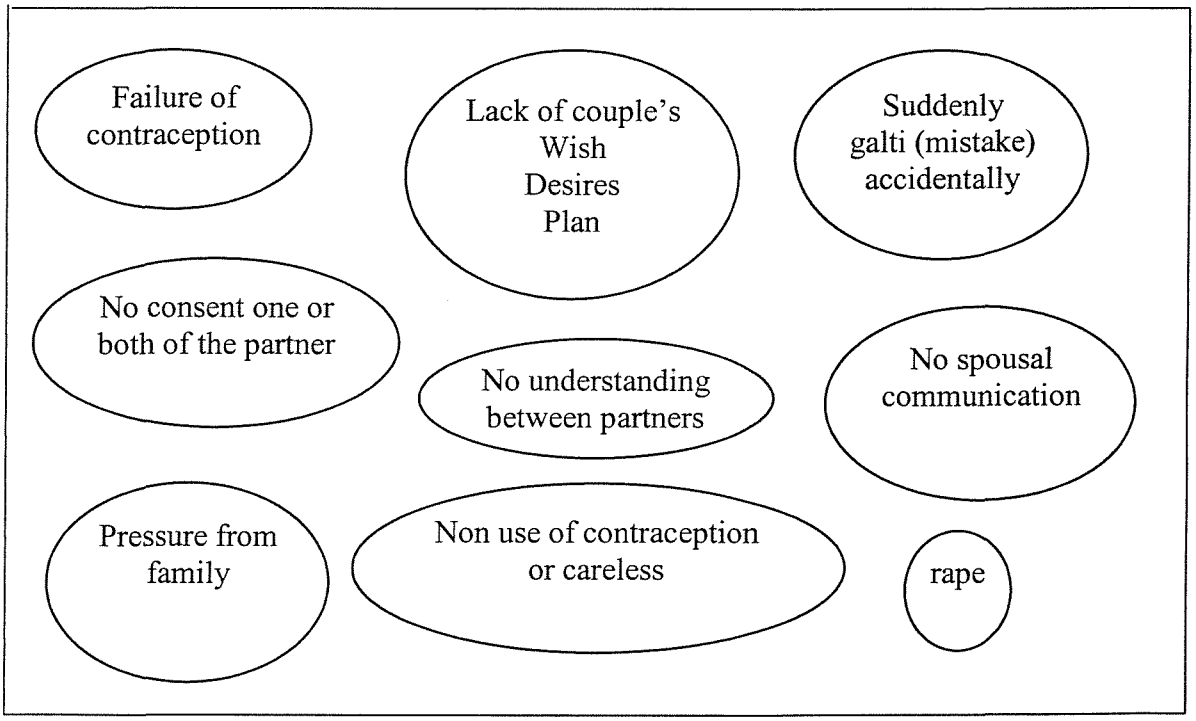
them, in planned pregnancy the couple make ready safe delivery kits beforehand. One of the community leaders, who emphasized the preparation of safe delivery kit and diet to be taken during pregnancy as a condition of being 'planned' pregnancy, said:

> *"..Planned pregnancy means.....let me give an example. If I plan to be pregnant, then various things are necessary for this, like preparing safe delivery kit. I will plan to eat nutritious food and for the good health of the baby ... ".*
>
> *-Gokul*

4.5.2 Definition offered for 'unplanned' pregnancies

In contrast to 'planned', the definitions provided for 'unplanned' pregnancy tended to be around the lack of couple's wish/desire/plan to have the child. Most of the respondents stated that an 'unplanned' pregnancy could be caused by a failure of a method of contraception and some said it could include non-use of contraception or carelessness in using it. Other factors such as no spousal communication or understanding between the partners and no consent by either one or both of the partners to bear the pregnancy were also mentioned as the criteria for an 'unplanned' pregnancy.

Diagram 4. 2 Definitions offered for 'unplanned' pregnancies: Young person's pregnancy study in Nepal, 2003



The word 'suddenly', *galti* (mistake), 'accidentally' were also frequently used as ways to define 'unplanned' pregnancy. Few respondents cited a pregnancy that was caused due to

rape and pressure from the family as an example of 'unplanned' pregnancy.

Young married women were mostly likely to mention failure of family planning methods (7 out of 17) and getting pregnant without the wish of either one or both of the partners (6 out of 17) as the two main conditions to be an 'unplanned' pregnancy. In describing 'unplanned' pregnancy, young women frequently used the word *galti* (mistake) for 'unplanned' pregnancy also.

Opinions of the young men in this matter are almost the same as those of young women. However, young men added two more criteria in the definition of 'unplanned' pregnancy to those given by the women. Men viewed that a pregnancy resulted from compulsion/pressure from the circumstances and carelessness in using method of family planning can also be considered as an 'unplanned' pregnancy (Table 4.3).

Health service providers added three more conditions for an 'unplanned' pregnancy. They are inter-spousal communications, the situations of 'suddenly' (5 out of 16), 'mistake' and 'rape'. Health service providers said that the parents arrange almost all marriages in Nepal therefore there is less opportunity to know each other before marriage. As a result, there is lack of spousal communication in using family planning methods and pregnancy planning especially during the first few months of marriage. As a consequence, the wife gets pregnant all of a sudden. One respondent explained her understanding of 'unplanned' pregnancy as follows:

> *"...When a husband and wife gets involved into a physical relation soon after getting married without knowing each other and gets pregnant during that time it is called 'aniyojit garbha' (unplanned pregnancy). They would not have shared their feelings or ideas with each other. So without talking to each other or knowing each other the woman gets pregnant then it is called 'aniyojit garbha'(unplanned pregnancy)...".*
>
> *-Sophia*

Besides the explanations given by the young women, men and health service providers, only one more point was added by the community leaders while defining the word 'unplanned' pregnancy. They viewed that not considering the upbringing of the child beforehand could be a criterion for such a pregnancy (Table 4.3).

Table 4.3 Definitions offered for 'planned' and 'unplanned' pregnancy according to the types of respondents: Young person's pregnancy study in Nepal, 2003

Terminologies	Types of respondents			
	Young married women	**Young married men**	**Health service providers**	**Community leaders**
Planned	▪ Thinking to have baby ▪ Decide to have baby at some point of time ▪ Plan keeping in mind the future of the child ▪ Mutual understanding between partners ▪ Stop using contraception ▪ Right/correct time to bear a child ▪ Thought about how to bringing up the child	▪ Right/correct/time for childbearing ▪ Decision of both partners to bear a child ▪ Stop using contraception ▪ Adequate time gap between two births ▪ Adequate communication between husband and wife ▪ Prepared to bear a/ another child ▪ Discuss abut bringing up the child	▪ Think and decide to have a child ▪ Thought about age of the mother ▪ Thought about mother's health ▪ Discuss about number of children to have ▪ Thought about place of delivery ▪ Thought about the child's future ▪ Right time ▪ Mutual understanding of the partners ▪ Happy from the pregnancy ▪ Stop using contraception ▪ Determination to have child	▪ Think about right time for both the partners ▪ Mutual understanding between partners ▪ Discuss about number of children ▪ Preparation of delivery kits ▪ Discuss about nutritious food at the time of pregnancy
Unplanned	▪ Without wishing/desiring to get pregnant ▪ Without planning for the future ▪ Failure of contraceptive method ▪ Non-use of contraception ▪ No discussion with partner	▪ Without planning the child ▪ Compelled by the circumstances ▪ No desire to bear the child ▪ Not thinking/planning beforehand ▪ Failure of contraceptives ▪ Non-use of contraceptives ▪ Careless in using contraception	▪ Without planning/no desire ▪ Suddenly ▪ Failure of contraception ▪ No spousal communication ▪ Mistake ▪ Rape	▪ Not thinking about the timing of childbearing and upbringing of the child ▪ Mistake ▪ Failure of contraceptives ▪ No discussion/understanding between the partners ▪ No consent either one or both partners ▪ Pressure from the family ▪ Non-use of contraceptives ▪ Rape

4.5.3 Definition offered for 'intended' pregnancies

In general, definitions provided for an 'intended' pregnancy by the respondents were similar to those offered for 'planned'. For example, desire to have children, mutual understanding between partners, plan/think about the future of the child beforehand, stop using contraception, think about the right time and age of mother and inter-spousal communications on the number of children were also stated by the respondents while mentioning the meanings of the term 'intended' pregnancy (Table 4.4).

Moreover, respondents offered few new points to the definition of 'intended' than those provided for a 'planned'. All the respondents opined that having preferred sex of the child is generally considered as an 'intended' pregnancy. Other new conditions were: thought about the capability (in every aspect) of a couple to bear a child, pregnancy that occurred after praying to the God and thought about antenatal check up beforehand. Interestingly, few respondents mentioned that the pregnancy that occurred from the desire of the parents could also be considered as 'intended' pregnancy.

Similar to the definitions offered for a 'planned', young women are more likely to say desire of the husband and wife (8 out of 17) and analysis of the situation such as education, employment, health and age of couple beforehand (7 out of 17) are the conditions of an 'intended' pregnancy. There was a minority view that 'intended' means mutual understanding between partners, have desired sex of the child and discussed about the timing of childbearing beforehand (Table 4.4).

Most of the young married men had the same opinion as women on the meaning of term 'intended'. However, two interesting views came up from the men in this context. First, few men stated that in order to get a share of property some couples make babies that are also called 'intended' pregnancy. Second, there was a view that pregnancy that takes place after praying to the God is also considered as 'intended' pregnancy. For example, one 26 year old man with intermediate level of education said:

> *"Chaheko (intended) means to go to the temple and ask God for son or a daughter and when the prayer is answered then it is called chaheko garbha (intended pregnancy)".*
>
> *-Sudheer*

The views of the health service providers on the meaning of 'intended' pregnancy were

almost same with the young women and men. The following quotation can be taken as a general view of all the health service providers.

> *".....It is the pregnancy at the time when you want it and for the right number of children that you have desired. After they are married they will have an understanding to conceive and if they are using temporary contraceptives they will stop it's use and when they think the pregnancy will not hamper then in any way, it is called 'chaheko garbha' (intended pregnancy)".*
>
> *-Shreyam*

However, there was also minority view that 'intended' also meant for thinking about going for antenatal check up beforehand and receiving support from the family during pregnancy.

Community leaders did not have further explanations over and above those offered by the young women, men and health service providers. However, they reinforced that the desired number of children, future of the child and support to the parents during their old age should also be discussed before getting pregnant to be an 'intended' pregnancy (Table 4.4).

4.5.4 Definition offered for 'unintended' pregnancies

On the whole, explanations offered for 'unintended' pregnancy were similar to those provided for an 'unplanned'. Young women were more likely to say no desire for son and failure of contraceptive methods could be the criteria for such pregnancies. Besides these, young men added pregnancy that occurred all of a sudden or by mistake or from the pressure of the family members other than husband and not considering the future of the child and not having preferred sex of the child are also considered as 'unintended' pregnancy.

Opinions of the health service providers were also similar to those of women and men. For example one of the service providers said:

> *"....When a couple already has children and in that case if they don't use family planning method or if the method fails and the woman gets pregnant then it is called nachaheko garbha (unintended pregnancy). Aslo, if a couple has a small child and if the woman gets pregnant again then it is called nachaheko garbha (unintended pregnancy)".*
>
> *- Nirmal*

But the health service providers clearly added pregnancy from rape, non-use of

Table 4.4 Definitions offered for 'intended' and 'unintended' pregnancy according to the types of respondents: Young person's pregnancy study in Nepal, 2003

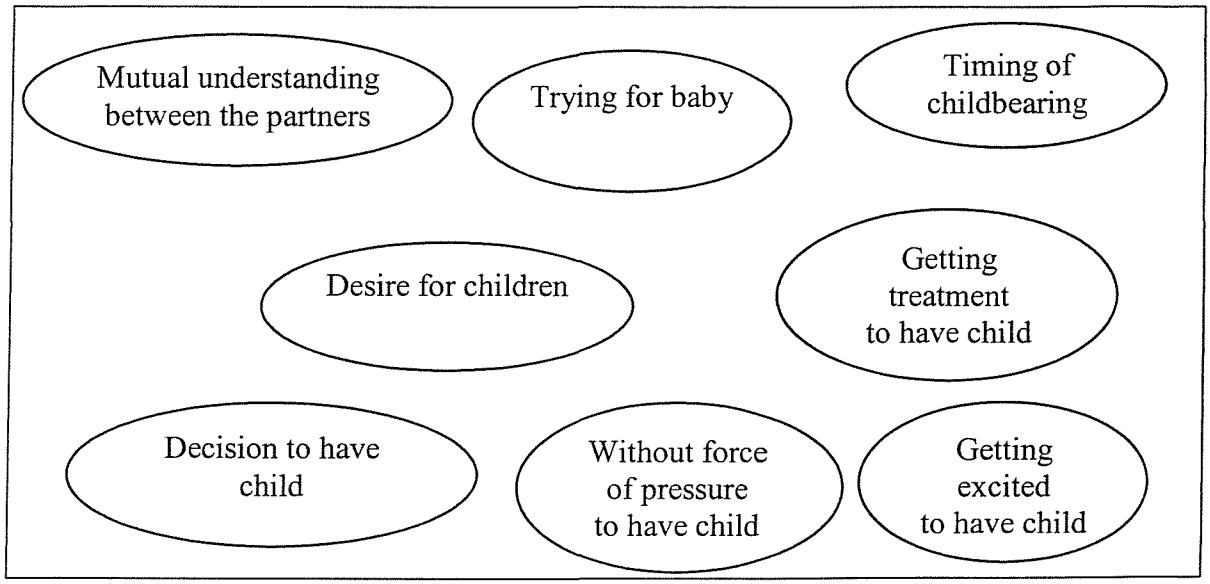
Terminologies	Types of respondents			
	Young married women	**Young married men**	**Health service providers**	**Community leaders**
Intended	▪ Partner's desires of the child ▪ Mutual understanding between partners ▪ Planning for the future of the child ▪ Gender preference ▪ Discuss with spouse about timing of the child bearing ▪ Desire of the parents ▪ Capability (in every aspects) of a couple to bear a child	▪ Couples desires or want to have a child ▪ When couple wanted particular sex of the child ▪ Pregnancy takes place after praying to the God ▪ Trying to get pregnant ▪ To get share of the property	▪ Appropriate time and age of mother ▪ Stop using contraception ▪ Think about going for antenatal checkups ▪ Mutual understanding of the couple ▪ Desire to have son	▪ Desire to have child ▪ Mutual understanding of the couple ▪ Stop using contraception ▪ Target particular time and plan accordingly ▪ Discussed about number of children and their future ▪ Discuss about the sex preference
Unintended	▪ No desire by either one or both of the partners ▪ Failure of contraception	▪ Failure of contraception ▪ Occurred all of a sudden ▪ Without desire of the couple ▪ Not thought of ▪ Future is not kept in mind ▪ More than two children ▪ Not having preferred sex of the child ▪ Pregnancy from the pressure of the family	▪ No desire of the child at that time Accidentally ▪ Contraceptive failure ▪ Rape ▪ Pre-marital pregnancy ▪ Not adequate birth spacing ▪ Non-use of contraceptive Unavailability of contraceptives ▪ Son preference	▪ Son preference ▪ No desire/wish of the couple ▪ Pre-marital pregnancy ▪ Failure of contraception ▪ Mistake ▪ Not thought ▪ Rape ▪ Non-use of contraceptives

contraception and premarital pregnancy on the explanations to an 'unintended' pregnancy. The views of community leaders on this matter were very much similar with health service providers and young married men (Table 4.4).

4.5.5 Definition offered for 'wanted' pregnancies

Generally, understanding of the term 'wanted' was similar to those of 'planned' and 'intended'. Respondents stated that the desire for children, trying for baby, timing of childbearing, mutual understanding between the partners, decision to have a child, without force or pressure to have child and getting treatment to have child were the meanings offered for the term 'wanted' pregnancy (Diagram 4.3).

Diagram 4.3 Definitions offered for wanted pregnancies: Young person's pregnancy study in Nepal, 2003



For example, more than half of the women mentioned that if the both couples desire to bear the child then it is called 'wanted' pregnancy. They also put the conditions of thinking about timing of child bearing beforehand, pregnancy without fear or force for 'wanted' pregnancy. In addition to the desire of the couples, young men were likely to say trying for baby (after a long wait), go for treatment to become pregnant and understanding between husband and wife beforehand were the criteria of 'wanted' pregnancy (Table 4.5).

Similar to the views of the young women and men, health service providers understood

the term 'wanted' mostly in relation to the word 'desire'. The common conditions put forward by the health service providers for ''wanted' pregnancy was the pregnancy desired by either one or both of the partners. This may be for an additional child or son preference. For example, one of the health service providers said:

> *"The desire for a child by one of the couple is wanted pregnancy. This want can be of the husband or the wife. This may or may not be fulfilled. For example, a couple has only 2 daughters and the husband wants a son. This is his want. This may or may not be fulfilled. Or the couple may have a child and may want another one after 5 years. This is also wanted pregnancy".*
>
> *-Nirmal*

Community leaders' understandings of the term 'wanted' were almost same as those mentioned by the young women, men and health service providers. A few community leaders mentioned that becoming excited to have the child also comes under the definition of the term 'wanted' pregnancy (Table 4.5).

4.5.6 Definition offered for 'unwanted' pregnancies

Respondents were able to describe the term 'unwanted' easily without much effort. Definitions offered for 'unwanted' pregnancy were overlapped with those provided for 'unplanned' and 'unintended'. For example, they again said that wrong time for pregnancy, without desire of either one or both of the partners, contraceptive failure, non use of contraceptive methods, not pre-planned, not having desired sex of the child, pre or extramarital pregnancy, and pregnancy from rape and force or family pressure could be the criteria for an 'unwanted' pregnancy (Table 4.5).

There was no difference in the definitions offered for 'unwanted' pregnancy between the four categories of the respondents. However, apart from no desire of having a child by either one or both of the partners, and wrong time for pregnancy, as conditions for 'unwanted' pregnancy, young men and community leaders emphasized 'mistake' (*galti)*, and 'suddenly'. All the respondents except young men mentioned a pregnancy resulting from pressure from the family or rape is also called 'unwanted' pregnancy.

Table 4.5 Definitions offered for 'wanted' and 'unwanted' pregnancy according to the types of respondents: Young person's pregnancy study in Nepal, 2003

Terminologies	Types of respondents			
	Young married women	**Young married men**	**Health service providers**	**Community leaders**
Wanted	▪ Desire/wish to have baby of both partners ▪ Pregnancy without fear or force ▪ Not raped ▪ Not without one's wish ▪ Thought about the timing to bear a child	▪ Desire by either one or both of the couple ▪ Trying for baby ▪ Getting treatment to become pregnant ▪ Mutual understanding	▪ Desire for the child ▪ Decision to have child ▪ Mutual understanding of the couple ▪ Son preference	▪ Desire to have children ▪ Desire for son ▪ Desire of family member to have children ▪ Discuss about number of children ▪ Consent of both partners ▪ No force or pressure to bear the child ▪ Thought about the future of the child ▪ Excited to have the child
Unwanted	▪ Wrong time for pregnancy ▪ Pregnancy without the desire of either one or both partners ▪ Failure of contraception ▪ Not pre-planned ▪ Preference for male child ▪ Pregnancy from a premarital relation ▪ Pregnancy from force or family pressure	▪ No desire of the couple ▪ Not thought of/ all of a sudden ▪ *Galti* (mistake)	▪ No desire of the either one or both of the partners ▪ No consent of the couple ▪ Force from the family ▪ No understanding between husband and wife ▪ Pre or extra marital pregnancy ▪ Non-use of contraceptives ▪ Failure of contraceptives ▪ Rape ▪ No birth spacing	▪ Without the desire of either one or both partner ▪ Wrong time ▪ Son preference

4.6 Respondents opinion on the relationship between the terminologies related to pregnancy intentions

4.6.1 Relationship between planned and intended

On the whole, respondents found it difficult to distinguish between the terms 'intended' and 'planned'. Most of them thought that the meaning of terms 'intended' and 'planned' are same. For example, most women (13 out of 17), men (11 out of 17), health service providers (12 out of 16) and about half of the community leaders stated that the terms are similar. Major reasons for considering the terms similar were: one 'plan' before they 'intend', 'intended' pregnancy is a part of the 'planned', in both the situations (in planned and intended) the communication between husband and wife and joint decision are met. Similarly, in both the situations, couples discussed beforehand about the number of children they need, place of delivery and the future of the child. The following are some excerpts from the interviews of the respondents who mentioned that these two terms are similar.

> *"...Because it's intended, it's planned before they become pregnant"*
>
> *-Mala*

> *" I think chaheko garbha (intended pregnancy) and planned are similar. When we plan for either a girl or a boy child we intend to give birth to what we have planned. Chaheko garbha (intended pregnancy) comes within planned pregnancy".*
>
> *-Subashis*

> *"Chaheko (intended) and planned are similar because even in intended pregnancy both the husband and wife discuss and decide" .*
>
> *- Mesh man*

Although the respondents could not explain the difference between the terms clearly, a considerable number of respondents felt that the meanings of 'planned' and 'intended' are different. Young women who considered that 'intended' is distinct from 'planned' said that 'planned' is making plans to bear a child from the beginning whereas in 'intended' they did not have to go through a long process of planning. One woman described the possible difference:

> *"Yogit garbha (planned pregnancy) means to plan from the beginning, it is not usually intended (chaheko). In intended pregnancy (chaheko garbha) one need not plan. It takes time to plan. In intended we need it then and there. For that one need not plan".*
>
> *-Malina*

Similarly, men (6 out of 17) viewed that the terms have different meanings saying that pregnancy could be 'intended' though not 'planned'. A minority of the health service providers considered the two terms are different. They opined that 'planned' pregnancy is mostly related to the timing of the birth whereas 'intended' is only the want for a child and there is no time factor involved. Five out of 16 community leaders, who thought that the terms are different, emphasized the sex of the child as the main difference. For example, one of the community leaders said:

> *"...It is a bit different. For example, in planned pregnancy couple think that they want a certain number of children whereas in intended pregnancy, they continue to have children if they don't give birth to their child of their preference like a son or a daughter..".*
>
> *-Chandara Lal*

4.6.2 Relationship between 'unplanned' and 'unintended' pregnancy

The relationship between the terms 'unplanned' and 'unintended' was similar to that between 'planned' and 'intended'. Many respondents felt that the term 'unplanned' is interchangeable with the term 'unintended'. They were likely to say 'unintended' is 'unplanned' pregnancy. Both the terms 'unplanned' pregnancy, 'unintended' pregnancy could include no desire/wish to have children, failure of contraception, or non-use of contraception.

However, a considerable number of respondents did not agree with this. They described in 'unplanned' it is all right if the woman conceived because they do not make effort to avoid pregnancy whereas in 'unintended' women become pregnant in spite of using contraception. So the effort of using contraception is considered as a difference between the terms. For example one respondent said:

> *"In unplanned it is all right if one conceives but in unintended one gets pregnant even after taking precautions".*
>
> *-Sudheer*

Health service providers, who thought that the terms 'unplanned' and 'unintended' are different, said that 'unplanned' pregnancy was mainly meant for the wrong timing of pregnancy whereas 'unintended' pregnancy referred to a pregnancy that was not desired at all. One health service provider said:

> *"..It is very different. When we say 'nachaheko' (unintended), it means that the couple doesn't want a child at any means and they think of how to terminate the child. Whereas in unplanned pregnancy, they mostly think that the woman shouldn't*

have been pregnant at that time. But they want a child. If the pregnancy is unintended, they try to abort it and if the pregnancy is unplanned they give birth to the child...".

-Eshwor

4.6.3 Relationship between 'unwanted' and 'unplanned' pregnancy

Half of the young married women felt that the term 'unwanted' and 'unplanned' are the same. The remaining half of them thought that the meanings of the terms are different. Explaining the difference in terms, one of them said, "..... *Pregnancy that occurred without one's desire is unwanted pregnancy whereas unplanned pregnancy occurred when contraceptive is not used....*".

In contrast to women, most of the young men considered that the terms 'unwanted' and 'unplanned' are the same. A minority of them explained that it is not similar because in 'unplanned' both the husband and wife decide to bear the child and take precaution to avoid the pregnancy but still it occurs whereas in 'unwanted' it might be the desire of only one partner and do not use any method of protection against it.

Half of the health service providers viewed that 'unwanted' and 'unplanned' are different whereas a fewer than half reported that these terms were the same (6 out of 16). Most explained that in 'unplanned' pregnancy the couple has the desire for the child but hasn't planned for it whereas in unwanted they do not have desire for the child at all and it can cause problems for the couple. In such cases they try to abort it whereas in 'unplanned' pregnancy they will keep the child.

Surprisingly, about half of the community leaders couldn't say anything in regard to the similarity or dissimilarity of the meaning of the terms 'unwanted' and 'unplanned'. Some of the community leaders (5 out of 16) mentioned that the term 'unwanted' and 'unplanned' are different whereas only a few (3 out of 16) thought that the terms have same meanings. Those who considered it is different opined that 'unplanned' usually referred to failure of contraceptive and it occurred within marital relationship, whereas unwanted pregnancy occurred without one's desire, outside marriage or due to non- use of contraceptive. A community leader quoted:

"...Anoyjit garbha (unplanned pregnancy) occurs when contraception fails but anecchit garbha (unwanted pregnancy) occurs against one's wish..".

-Ripesh

4.6.4 Relationship between 'intended', 'planned' and 'wanted' pregnancy

In relations to whether or not the term 'intended' and 'planned' were similar to 'wanted', most of the women and men felt that all three terms were similar. Only few of the young men and women thought that they were different. They had the opinion that they are not similar because 'desire' and 'need to have a child' is the main thing in 'wanted' pregnancy but not in 'intended' and 'planned'.

There was no consensus amongst the health service providers and community leaders in the meaning of terms 'planned', 'intended' and 'wanted'. In contrast to young men and women, very few health service providers (4 out of 16) and community leaders (5 out of 16) considered that these terms have the same meanings. Six of the health service providers and one community leader viewed that the meanings of the terms 'wanted', 'planned' and 'intended' are different. They thought that the three terms were different because 'wanted' pregnancy is mostly desired either by wife or husband but in 'planned' and 'intended' pregnancy understanding of the both partners is required. In addition, they stated that, in 'intended' and 'planned', couples discuss and think about the number of children and the future of the child which is not the case for 'wanted'.

4.6.5 Relationship between 'unplanned' 'unintended' and 'unwanted' pregnancy

Compared with other terms related to pregnancy intention, respondents found it very difficult to explain about the relationship between three terms 'unplanned', 'unintended' and 'unwanted'. Those few respondents who responded to the questions thought that these are similar. It was common to hear that "*...Only the words are different, the meanings are the same ...*" .

4.7 Discussion and conclusions

This study was the first of its kind in Nepal to explore local vocabularies used for 'pregnancy' and 'abortion' and the meaning of the terminologies related to pregnancy intentions from the 'emic' perspective of Nepalese people. Increasing acceptance of the problems in measuring pregnancy intention related questions used in most of the national and international demographic and health related studies provided the impetus to this study. It is interesting to find that as many as 42 terms for 'pregnancy' and 37 for 'abortion' were used by the respondents. Despite speaking in the Nepali language, many

respondents mentioned the local words for 'pregnancy' and 'abortion' in their own dialect. The local words were completely different from one ethnicity to another. However, no clear difference was found according to the age, level of education and occupation of the respondents. This finding has direct implications for service provision especially while designing IEC materials for maternal health care and phrasing questions for the structured survey that are aimed at measuring the pregnancy planning intentions.

The study revealed that, generally, respondents did not use the terms 'planned', 'unplanned', 'intended', 'unintended', 'wanted' and 'unwanted' spontaneously. When introduced the terms and asked their meanings, the respondents broadly understood the terms but they had their own definitions. There was no unanimous opinion between the respondents on the meanings of these terms; however, their definitions revolved around desire for the child by either both or one of the partner, contraceptive failure, timing of the child bearing, understanding between the partners, physical and socio-economic situations of the couple and the family, pressure from the partner or the family members, sex preference, upbringing of the child, preparation for antenatal check up and safe delivery kits beforehand etc. This suggests that the terms used for pregnancy intention in previous research and the criteria to dichotomise were not adequately capturing the feelings of Nepalese young couples.

Another important finding was that intending to become pregnant and stopping contraception were not sufficient for the respondents to call any pregnancy 'planned' as found in previous studies in other settings. The most recent study conducted in the United Kingdom found that two other criteria - partner agreement and reaching the right time in terms of lifestyles/life stages - were also important for planned pregnancy (Barrett and Wellings, 2002). However, the present study revealed that those were not adequate in the Nepalese cultural context. The study found that the mutual understanding between husband and wife, bearing in mind the future of the child prior to conception, capability of the parents (physical, economical), the determination of the parents to have a child and being free from the pressure are also important. This suggests that there is a discrepancy between the current frameworks for understanding unintended pregnancy and the perceptions and experiences of young couples most at risk for it. The definitions of unintended pregnancy used by young couples are not only depends on the timing of childbearing which is the main criteria used in the current framework of measuring

unintended pregnancy. The definitions of unintended pregnancy should also include intermediate demographic outcomes (e.g. sudden, accidental pregnancy, non-use of contraceptives and contraceptive failure), inter-personal factors (e.g. lack of couple's desire, no mutual understanding, no consent of both or one partner, no spousal communication, family or social environment and parent's pressures) and personal factors (e.g. not thinking about or deciding about having a child).

It is evident from the study that the terminologies related to pregnancy intentions that were used in the past are not only difficult to understand and describe easily by the Nepalese people but, also, are rarely used. Comparatively, more respondents used the words 'intended' and 'unintended' than 'planned', 'unplanned', 'wanted' or 'unwanted'. Also, the respondents felt very difficult to distinguish the meanings of the terms 'planned', 'unplanned', 'intended', 'unintended', 'wanted' and 'unwanted'. There was a considerable number of respondents who said "*..meanings are the same, only the words are different...*". After probing, the respondents mentioned their own wide ranges of criteria to distinguish between the terms. This not only raises the questions in the area of policy and clinical practice but also in the validity of the measurement of the pregnancy intention in the Demographic Health Surveys. This finding suggests that the Nepalese people define the terminologies related to pregnancy intentions in different ways than those used before. Therefore, using these terms alone to describe or measure the pregnancy intention would be inadequate. The underlying concept of measuring pregnancy planning/intention in structured survey should be modified according to local cultural context. Any programme to prevent unintended pregnancy must use terms that are familiar to men and women and must build upon cultural understanding of the problem.

The study also revealed that the conventional questions used to measure unintended pregnancy are inadequate. Therefore, based on the qualitative research, additional questions were included in the original questionnaire to measure unintended pregnancy more accurately in the quantitative survey of the present study (results are discussed in Chapter Five). The main questions added were: whether or not partners had an understanding beforehand for last pregnancy, whether or not they have discussed about having another child beforehand, whether or not the couple determined to bear the child, whether or not the couple are trying for a baby and praying to the God for children.

Questions on method failure, pregnancy from mistake or accidentally were also added in the survey. In addition, whether or not partners thought about appropriate age to bear the child, economic conditions and future of the child, antenatal and place of delivery related questions were also included. Further, local vocabularies for 'abortion' and 'pregnancy' were used in both survey questionnaires and in-depth case histories (see H7 to H23 in section H of Annexes IX and X).

CHAPTER 5
DETERMINANTS OF UNINTENDED PREGNANCY

5.1 Background

Unintended pregnancy is an important public health concern in both the developing and developed world because of its association with adverse social and health outcomes for mothers, children and the family as whole. These include the higher likelihood of unsafe abortion, and the late initiation and underutilization of prenatal and postnatal care (Eggleston *et al.*, 2001). The level of unintended pregnancy is considered to be an indicator of the state of women's reproductive health and the success or failure of reproductive health programmes, including family planning services. It is important to document the level of unintended pregnancy and factors associated with it to enable policy makers and programme planners to design policy and services especially for the people who are most likely to experience this problem. However, in recent years, researchers have begun to criticise some fundamental assumptions made by the DHS, the WFS and the NSFG surveys in measuring the prevalence of unintended pregnancy (Moss *et al.*, 1997; Fischer *et al.*, 1999; Zabin *et al.*, 2000).

This chapter examines the reported extent of, and the determinants of unintended pregnancy amongst young couples in Nepal. Two definitions of unintended pregnancy were used for the purpose of estimating the levels of unintended pregnancy. The first was the conventional definition as used in DHS surveys, whilst the second was the modified definition based on extensive exploratory research outlined in the previous chapter. The modified definition was used to identify the determinants of unintended pregnancy. This definition (modified) could not be used in the DHS data due to the lack of required information. The author of this thesis believes that the modified definition addresses some of the criticisms raised recently concerning the methods of measuring unintended pregnancy in the DHS and other fertility surveys.

The present chapter begins with a conceptual framework that illustrates the potential determinants of unintended pregnancy and is followed by a description of the data sources and method of analysis. A summary of the background characteristics of the survey respondents covered in the study is also presented. The subsequent section discusses the level of unintended pregnancy observed in this survey and compares this with data from

the Nepal DHS 2001. The correlates of unintended pregnancies are presented in the following section. Finally, a discussion and conclusions are presented.

5.2 Conceptual framework for identifying determinants of unintended pregnancy

The determinants of pregnancy intentions are difficult to identify accurately because it is a complex and dynamic process. A common conceptual framework applied in studies of personal/interpersonal determinants of unintended pregnancy is that the motivation to avoid pregnancy is a function of the perceived benefits and costs (or burdens) of becoming pregnant and having a child (Miller and Pasta, 2002). Sexually active women and men will take action to seek pregnancy or prevent it depending on their individual assessment of the relative cost/benefit ratio, and this ratio will shift over the course of their lives. Other researchers have added a normative factor to this model, postulating that pregnancy-related decision making is also guided by a woman's desire to meet the expectations of other important persons in her life (husband, family, friends) and her internalized set of social norms (Miller and Pasta, 1993; Miller, 1994). This is known as the theory of 'planned behaviour', and has been applied to a wide range of health behaviour studies (Godin and Kok, 1996).

Researchers studying young peoples' pregnancy have adapted this model further, arguing that rational decision-making models are not always applicable for young people, who may not consciously intend to engage in a particular behaviour, but do so anyway. To account for this discord, they add the concept of 'behavioural willingness'- an individual may be willing to engage in unprotected sex, though not 'planning' or 'intending' to conceive (Gibbons *et al.*, 1998). Ingham (1992) argues that the notion of a direct link between belief, motivation, intention and behaviour is simply not tenable. He further suggests considering the factors such as meanings, powers, liabilities and constraints, social reputation, and the dynamic processes involved in creating and maintaining identities to fully understand the health related behaviour of young people.

An existing literature suggests that there is no one acceptable conceptual framework available to date on pregnancy planning intentions, with frameworks changing over periods of time. Moreover, none of the theories discussed above has been tested in the context of Nepal. Most of the evidence come from married women (not from their

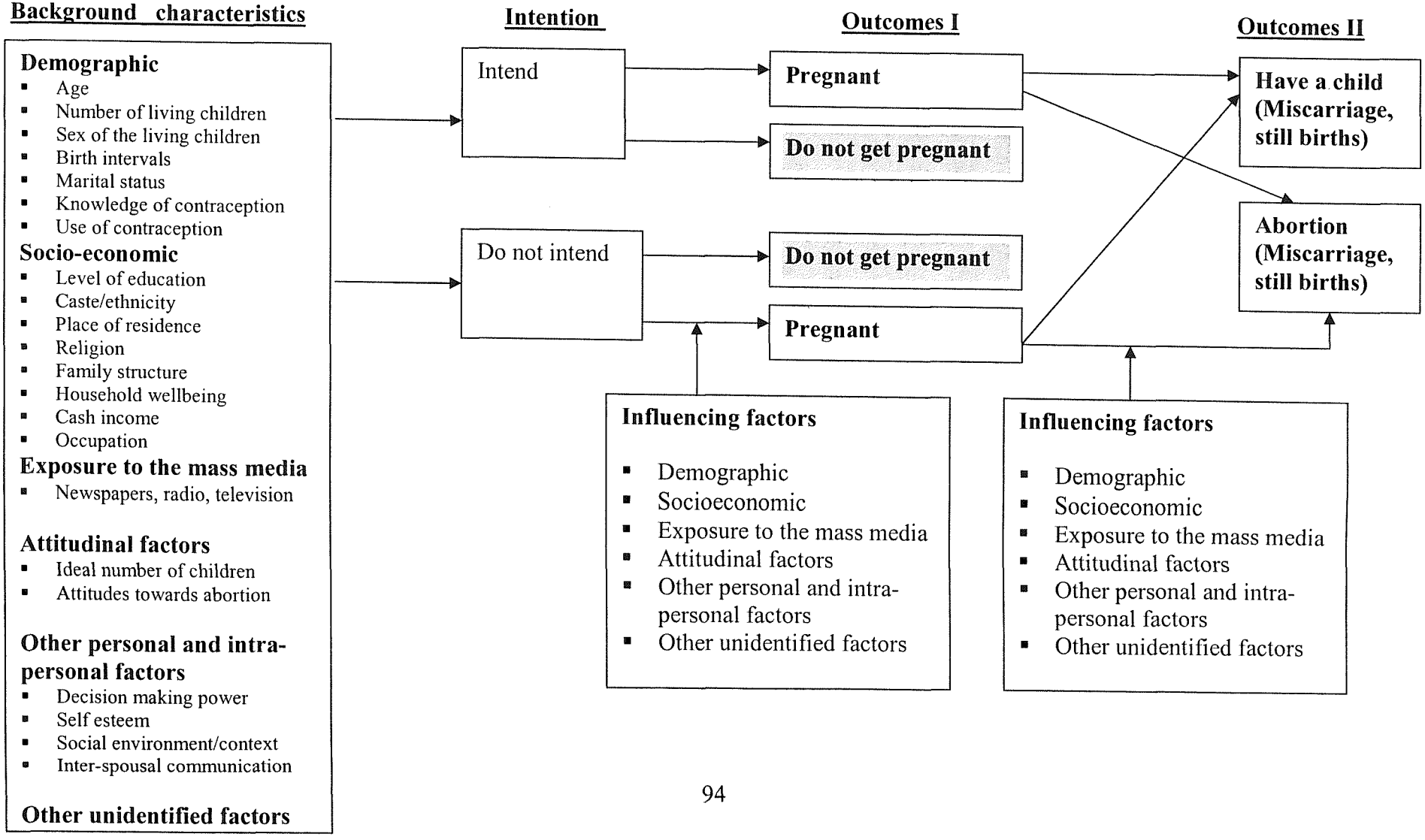
partner). It is believed that due to the socio-economic and cultural differences and sexual health orientation in the schools, none of the models related to pregnancy planning intentions developed in other settings can be adopted fully in Nepal.

Figure 5.1 presents a conceptual framework for the analysis of determinants of unintended pregnancy in this study. The purpose of this framework is not to suggest a new framework or test any existing theories. It aims to modify the existing theories according to the Nepalese socio-cultural contexts and accommodates some of the recent criticism on this matter. This is particularly designed to guide the analysis plan of the data of this study.

The framework (see Figure 5.1) proposes a relationship between pregnancy intentions and multiple domains of women's lives, in a context where external and contextual factors can affect both. The starting point is the possible relations between a woman's background and her intention to become pregnant. The demographic factors and socio-cultural contexts of couples, their well-being characteristics, and their attitude towards abortion may influence their pregnancy intentions. Decision making power, self esteem and exposure to the mass media can also have an association with their motivations for pregnancy. Although all these factors can influence pregnancy intentions, not all women who intend pregnancy actually become pregnant. Those who intend to become pregnant and actually get pregnant have two options: either continue the pregnancy and have a child or terminate the pregnancy. The most likely outcome is to continue the pregnancy to birth. Similarly, those women who do not intend to become pregnant but get pregnant also have two choices: either continue the pregnancy and have a child or have an abortion. Multiple factors may influence the decision making stage for those women who experience unintended pregnancy.

From the conceptual framework presented in Figure 5.1, an analysis plan was derived for examining the relationship between the various predictor variables (determinants) and the outcomes variable (unintended pregnancy). The key criteria for selecting the variables in this analysis were based on the situation of why a couple would consider their pregnancy unintended.

Figure 5.1 Conceptual framework for identifying the determinants of unintended pregnancy: Young person's pregnancy study in Nepal, 2003



5.3 Data sources, operationalisation of variables and analytic approach

The data for this chapter are mainly based on the quantitative data; however, qualitative data are also used to supplement the findings where needed. A detailed description of the data collection methodology was presented in Chapter Three of this thesis.

The Nepal DHS 2001 data are also used to estimate the level of unintended pregnancy for comparison with the present study. The Nepal DHS is a nationally representative survey of ever married women 15-49 years of age. The Nepal DHS data were collected from 8726 women and 2261 men aged 15-59 years. The survey collected detailed information on fertility, family planning, infant and child mortality, maternal and child health and nutrition. Two types of questionnaire were used in the Nepal DHS- a household questionnaire and an individual questionnaire (Ministry of Health (Nepal) *et al.*, 2002).

Two definitions of unintended pregnancy are used for the purpose of estimating the levels of reported unintended pregnancy in this chapter. The first was the conventional definition, which has been widely used in the DHSs. According to the conventional definition, pregnancy that was not wanted at the time of conception or at any time in the future was considered as being an unintended pregnancy. This definition is based on the following survey question:

> *At the time that you become pregnant did you want to become pregnant then, did you want to wait until later or did you not want to have any (more) children at all?*

The modified definition of unintended pregnancy was also used; this reflected the findings from an exploratory qualitative research conducted as part of this study. In addition to the question used by Nepal DHS, eight further questions were asked of the survey respondents. The main questions were as follows (see Annexes IX and X, number H7 to H23 in section H):

- *At the time you became pregnant, were you or your partner using any contraceptives to avoid or delay getting pregnant?*
- *When you became pregnant last time, were you or your partner determined to have a (another) child?*
- *Before becoming pregnant the last time, did you have mutual understanding between your partners to have a (another child) child?*

- *When you became pregnant last time, did you consider that was the appropriate age to become mother?*
- *When you became pregnant last time, was it because of failure of family planning methods?*
- *When you became pregnant last time, did you say that it was because of galti (mistake) or suddenly or accidentally?*
- *When you were pregnant, the last time was it because your mother- in-law or father-in-law or other family members wanted a child?*
- *When you were pregnant, the last time was it because of the pressure from your husband?*

In the modified definition, it was considered to be an unintended pregnancy if the respondent responded 'yes' on one or more of the following criteria:

- the couples were using contraception;
- the partners had not decided to have a child before pregnancy or not trying;
- the partners did not have a prior mutual agreement to have a child;
- the couple thought that they had not reached the right time for childbearing;
- the pregnancy was from method failure;
- the pregnancy was due to pressure of relatives or family members;
- the pregnancy was wanted later or not wanted at all (conventional criterion).

The prevalence of unintended pregnancy was estimated using both definitions and comparison were made with the results from Nepal DHS 2001. The prevalence was calculated only among pregnant women at the time of interviews, because Nepal DHS did not collect information on ever experience of unintended pregnancy. However, for the purpose of identifying the correlates of unintended pregnancy (in both bivariate and multivariate analysis), the modified definition and ever experienced of such events were used[1]. The main rationale for using the modified definition was that the qualitative research findings from this study suggested that the conventional definition (used by DHS studies) is not adequate to capture some important criteria of an unintended pregnancy as described by the respondents. Therefore, it was felt that the modified definition is a more sensitive means of measuring unintended pregnancy. The qualitative research from the

[1] Multivariate analysis was also carried out using the conventional definition of unintended pregnancy to check if the same or different predictors emerged as important. No new predictors were identified; instead some relationship disappeared mainly due to small cell size in some variables.

present study documented that the definitions of unintended pregnancy should also include intermediate demographic outcomes (e.g. sudden, accidental pregnancy, non-use of contraceptives and contraceptive failure), inter-personal factors (e.g. lack of couple's desire, no mutual understanding prior to pregnancy, no consent either both or one of the partner for pregnancy, no spousal communication, family pressure) and personal factors (e.g. not thinking about or deciding about having a child) in addition to timing of childbearing (see details in chapter four). In fact, the above mentioned seven criteria were used by the majority of the respondents in the in-depth interviews and the quantitative survey. For example, in the survey, about 60 per cent of women and half of men reported that their last pregnancy was due to the pressure from family members and relatives. Over one-quarter of men and one-third of women said that they had no prior mutual agreement with the spouse to have a child.

Although the 'degree of unintendedness' may vary according to the number criteria of unintended pregnancy met by the respondents, this research focuses on identifying determinants of unintended pregnancy rather than on the 'degree of unintendedness'. Therefore, no distinction was made according to the 'degree of unintendedness'.

Bivariate analyses were carried out to assess the relationships between unintended pregnancy and selected background characteristics of the respondents. Multivariate logistic regressions - separately for men and women - were used to estimate the net effect of each of the conceptually important variables on the likelihood of a pregnancy being intended after controlling for the effects of other variables. This statistical technique is considered to be appropriate for analysing dichotomous dependent variable (Clayton and Hills, 1993). During the process of analysis, multicollinearity between the variables was assessed and the least important variables were removed from the logistic model. For example, a high correlation was found between the number of children and the sex of the living children; therefore, only the number of children was entered in to the logistic regression model. Similarly, a high correlation between the main occupation of the respondent and cash income was observed, so cash income was not entered in to the logistic regression model. The logistic regression model can be written as

1) $\ln(P/1-P)) = \mathrm{B}_o + B_1X_1 + B_2X_2 + ...B_nK_n))$

where ln is the natural log and P is the probability that a pregnancy will be considered as unintended and can be written as

2) $P=1/(1+\exp^{-(B_0+B_1X_1+B_2X_2+.....+B_nX_n))}$

Where B_0, B_1, B_2.....B_n are the coefficients and X_1, X_2.....X_n are independent variables, and exp stand for exponentiations. The likelihood ratio test was used to assess the significant effects of each variable. Interactions between the variables were also tested for.

The dependent variable in the multivariate logistic regression analysis was 'whether or not the respondent had ever experienced one or more unintended pregnancies'.

Altogether, 15 independent variables that are conceptually thought to be important factors for unintended pregnancy (age, number of children, number of ideal family size, level of education, main occupation, correct number of methods of contraception, district, ethnicity, family structure, place of residence, religion, household wellbeing, exposure to mass media, decision making power, self esteem) were included in the model but some of them were removed once they become insignificant. Both backward and forward methods were used to cross check the results. Table 5.1 shows the lists of variables, their definitions and coding categories used in the logistic regression models. Some of other variables such as sex of the living children, cash income etc. are not shown in Table 5.1, but were used in the bivariate analysis only. The coding categories of most of the variables included in the analysis are self explanatory. However, some of the variables are generated; therefore, brief descriptions of these variables are provided in the following section.

Knowledge of contraception is a categorical variable and has been categorised as correctly knowing five modern methods or less against knowing six or more methods. The average number of methods correctly known was taken as a guide for making these two categories (below and above the average). Correct knowledge of contraception of the respondents was assessed by asking the following questions (see Annexes IX and X, number E1 and E2 in section E):

- *Do you know of any methods or ways that one can use to delay or avoid getting pregnant?*

- *If, yes, please tell me all the methods you know/heard of? (Probing was made without describing about methods, only name was mentioned)*

The following additional question was asked for each method if respondents gave affirmative responses in the above two questions.

- *(If the respondent mentioned any one method even after probing then ask): How is (name of method) used, please describe*

From the description of the method provided by the respondent, the interviewer made the decision as to whether or not the respondent had correct knowledge for that particular method. Additional prompting questions were asked until the interviewer was confident about judging the respondent's knowledge on each particular method.

Caste/ethnicity was categorised as Brahmin and Chhetri, Tharu, mongoloids, occupational caste. The 'occupational caste' includes Damai, Kami, Sarki, and other terai occupational caste group. The 'Mongoloid' includes Rai, Gurung, Magar, Tamang, Limbu, Newar, etc. These categories are made considering the similarities and dissimilarities in terms of religion, culture, mother tongue, living style and caste prevailing in the study areas.
The *level of education* was categorised as no education, primary, secondary and higher than secondary; 'primary' includes women who have attended informal education. The 'secondary level' includes six to ten years of education. The 'higher than secondary' includes more than ten years of schooling.

Household wellbeing variable was categorised as poor, medium and rich. This variable was generated by using Principal Component Analysis (PCA) based on several indicators of household possessions. A question was asked in the survey whether or not the household had such items and facilities as electricity, radio, television, telephone, bicycle, gas stove, kerosene stove, motorbike, refrigerator, piped water, toilet, non dirt floor and roof. PCA involves a mathematical procedure that transforms a number of (possibly) correlated variables into a (smaller) number of uncorrelated variables called principal components (Manley, 1994). After calculating a raw assets factor score by PCA, standardized household asset scores were estimated. Standardized household scores were added up for each household and each individual was assigned a total household asset score for her/his household. Individuals were ranked according to their total scores and divided into three categories. A list of assets and factor scores is presented in Annex XV.

This method of creating variable using asset score has been used in previous studies in Nepal by the World Bank (Gwatkin *et al.*, 2000).

Table 5.1 Variables, their operational definitions and coding categories used in the logistic regression model: Young person's pregnancy study in Nepal, 2003

Variables	Definition	Coding categories
Dependent		
Intendedness of pregnancy	Pregnancy was categorised either intended or unintended using the modified definition	Unintended=1, Intended=0
Independent		
Age	Current age of respondents	For women: 15-19 years=1, 20-24 years=2 and For men: 15-24 years =1 25-27 years=2
Number of living children	Number of living children	0, 1, 2, 3 or more
Ideal Number of children	Ideal number of children	1, 2, 3 or more
Knowledge of family planning	Mean number of family planning methods correctly known	Five or less number of methods correctly known=0, known six or more methods correctly=1
District	Name of the district	Ilam=1, Morang=2, Chitwan=3, Kaski=4, Lalitpur=5
Place of residence	Place of residence	1 = Urban, 2= Rural
Caste and ethnicity	Caste and ethnicity	1=Brahmin/chhetri, 2= Tharu, 3= Mangolids, 6=Occupational caste
Education	Level of education	No education=0, Primary=1, Secondary=2, IA and above=3
Occupation	Main occupation of the respondent	Agriculture=1, House maker=2, Non- agriculture=3
Religion	Religion	Hindu=1, Buddhist=2, Other=3
Family structure	Family structure	Nuclear=1, Joint=2
Exposure to the mass media	Listen radio (everyday) or watch television (at least once in a week) or read newspapers (at least once a week)	Yes=1, No=2
Self esteem	Self esteem (based on the Rosenberg self-esteem scale)	High=0, Moderate=1, Low=2
Household wellbeing	Household wellbeing	Poor=1, Medium=2, Rich=3
Decision making	Decision making power	No power=0, Moderate power=1, Strong power=2

Exposure to the mass media is dichotomous and a composite index of three variables. Those respondents who mentioned that they usually read newspapers (at least once in a

week) or listen to radio (almost everyday) or watch television (at least once in a week) were placed in the 'yes' category and in 'no' category otherwise.

Self esteem is a composite index of 10 questions assessing the self esteem of the respondents. The questions asked in the survey were based in the Rosenberg self-esteem scale (Rosenberg, 1989). Despite the little difficulties in translating into Nepali language, self esteem related questions (with rating scale) were generally well responded by the respondents. Items are scored from one to four in the direction of negative self-esteem. The scores were added and found to range from 10 to 31. A score within the range of 10 to 21 was considered as high self esteem, from 22 to 24 as medium and from 25 to 31 as low self esteem. The score was calculated separately for men and women but no marked difference was observed. The categories were made on the basis of the percentile of the score (up to 25 percentile, 26 to 75 percentile and 76 and above).

Decision making is a composite score of five variables related to the individuals' reported decision making power in the household, fertility control and own health care. Three of the variables are related to decision making pertaining to fertility control; for example, whether or not the respondents have the final say on the use of contraception, bearing children and the number of children. Other variables included in decision making power are whether or not the respondent has the final say on making large household purchases and in their own health care. A joint decision with partner was considered the affirmative response. When the affirmative response for the above variables is counted and added, the result can be represented on zero to five scales. A count of zero was categorised as no decision making power, a count of one and two is categorised as moderate decision making power and a count of three to five categorised as strong decision making power.

Both bivariate and multivariate analyses to identify the determinants of unintended pregnancy are based on respondents who had ever experienced a pregnancy - that is 387 men and 841 women. Statistics Data Analysis (STATA) and Statistical Packages for Social Sciences (SPSS) were used for the multivariate logistic regression.

5.4 Characteristics of the survey respondents

Table 5.2 presents the demographic background of the respondents covered in the present study. Amongst the surveyed men, about half each were in the age groups 20-24 years

and 25-27 years age; a very low proportion fall in the age group 15-19 years. However, three-quarters of the women fell into the age group of 20-24 years and one-fifth into the age group 15-19 years. The mean age is higher amongst men than women (24 years for men and 21 for women). The median age at first marriage is three years higher for men than women (20.9 years for men and 17.6 years for women) which are similar to national averages (Ministry of Health (Nepal) *et al.*, 2002).

Table 5.2 Selected demographic characteristics of the respondents: Young person's pregnancy study in Nepal, 2003

Selected demographic Characteristics	Men		Women	
	N	%	N	%
Current age (in years)				
15-19	24	4.8	254	25.5
20-24	236	47.3	743	74.5
25-27	239	47.9	na	na
Mean age in years	24.05		21.14	
Standard deviation	2.42		2.32	
Mean age at first marriage	20.9		17.6	
Standard deviation	2.76		2.23	
Number of living children				
None	182	36.5	280	28.1
One	197	39.5	440	44.1
Two	93	18.6	225	22.6
Three or more	27	5.4	52	5.2
Sex of the living children				
No children	182	36.5	280	28.1
Daughter only	132	26.5	283	28.4
Son (s) only	109	21.8	264	26.5
Son(s) >daughter(s)	58	11.6	133	13.3
Son (s) = daughter (s)	12	2.4	22	2.2
Son (s)< daughter (s)	6	1.2	15	1.5
Ideal number of children				
None or one	34	6.8	90	9.0
Two	393	78.8	824	82.7
Three or more	72	14.4	83	8.3
Total	**499**	**100.0**	**997**	**100.0**

Slightly over one-third of the men (36%) and one-quarter of the women (28%) did not have any children at the date of interviews. A large proportion of respondents (40 % men and 44% women) had already one living child. This is also similar to national average which indicates that the sample of the present study is not very different from the general population of the country (Ministry of Health (Nepal) *et al.*, 2002). One in twenty

respondents reported that they have three or more living children. The proportion of men and women reporting daughter(s) only is slightly higher than having son(s) only.

Knowledge of at least one modern method of contraception is universal amongst both the men and women. The mean number of family planning methods correctly known was five for both the men and women. More than half of the respondents reported that they are currently using a method of contraception; although there was considerable variation by age of the respondents and district. Very few young women aged 15-19 years are currently using a method compared with the women aged 20-24 years.

Table 5. 3 Current use of contraceptive by methods: Young person's pregnancy study in Nepal, 2003

Current use of contraceptive by methods	Men		Women	
	N	%	N	%
Condom	103	36.5	107	23.8
Pills	21	7.5	46	10.2
Depo-Provera	99	35.1	167	37.2
Norplant	6	2.1	10	2.3
IUD	6	2.1	10	2.3
Female sterilization	14	5.0	28	6.2
Male sterilization	11	3.9	19	4.2
Calendar method	11	3.9	15	3.3
Withdrawal	11	3.9	47	10.5
Total	**499**	**100.0**	**997**	**100.0**
Contraceptives prevalence rate	282	56.5	449	45.0

Similar to the results of Nepal DHS 2001, the dominant method reported by women was the injectable, followed by condoms and oral pills respectively. Amongst men, condoms were the most frequently reported method, followed by the injectable and the pill respectively. These discrepancies were mainly because of a tendency towards low reporting of condom use by women respondents. A similar result was found comparing men and women on reported condom use in the Nepal DHS 2001 (Ministry of Health (Nepal) *et al.*, 2002). No explanations were found on why higher proportions of women than men reported withdrawal as their current method of contraception.

As described in Chapter Three, Morang is a bigger city compared with other districts selected in this study, so it takes the share of one-third of the sampled respondents. About one-fifth of the respondents are from Kaski district followed by 19 per cent from Chitwan, 17 per cent from Lalitpur and 11 per cent from Ilam respectively.

Table 5.4 Selected socio-economic characteristics of the respondents: Young person's pregnancy study in Nepal, 2003

Selected socioeconomic characteristics	Men		Women	
	N	%	N	%
District				
Ilam	57	11.4	113	11.3
Morang	165	33.1	329	33.0
Chitwan	92	18.4	184	18.5
Kaski	100	20.0	201	20.2
Lalitpur	85	17.1	170	17.1
Place of residence				
Urban	198	39.7	400	40.1
Rural	301	60.3	597	59.9
Caste/ethnicity				
Brahmin/Chhetri	192	38.5	410	41.1
Tharu	49	9.8	93	9.3
Mongoloid	147	29.5	299	30.0
Damai/Kami/Sarki	38	7.6	74	7.4
Terai caste	58	11.6	87	8.7
Low terai caste	11	2.2	19	1.9
Muslim	4	0.8	15	1.5
Level of education				
No education	88	17.6	283	28.4
Primary and informal	51	10.2	121	12.1
Secondary	266	53.3	493	49.5
IA and above	94	18.9	100	10.0
Main occupation				
Agriculture	166	33.3	286	28.7
House maker	na	na	564	56.6
Non-agriculture	286	57.3	112	11.2
Unemployed/student	47	9.4	35	3.5
Religion				
Hindu	431	86.4	846	84.9
Buddhist	47	9.4	108	10.8
Other	21	4.2	43	4.3
Family structure				
Nuclear	126	25.3	251	25.2
Joint	373	74.7	746	74.8
Household's wellbeing				
Poor	118	23.7	259	26.0
Medium	275	55.1	500	51.2
Rich	106	21.2	238	23.9
Cash income				
No cash income	153	30.7	836	83.9
Cash Income	346	69.3	161	16.1
Total	**499**	**100.0**	**997**	**100.0**

Similarly, 60 per cent of the respondents are residing in rural areas and the remaining 40 per cent in urban areas. The majority of the respondents reported belonging to the Brahmin or Chhetri ethnic community, which is the dominant group of the population in the country. Mongoloid and Terai ethnicity were the second and third most prevalent caste/ethnicity group amongst the respondents. A considerable proportion of the respondents are from occupational caste groups. The literacy rate is 82 per cent for men and 72 per cent for women that is higher than the national average of 61.6 per cent in the same age group (United Nations Development Programme, 2003). About half of the men and women had studied up to secondary level education and only one in 10 women compared with one in five men had attained college level education. More men reported that they were engaged in non-agricultural work (57%) than in agricultural work (33%), and more than half of the women were house makers.

An overwhelming majority of respondents belong to the Hindu religion. Three-quarters of the respondents covered in the study mentioned that they lived in joint family structures. The majority of the respondents were of medium level standard of living with a quarter being low standard of living. About one-third of the men compared 84 per cent of the women mentioned that they do not earn any cash. This indicates major gender irregularities in terms of cash income in the study areas (Table 5.4).

Table 5.5 Respondent's exposure to mass media: Young person's pregnancy study in Nepal, 2003

Exposure to mass media	Male		Female	
	N	%	N	%
Usually read newspapers				
Yes	318	63.7	317	31.8
No	181	36.3	680	68.2
Usually listen radio				
Yes	397	79.6	667	66.9
No	102	20.4	330	33.1
Usually watch television				
Yes	397	79.6	780	78.2
No	102	20.4	217	21.8
Exposure to one or other mass media Yes				
No	476	95.4	900	90.3
	23	4.6	97	9.7
Total	**499**	**100.0**	**997**	**100.0**

Overall, respondents have regular access to some form of mass media, especially television and radio. Amongst the surveyed men, three out of four usually watch television or listen to radio and about two-thirds read newspapers. Amongst women, 78 per cent usually watch television, 67 per cent listen to radio while only about one-third read newspapers (Table 5.5).

Table 5.6 shows the percentage distribution of self esteem and decision making power of the sampled respondents. The majority of the respondents have a medium level of self esteem. High self esteem is slightly more prevalent amongst men than women.

Table 5.6 Respondent's self esteem, decision making power: Young person's pregnancy study in Nepal, 2003

	Men		Women	
	N	%	N	%
Self esteem				
High	109	21.8	172	17.2
Medium	275	55.1	637	63.9
Low	115	23.1	188	18.9
Decision making power				
No power	120	24.1	663	66.5
Little/moderate power	292	58.5	278	27.9
Strong power	87	17.4	56	5.6
Total	**499**	**100.0**	**997**	**100.0**

When it comes to the decision making power on large household purchase or fertility control issues, two-thirds of the women reported that they have no power whereas over half of the men responded they have moderate power in these areas.

5.5 Level of reported unintended pregnancy

Table 5.7 presents the percentage distributions of currently pregnant women and levels of unintended pregnancy amongst those who were currently pregnant at the time of interviews[2]. One in six women covered in the study was pregnant at the time of interviews. There is little difference in the levels of current pregnancy between the Nepal DHS 2001 and the present study. However, a clear difference is observed in the prevalence of unintended pregnancy between the two surveys. Using the conventional definitions, a large difference in the levels of unintended pregnancy between the two

[2] Nepal DHS only collected information on pregnancy intendedness among currently pregnant women (also not for men); therefore, no comparison can be made on the level of ever experienced of unintended pregnancies.

surveys was observed amongst younger women (31 per cent in the Nepal DHS as against 50 per cent in the present study amongst women aged 15-19 years) and in the western region of the country (28. 6 per cent in the Nepal DHS and 68.9 per cent in the present study). One of the explanations is that younger women intend to have smaller family size than older women. The regional difference could be due to high differentials within the clusters, which were not the same in the two surveys. A large difference observed between two surveys when the modified definition was used. The results suggest that there is an underestimation of the prevalence of unintended pregnancy when the conventional definition is employed.

Table 5.7 Level of unintended pregnancies amongst currently pregnant women age 15-24 years at the time of survey in Nepal - a comparison

	Nepal DHS, 2001	Present study, 2003
Percentage of women pregnant at the time of interviews	15.8 (2567)	17.3 (997)
Percentage of women reporting unintended pregnancy using the conventional definition	32.1 (405)	43.6 (172)
Adjusted (for rural - urban difference) percentage of women reporting unintended pregnancy using the conventional definition	32.2	44.8
Percentage reporting unintended pregnancy using modified definition (among currently pregnant)	na	55.8 (172)

Note: Denominators in parenthesis

5.6 Demographic determinants of unintended pregnancy

Determinants of unintended pregnancy were assessed through selected demographic and socioeconomic characteristics of the respondents. The variables considered in the analysis were current age of the respondents, living number of children, ideal number of children, their place of residence, caste/ethnicity, education level, main occupation, religion, family structure, household wellbeing and cash income. A few attitudinal and respondent's autonomy variables were also used to test an association of these variables with unintended pregnancy.

Table 5.8 presents the percentages reporting that their (or their wives') most recent pregnancy had been unintended by selected demographic characteristics. The results show that there is a negative association between unintended pregnancy and age of respondents. Younger men and women were more likely to report unintended pregnancy than the older

Table 5.8 The percentage reporting unintended pregnancy (amongst those ever been pregnant) by selected demographic characteristics: Young person's pregnancy study in Nepal, 2003

Selected demographic characteristics	Men		Women	
	N	%	N	%
Current age (in years)				
15-19	10	70.0	175	68.6***
20-24	182	45.0	666	53.7
25-27	195	44.6	na	na
Number of living children				
None	70	38.6	124	51.6
One	197	43.1	440	56.8
Two	93	49.5	225	56.9
Three or more	27	66.7*	52	69.2
Sex of the living children				
No children	70	38.6	124	51.6
Son(s) only	132	47.7	283	58.3
Daughter (s) only	109	43.1	264	57.2
Son (s) = daughter(s)	58	48.3	133	54.1
Daughter(s) > son(s)	12	50.0	22	72.7
Son (s) > daughter(s)	6	83.3	15	66.7
Ideal number of children				
One	27	37.0	77	62.3**
Two	306	44.1	690	57.7
Three or more	54	57.4	74	43.2
Correct knowledge of family planning methods				
Know five or less methods	200	49.5	484	60.1
Know six or more methods	187	41.2	357	52.4
Current use of contraception				
Yes	226	47.8	390	58.9
No	161	42.2	451	55.0
Total	**387**		**841**	

*Chi square test significant at 0.10 level, ** Chi square test significant at 0.05 level, *** Chi square test significant at 0.01 level

age group. They might have wanted to postpone their pregnancy because of the health implications of pregnancies at young ages, desire to obtain education, or to follow other types of career development.

Unintended pregnancy was further examined through parity of respondents. As expected, it is clear that as parity increases the percentage of respondents reporting unintended pregnancy increased from about 39 per cent of the men and 52 per cent of the women with no child to 67 per cent of men and 69 per cent women with three or more children.

Amongst men, there is an indication that those who have had more sons than daughters, were more likely to report the last pregnancy of their wife was unintended. In contrast, women who have more daughters than sons were more likely to report unintended pregnancy. Apart from this, no clear difference was observed in the percentage reporting unintended pregnancy according to the sex composition of the living children.

The percentage of unintended pregnancy is highest amongst women who desired one child as an ideal family size. Amongst women, the proportion decreased from 62 per cent to 43 per cent as the ideal number of children increased from one child to three or more. The result suggests that as ideal number of children decreases the level of unintended pregnancy increases. Surprisingly, the proportion of men reporting unintended pregnancy increases with ideal family size. This contradictory finding needs further exploration.

As expected, the number of family planning methods correctly known is negatively associated with level of unintended pregnancy. Men and women who correctly mentioned six or more family planning methods were less likely to report unintended pregnancy compared with those who mentioned five or less. Men and women who correctly mentioned six or more family planning methods were more likely to use them than those who mentioned five or less methods (amongst women 60 per cent as against 35 per cent and amongst men 66 per cent as against 46 per cent). Current users of contraception were more likely than non-users to report unintended pregnancy.

5.7 Socio-economic determinants of unintended pregnancy

The respondents from Kaski district were more likely to report unintended pregnancy than those in Ilam, Morang, Chitwan and Lalitpur. Women residing in urban areas were more likely to report unintended pregnancy compared with their counterparts from rural areas. One explanation could be that urban women were more aware than their counterparts about the fact that fertility can be controlled. Fifty four per cent of rural women reported unintended pregnancy compared with 61 per cent of urban women. However, amongst men, no difference was observed in the level of unintended pregnancy according to the place of residence.

Ethnic group identification represents a sub-system within a society and reflects variation in institutional arrangements concerning the starting pattern of reproduction. There is little

difference in the percentages of unintended pregnancy amongst the women in different ethnic groups. However, the Tharu men of the terai region reported higher unintended pregnancy, followed by the occupational caste group who are the most socio-economic disadvantaged group of the population in the country. In contrast, the Tharu women reported the lowest level of unintended pregnancy. There is no strong evidence to support why the terai origin women report few numbers of unintended pregnancies compared with other ethnic groups (Table 5.9).

Amongst men, the level of unintended pregnancy increased from 46 per cent to 50 per cent - but not linearly - with the increase in educational attainment. Amongst women, those who had acquired secondary education were more likely to report unintended pregnancy compared to those with no education or who have higher level education.

Amongst men, those whose main occupation was non-agricultural reported higher levels of unintended pregnancy compared to those engaged in agricultural activities, with 50 per cent and 40 per cent respectively. Amongst women, no clear difference was observed according to their main occupation.

Hindu men were more likely than Buddhist to report unintended pregnancy. In contrast, Buddhist women were more likely to experience unintended pregnancy than Hindu women, but this was not significant. No major difference was observed in the level of unintended pregnancy according to family structure of the respondents.

Unintended pregnancy was also assessed by the household wellbeing of respondents. The results indicate that the medium class family were more likely to experience unintended pregnancy than either the poor or the rich class family. Amongst men, 51 per cent of the medium class men reported ever experiencing unintended pregnancy compared to 32 per cent rich and 48 per cent poor class families. Amongst women, there were no major differences.

No marked difference was found in the level of unintended pregnancy according to the cash earning status of the respondents. However, amongst men, those who did not earn cash were more likely to report unintended pregnancy whereas amongst women the association is in the opposite direction.

Table 5.9 The percentage reporting unintended pregnancy (amongst those who ever been pregnant) by selected socio-economic characteristics: Young person's pregnancy study in Nepal, 2003

Characteristics	Men		Women	
	N	%	N	%
Districts				
Ilam	49	20.4	93	45.2
Morang	129	55.0	279	49.1
Chitwan	72	44.4	154	56.5
Kaski	72	55.6***	169	74.6***
Lalitpur	65	35.4	146	58.9
Place of residence				
Urban	145	45.5	338	61.0**
Rural	242	45.5	503	54.1
Caste/ethnicity				
Brahmin/Chhetri	148	42.6	344	57.8
Tharu	87	60.0**	153	52.9
Mongoloid	112	37.5	247	57.9
Occupational caste	40	47.5	97	56.7
Level of education				
No education	78	46.1	257	52.9
Primary	41	48.8	108	50.9
Secondary	204	43.1	407	61.9**
IA and above	64	50.0	69	50.7
Main occupation				
Agriculture	162	39.5	252	58.3
House maker	na	na	491	55.6
Non-agriculture	225	49.8**	98	59.2
Religion				
Hindu	333	48.0**	720	56.1
Buddhist	36	33.3	87	62.1
Other	18	22.2	34	58.8
Family structure				
Nuclear	112	45.5	233	53.6
Joint	275	45.5	608	58.1
Household wellbeing				
Poor	208	48.1	421	55.6
Medium	218	50.5**	209	60.3
Rich	73	35.6	211	55.9
Cash income				
No cash earning	107	48.6	694	56.2
Earn cash	280	44.3	147	59.9
Total	**387**		**841**	

* Chi square test significant at 0.10 level, ** Chi square test significant at 0.05 level, *** Chi square test significant at 0.01 level

The study shows that higher exposure to mass media (newspapers, radio and television) increases the experience of unintended pregnancy. For example, about 47 per cent of the

men exposed to the mass media reported their wife's most recent pregnancy as being unintended compared with 43 per cent of the men who do not have regular access. Similarly, women who usually read newspapers or listen to radio or watch television were more likely to report their last pregnancy being unintended compared with their counterparts.

Table 5.10 The percentage reporting unintended pregnancy (amongst those who ever been pregnant) according to the selected indicators: Young person's pregnancy study in Nepal, 2003

Characteristics	Men		Women	
	N	%	N	%
Exposure to the mass media (Newspapers, radio, TV)				
Yes	371	46.6**	756	57.8*
No	16	18.8	85	48.2
Self esteem				
Low	90	36.7	148	53.4
Medium	208	46.2	533	57.0
High	89	52.8*	160	59.4
Decision making power				
Low	96	41.7	229	55.0
Medium	218	50.5*	421	58.2
High	73	35.6	191	56.0
Total	**387**		**841**	

* Chi square test significant at 0.10 level, ** Chi square test significant at 0.05 level,
*** Chi square test significant at 0.01 level

Against expectation, the higher a person's self esteem, the higher risk of unintended pregnancy was observed. Amongst men, 53 per cent who have high self esteem reported unintended pregnancy compared with about 37 per cent who have low self esteem. Similarly, 59 per cent of women who have high level of self esteem reported unintended pregnancy compared with 53 per cent with low self esteem.

Respondents who have a medium level of decision making power were more likely to experience unintended pregnancy compared with those with low or high level decision making power. The difference is much wider amongst men than women (Table 5.10).

5.8 Determinants of unintended pregnancy: The results of multivariate analysis

Determinants of unintended pregnancy were modelled using a multivariate logistic regression. This statistical analysis assesses the relative impact of the variables in

experiencing unintended pregnancy after controlling for the effects of other variables in the model. Interactions between the variables were also tested for.

The results of the logistic regression are presented in Tables 5.11 and 5.12. Although all the conceptually important variables were included in the analysis only the statistically significant variables are presented in the tables. For women, age, number of living children, ideal number of children, contraceptive knowledge, district, educational attainment, exposure to the mass media and household wellbeing were the significant predictors; for men, number of living children, districts, level of education, household wellbeing, exposure to the mass media, self esteem, and decision making power were significant. No statistically significant results were observed in the interactions tested between the likely variables in the multivariate analyses.

The results show that the effect of maternal age on unintended pregnancy was statistically significant. The likelihood of unintended pregnancy decreases as maternal age increases. For example, the odds of a woman aged between 20 and 24 years reporting an unintended pregnancy were 60 per cent lower compared with women aged between 15 and 19 years. A similar trend was observed in relation to the current age of men but was not statistically significant.

The number of living children at the time of interview was a strong predictor of unintended pregnancy. Women with one child only or no living children at the time of interview were the least likely to report unintended pregnancy. The odds of women with three or more living children reporting their last pregnancy as being unintended were 5.57 times higher than the odds of women with no living children. A similar finding was observed amongst men as well. The odds of men with three or more living children reporting their wife's last pregnancy being unintended were 2.98 times higher than those of men with no living children.

The results also revealed that the perception of the ideal family size is also a significant predictor of unintended pregnancy amongst women. The odds for women who perceived that three or more children are ideal decrease by 73 per cent compared with those women who perceived that one child is ideal; for men, on the other hand, the odds ratios were not very different for those who perceived three or more children as ideal compared with those who said one is ideal.

Table 5.11 Estimated odds ratios for unintended pregnancy by socio-demographic correlates: Young person's pregnancy study in Nepal, 2003

Selected predictors	Odds Ratios	
	Men	Women
Current age of women in years		
15-19 (ref)	na	1.00
20-24	na	0 .40***
Current age of men in years		
15-24 (ref)	1.00	na
25-27	0.92	na
Number of living children		
0 (ref)	1.00	1.00
1	1.23	1.55**
2	1.99*	2.19***
3 and more	2.98**	5.57***
Ideal number of children		
1 (ref)	1.00	1.00
2	1.23	0.63
3 and more	1.29	0.27***
Knowledge of contraception		
Known five or less methods (ref)	1.00	1.00
Known six or more methods	0.77	0.58***
District		
Ilam (ref)	1.00	1.00
Morang	2.04	1.59
Chitwan	1.35	1.50
Kaski	3.57**	4.67***
Lalitpur	1.53	3.75***
Literacy level		
No education (ref)	1.00	1.00
Primary	1.60	0 .89
Secondary	1.23	1.89***
I A and above	2.41*	1.37
Household wellbeing		
Poor (ref)	1.00	1.00
Medium	0.91	0.64**
Rich	0.41**	0.50**
Number of observation	*387*	*841*
LR chi2 (31)	*69.19*	*104.41*
Prob > chi2	*0.0001*	*0.000*
Pseudo R2	*0.1297*	*0.0908*

* significant at 0.10 level, ** 0.05 level, *** significant at 0.01 level

The study revealed that the correct number of family planning methods known is also an independent significant predictor of unintended pregnancy amongst women. Women who have correct knowledge of six or more methods of family planning were 42 per cent less

likely to experience an unintended pregnancy than those who only know five or less number of methods of family planning. However, it does not make any significant difference to men.

The results also show that the area of residence (district), especially for women, is also a strong predictor of unintended pregnancy. The odds of women from Kaski district (western region) reported their most recent pregnancy was unintended were 4.67 times higher than the odds of women from Ilam (eastern region). The trend is true for men as well.

Similarly, higher levels of educated men and women were more likely to report unintended pregnancy compared with those with no education.

A further independent significant factor for unintended pregnancy for women was household wellbeing. As mentioned before, household wellbeing was taken as proxy measure of the economic status of the respondents. The results show that higher economic status women tend to be associated with lower odds of experiencing unintended childbearing than low status. A similar trend was observed in the case of men.

Table 5.12 Estimated odds ratios for mass media, self esteem and decision making power on unintended pregnancy amongst young men and women: Young person's pregnancy study in Nepal, 2003

Selected predictors	Odds Ratios	
	Men	**Women**
Exposure to mass media		
No (ref)	1.00	1.00
Yes	5.03**	1.67**
Self esteem		
High (ref)	1.00	1.00
Moderate	1.40	0.99
Low	2.00*	0.98
Decision making power		
No power (ref)	1.00	1.00
Moderate power	0.48**	1.04
Strong power	0.92	1.57
Number of observation	*387*	*841*
LR chi2 (31)	*69.19*	*104.41*
Prob > chi2	*0.0001*	*0.000*
Pseudo R2	*0.1297*	*0.0908*

* significant at 0.10 level, ** 0.05 level, *** significant at 0.01 level

Exposure to mass media is also strongly associated with unintended pregnancy. For example, men who have frequent exposure to mass media were 5.03 times more likely to report unintended pregnancy compared with those who are not exposed. Similarly, women who have higher exposure to mass media were more likely to report unintended pregnancy compared with those with no exposure.

Self esteem is a significant predictor of unintended pregnancy amongst men only. Generally, low levels of self esteem tend to be associated with higher odds of experiencing unintended pregnancy. The odds of low self esteem men reporting their wife's pregnancy was unintended was twice that of men with high self esteem. Men with moderate decision making power were less likely to report unintended pregnancy compared with no power.

5.8 Discussion and conclusions

This chapter examines the prevalence and the factors associated with unintended pregnancy amongst young men and women in Nepal. This is the first study in the country which has used the modified definition of intendedness of pregnancy guided by extensive exploratory research. The study found a higher prevalence of reported unintended pregnancy than that obtained in the Nepal DHS 2001, indicating that the level of unintended pregnancy reported in the latter is underestimated. The difference observed in the level of unintended pregnancy using the conventional definition between the two surveys could be partly due to difference in sampling design. The clusters covered in the Nepal DHS 2001 and the present study were not exactly the same. Therefore, there could be a difference in the prevalence of unintended pregnancies at cluster level. Other reasons could be the quality of the research and data collection process themselves. The present survey questionnaire was modified based on extensive exploratory research (for example, used words familiar to the respondents), the rigorous training of interviewers for the purpose of obtaining confidential responses, used local vocabularies as much as possible in the research instruments; all may have been contributed to better response. A number of multiple methods such as re-administration key questions by the field supervisors, cross checking the responses between husband and wife immediately after interview, validating with case histories - were employed to triangulate information collected; therefore, the possibility of under reporting of such events was minimized.

Further, since the present study was specifically focussed on pregnancy planning intentions and outcomes, respondents may have been more willing to report unintended pregnancies.

The difference in the levels of unintended pregnancy is much higher between the two surveys when the modified definition was used. This is because of inadequate definition of unintended pregnancy is used in the DHS study. The definition used in the DHS surveys gives an emphasis on the *timing* of the childbearing, but the exploratory research that formed part of this current study revealed that socioeconomic factors, cultural circumstances and the health status of couples are also equally important for considering whether or not a pregnancy is intended (detailed discussion in Chapter Four).

The bivariate analysis showed that the demographic and socio-economic variables - current age, number of living children, ideal family size, number of family planning methods correctly known, place of residence, district, educational attainment, exposure to the mass media and self esteem - are significantly correlated with unintended pregnancy amongst women. Amongst men, number of living children, district, caste/ethnicity, main occupation, household wellbeing, exposure to mass media, self esteem and decision making power are correlated with unintended pregnancy.

Multivariate analysis identified that young couples aged between 15 and 19 years with high parity and smaller ideal family sizes were more likely to report experience of unintended pregnancy regardless of other factors. This corroborates findings from most of the previous research outside Nepal. The higher likelihood of experiencing unintended pregnancy amongst younger women may indicate that they want smaller families than do older women. This is well reflected in the data; for example, 84 per cent of women aged between 20 and 24 years considered three children to be ideal family size, compared with just 16 per cent amongst women aged between 15 and 19 years.

A further explanation for the high number of unintended pregnancies could be a reluctance amongst younger women to ask partners to use contraception. This is well supported by the qualitative data. In-depth interviews revealed that shyness to talk about contraceptive use is one of main barriers against using contraception amongst young women. The respondents in the qualitative component of the study stated that newly married couples, especially women, should feel shy in communicating (or should reflect a

shy nature) in the family. If a newly married woman talks about contraceptives then she might be called 'characterless' and might be misunderstood. Furthermore, young couples also feel shy to obtain contraceptives due to various reasons such as the gender of the provider, perceived discouraging behaviour on the part of the service provider and fear of side effects, each of which may lead to unintended pregnancy. It is also quite clear from the qualitative research that young women wanted to postpone their pregnancy because of their desire to continue education, or to achieve other types of career development and independence.

The more living children men and women had, the more likely they were to report their last pregnancy as being unintended, regardless of age and other factors. This indicates that those young men and women who have had many children may differ in meaningful ways from those who have not. For example, high parity women may have limited access to services or may experience particular difficulty in practicing contraception. Another reason could be that the decline in desired family size in Nepal has resulted in increased exposure to the risk of having unintended pregnancy. As fertility preference declines, the number of years between the completion of a couple's desired family size and the end of potential childbearing increases, thus leading to increases in the time during which unintended pregnancy can potentially occur.

Amongst women, just knowing the name of contraceptive methods (having heard about the methods) was not associated with unintended pregnancy, but the number of methods correctly known about was independently associated with the likelihood of unintended pregnancy. Those who knew six or more methods correctly were less likely to experience unintended pregnancy than those who knew five or less methods. This clearly has implications for the concept of informed choice on family planning programmes.

Unintended pregnancy was more common in the western region (i.e. Kaski and Lalitpur district) than in the eastern region (Ilam or Morang district) of the country. Such disparity may be due to cultural factors. For example, Ilam is mainly dominated by the Rai and Limbu communities, whereas the Morang district is dominated by the Maithali community, where the mean age of marriage is low compared with other ethnicities and early childbearing is not considered as a problem for the family. In-depth interviews showed that people in these areas strongly believed that if they have children at an early age then their children will grow up soon and the parents won't have any problems later

in their old age. By contrast, Kaski and Lalitpur are dominated by Gurung and Newar, respectively, where age at marriage is higher than other ethnicities and early age pregnancies are not welcomed. No statistically significant difference was observed between rural and urban areas in experiencing unintended pregnancy. One would expect a lower level of unintended pregnancy in rural than urban areas due to the fact the rural women expect a child immediate after the marriage and have larger ideal family sizes. This unexpected finding needs further investigation.

As expected, men and women who completed secondary or higher level education were more likely to report their last pregnancy as being unintended than those who never attended school. This could be because the better educated couples (who have a stronger motivation than uneducated couples to prevent unintended pregnancy) may not be using contraceptives for some reasons. This is supported by the data on contraceptive use. The data revealed that there is no significant difference in contraceptive use amongst women by level of education. The data further suggest that number of living children is more important than the level of education in determining use or not use of contraception. Couples with two or more children were more likely than those who have had one or no children to use contraception. However, this unexpected result on the association between level of education and contraceptive use requires further research.

Women from medium and high wellbeing households were less likely to report unintended pregnancy than those from poor wellbeing households. An unexpected association is observed between exposure to mass media and unintended pregnancy. It is difficult to establish casual links between exposure to mass media and unintended pregnancy in cross sectional studies, but the result indicated that those who have had regular access to mass media were more likely to report unintended pregnancy. This contradiction needs further research; this pattern of result may indicate different expectations between different groups, but these are not accompanied by appropriate contraceptive use in line with these expectations.

The multivariate results also showed that men with low self esteem were more likely to experience unintended pregnancy compared with those who have high self esteem. Similarly, men who have moderate decision making power were less likely to report unintended pregnancy than those who have no power. Interestingly, these two variables were not statistically significant for women. This suggests that programmes that aimed at

increasing spousal communication on mutual fertility decision making and self esteem would help to reduce the level of unintended pregnancy amongst young couples. Although son preference is not statistically significant in this analysis, it should be mentioned here that most of the respondents covered in the qualitative study believed that it is one the factors associated with unintended pregnancy in their communities.

The results showed that those women and men who have younger age, higher level of education, and higher exposure to mass media were more likely than their counterparts to report unintended pregnancy. These findings indicate the 'transition phenomena in pregnancy intention' in developing countries like Nepal where desired family size is falling rapidly, couples are beginning to realize that they could control their fertility but quality family planning services are not reaching to needy people to translate their thinking into the real life.

The results clearly point to some programme and policy implications. As the results show that the conventional way of measuring intendedness of pregnancy tends to under-estimate the level of unintended pregnancy in Nepal, the research instruments should by modified before conducting any further studies (including DHS) that are designed to assess the level of unintended pregnancy.

It is clear from the analysis that particular groups of Nepalese young couples are at significantly elevated risk of unintended pregnancy, and thus would benefit from quality family planning services that are tailored to their needs. For example, improving the quality of family planning services in terms of providing informed choice and functional knowledge appear to be instrumental in reducing the level of unintended pregnancy. In addition, information about the effective use of existing services, the value of small families and young couple friendly health services should enable women to avoid unintended pregnancy.

Further research is required on how the mass media are affecting the level of unintended pregnancy. In-depth research is needed to examine the relationship between contraceptive use and level of education, and rural-urban difference on unintended pregnancy. Birth interval is identified as one of the major determinants of unintended pregnancy in the literature. However, this study did not collect the data related to birth interval due to the problems associated with it. Including birth interval data could improve the results of

future studies. A retrospective study such as this might be generating biased results, as feelings about pregnancy may change throughout the gestation period as well as after the birth, and couples might not report their unintended pregnancy as having been unintended. Although this study interviewed in-depth those couples who experienced unintended pregnancy and sought an abortion, it should be noted that, due to cultural taboo attached with abortions, some young men and women might not have reported unintended pregnancy especially when they have had abortion or still birth. A longitudinal study could avoid such problems.

CHAPTER 6

MAKING DECISIONS ABOUT UNINTENDED PREGNANCY: ACCEPTING THE PREGNANCY OR SEEKING ABORTION

6.1 Background

Couples with unintended pregnancy have two options - accept it to end up in full term delivery or undergo abortion. For many couples, the answer is very clear: yes, they are ready to bear a child and become parents. For others, the answer is far less certain. There are many questions that must be answered; the impact of having a baby on their lives must be explored before taking a decision. For many young couples, an unintended pregnancy can be one of the first times that they have had to deal with a decision about their health and the course of their life. Weighing the pros and cons of such a personal decision can be stressful and/or challenging. Women may decide without consulting with anybody or wish to seek advice when making such decision. Who a woman (or her partner) chooses to talk with may vary; each of them may have their own needs for privacy and for emotional, physical, economic and spiritual support. Women or couples may have received various suggestions and, sometimes, conflicting opinion which make it more difficult to decide. Therefore, this is a difficult time for them.

A better understanding of the processes by which decisions are made is necessary to improve programme that could enable couples to take timely decisions and assist in reducing unsafe abortion practices. No detailed studies have been conducted on this issue so far in the country.

This chapter explores how young couples decide whether or not to terminate a pregnancy. Attempts have been made to understand who are involved in the decision making process and what are their roles. The chapter also discusses pathways from unintended pregnancy to abortion and, finally, a discussion and conclusions are presented.

6.2 Data sources and methods

This chapter uses both quantitative and qualitative data. Information is derived from the following sources:

- Sample survey of 997 married women aged between 15 and 24 years and 499 married men aged between 15 and 27 years
- Free listing with 127 respondents, and;
- Case histories with 30 respondents (11 men and 19 women), who ever experienced unintended pregnancy.

As discussed in Chapter Three, free listings were conducted before the sample survey, whereas the case histories were collected after the survey. The detailed description of the sampling procedures is presented in Chapter Three. The process of analyzing case histories and data from free listings were similar as described in the Chapter Four. Key background characteristics of the respondents in case histories are presented in Annex XVI. For the quantitative data, frequencies and cross-tabulation were produced using STATA.

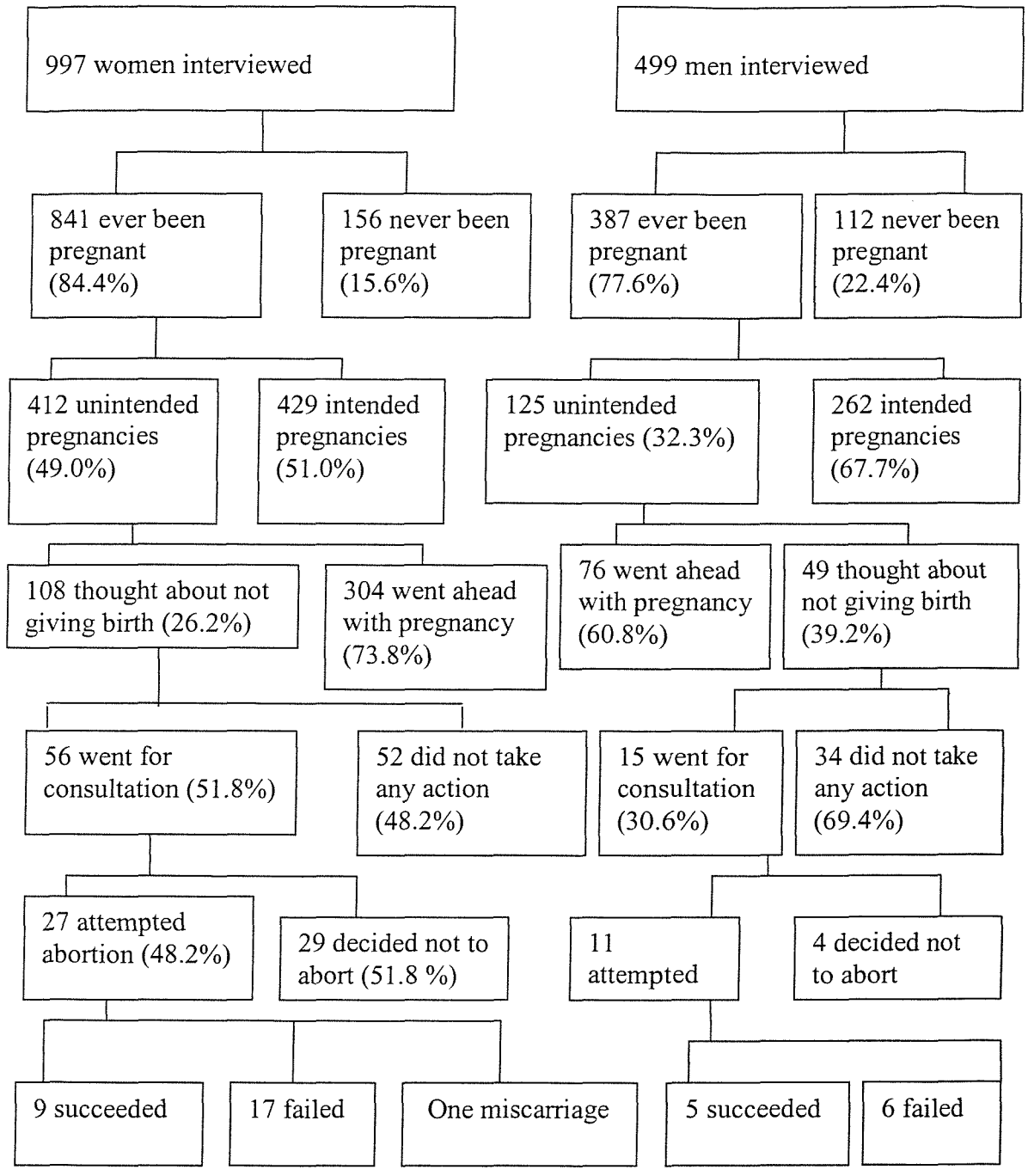
6.3 Inter-spousal communication in pregnancy planning and abortion

Generally Nepalese young couples do not discuss abortion but most of them do talk about pregnancy and contraception. Amongst the survey respondents, about three-fourths of men and women reported that they had discussed contraception during the 12 months prior the survey. Similarly, 83 per cent of respondents (men and women) mentioned that they had discussed whether or not to bear a child in the 12 months prior to the survey. In contrast, 84 per cent of men and 73 per cent of women reported that they had not discussed abortion in the previous 12 months. This finding is well supported by the qualitative data. Most of the respondents in the in-depth interviews perceived that partners talk about pregnancy and contraception but rarely discuss abortion. Very few respondents (one in three) mentioned that couples discussed abortion. However, case histories revealed that couples invariably discus abortion when they experience an unintended pregnancy.

6.4 Experiences of unintended pregnancies and abortions

Diagram 6.1 presents the details of the survey respondents on their pregnancy intentions and outcomes of unintended pregnancy. As the diagram shows, about 85 per cent of women had ever been pregnant and 78 per cent of men reported their wife as ever having

Diagram 6.1 Pregnancy, intentions and outcome of unintended pregnancy: Young person's pregnancy study in Nepal, 2003



been pregnant. Using the conventional definition[1] of unintended pregnancy, about half of the women and one-third of the men reported at least one experience of unintended

[1] Pregnancy that was not desired at that time or any time in the future by pregnant woman was considered as unintended pregnancy.

pregnancy in their life time[2]. A total of 503 and 156 unintended pregnancies were reported by 412 women and 125 men respectively. In other words, on average, a woman has at least one unintended pregnancy before the age of 24 years. Comparatively, the higher proportion of women than men reported unintended pregnancy. It may be due the fact that women have a direct impact on her health and personal development from a pregnancy compared with men.

More than half of the women and three-quarters of the men reported that their unintended pregnancies occurred within the two years preceding the time of the survey. One-quarter of the women who reported unintended pregnancy (108 out of 412) actually thought about not carrying the pregnancy to full term. However, only 56 of these women (52 per cent) ever discussed with someone about having an abortion. Despite considering not continuing their pregnancy, about half of the women (52 out of 108) did not take any action. Amongst those women who did discus their unintended pregnancies, 29 (51.8 per cent) decided to continue their pregnancies with 27 (48.2 per cent) attempting an abortion. Finally, nine women reported terminating their pregnancies successfully whereas 17 women were not successful, and one ended in miscarriage. Women were unsuccessful in terminating pregnancy mainly because of the use of ineffective methods.

Amongst men, 39 per cent of them (49 out of 125) thought about their wives not having an unintended birth, but only about a third (15 out of 49) consulted with someone about an abortion. Of those who discussed with someone, 11 attempted an abortion whereas the remaining four decided to continue the pregnancy. Five out of 11 men who prompted their wives for an abortion were successful.

6.5 Involvement of different people in decision making on abortion: Results from the free listing

Respondents were asked to report all the important people who could contribute to making a decision to have an abortion during the free listing exercise. Therefore, the response in free listing indicates what people thought would be the case in relation to decision making on abortion. The results from the free listings are presented in Table 6.1. The results showed that the husbands take the decision regarding abortion in most

[2] In the quantitative survey, questions on decision making process on abortion were asked with only those respondents who fall under the conventional definition of unintended pregnancy, therefore, the conventional definition was used.

of the cases (67%). Nearly half of the respondents mentioned that the wife takes the abortion decision. This was followed by both husband and wife (33%) and the parents-in-law (27%) respectively. Very few of the respondents thought that medical personnel such as doctors or persons from nursing homes take the decision on abortion. Friends, relatives and neighbours were also rarely perceived as decision makers.

The average rank shown in Table 6.1 refers to how early in the free listing each person, on an average, mentioned a particular response. Therefore, the term that has the lowest rank indicates that the person was mentioned by most respondents first. 'Smith's salience' is an indicator that takes the frequency of mention, and then weights that frequency by the average rank (Borgatti, 1996). That means that if two items had equal numbers of mentions then an item would have higher salience if it was mentioned earlier in the respondents' lists. Salience is calculated in the free list as a combination of how many people said that item and how early in their lists they said it.

Amongst the 41 respondents who mentioned that both husband and wife take the decision for abortion, all listed this response first. However, the majority of the respondents who mentioned husband, as the decision maker listed husband first. Smith's salience was highest for husband indicating that this response was mentioned the maximum number of times and more likely to be mentioned first.

Table 6.1 Perceived important persons who contribute in making decision on abortion in a family-result from free listing: Young person's pregnancy study in Nepal, 2003

Decision maker	Frequency (N=127)	Percentage	Average Rank	Smith's Salience
Husband	85	67.0	1.247	0.618
Wife	59	47.0	1.983	0.333
Husband and wife	41	33.0	1.024	0.321
Parents-in-law	34	27.0	2.235	0.161
Mother-in-law	27	21.0	2.444	0.133
Mother	20	16.0	3.600	0.065
Friends	17	13.0	3.941	0.047
Boyfriend	15	12.0	3.73	0.048
Family	13	10.0	3.30	0.043
Parents	10	8.0	2.90	0.040
Girl	8	6	4.50	0.019
Doctor	5	4	2.60	0.020
Nursing home	1	1	2.00	0.005
Clinic	2	2	2.00	0.011

Case histories revealed that multiple factors intervene during the decision making phase, making the process dynamic and situation specific. Decision making related to whether or not to terminate the pregnancy, choosing the service provider and the method of abortion, were mainly dependent on the role of the husband and health service providers they consulted. In some situations, however, the women themselves, mothers-in-law, family relatives and friends also played important roles in the process.

6.5.1 Involvement of women

Nepal is a patriarchal society country; generally women (especially young married women) have relatively very little power in decision making on large household purchase, fertility control and their own health care (Ministry of Health (Nepal) *et al.*, 2002) . The result of the present study confirms that men are the most important decision makers in the family. Eight out of 10 women reported that they do not have the final say in purchasing large household items. Roughly nine in 10 women (88 per cent) mentioned that they could not decide on their own fertility. Furthermore, about one-third of women could not visit health facilities without permission from their husbands or other elder members of the family. Case histories also revealed that women could not take decisions alone regarding using contraception, the number of children to bear and whether to continue or end an unintended pregnancy. Nima who is twenty-two years and had two years of education, typified this when she said:

> *"...The second pregnancy was "nachaheko" (unintended), my second daughter was born when my first daughter was only a year old...I had planned to use contraceptives but my husband did not allow me to use.....".*

Most of the women who had experienced an unintended pregnancy reported that very often they were consulted, but the final decision to end or continue a pregnancy was mostly taken by the husbands. For example, a woman who had experienced unintended pregnancy had thought about undergoing an abortion, but her husband refused; she said:

> *"..When I told my husband about my pregnancy, he said, it's not right to have the baby since the other one was still small. He suggested me to take the medicine. At that time, I was running on the 4th month so he told the medicine wouldn't do and I'll have to do curettage. Later we went to the doctor but she said she wouldn't do it then my husband eventually decided this time we'll deliver this one but no more after this."*
>
> *-Poonam*

However, in a few cases, women had initiated abortions but couldn't proceed without the consent of their husbands. Generally, women took such decisions alone in three contexts. First, if their husband told them to continue with an unintended pregnancy. Second, if they perceived that their husbands would not consent to abortion or they were scared to be misunderstood (i.e. there would be a suspicion that they were having extra marital relations). Finally, if there were family pressures to have a child. A 23 year old woman with 12 years of education said:

> *"...No I did not inform my husband before consulting the doctor for an abortion..... because, I knew that he wouldn't be willing to abort and I feared he might think that the child might not be his..."*
>
> *-Menu*

Another woman did not report to anybody in the family (apart from her husband) about the visits to the doctor for an abortion because everybody in the family was expecting a child; she said:

> *"....I didn't tell anyone besides him (husband), not even my friend, sister or mother in law. It was not possible to tell anyone because everyone was expecting a child.*
>
> *-Sumana*

Contrary to the general expectation, a woman's level of education and living in a nuclear household did not appear to make any difference in making decisions on abortion. Women who had completed 10 to 12 years of education and were working as teachers were no more likely to be independent decision makers than were others with lower levels of education. They had to rely on their husbands to take the final decision regarding abortions, whereas some women with less than primary level of education (less than five years of schooling) decided to abort without the knowledge of their husbands. The case histories suggest that women with one or more short birth intervals or who suspected that their husband mistrusted them of involvement in extra marital relations or who faced economic and family hardship tended to take abortion decision alone.

6.5.2 The role of husbands

Normally, men are the major decision makers in the matters on health care of family members, fertility intentions and abortions. Case histories documented that, in most cases, women who had experienced an unintended pregnancy and had had an abortion said that the final decision had been made by their husbands. The results showed that if the decision maker was the husband then he helped his wife not only by bringing

medicines home, but also by identifying service providers, escorting them, paying the costs and providing post-abortion care. This means that, in such cases, the husband efficiently plays the role of a facilitator and caretaker. Sharada, who was a mother of one daughter and become pregnant for a second time, described how her husband decided to get an abortion.

> *"...When my husband decided to get an abortion because of the fear that we will again have a daughter then he went to the medical centre nearby for suggestion. He bought the medicines from the medical nearby. He paid all the costs as well.."*
>
> *-Sarada*

Husbands played a major role not only in the case of terminating the pregnancy but in continuing the pregnancy as well. Case histories revealed that, in most cases, women said that the final decision to keep the baby was also made by their husbands. Menu who is 23 years old and had 12 years of education, said:

> *".. Only my thought didn't matter, I was in compulsion. I talked with him (husband), I told him I would like to abort but he denied vehemently. He told me to give birth.... I had no option.....I kept the pregnancy...".*

Another example, Nima, 22 years old with two daughters, who is from a poor family and working as daily wage labour in construction sites, discontinued using Depo-Provera due to side effects and, as a consequence, she become pregnant. She wanted to terminate the pregnancy but her husband was against going for an abortion. Nima tried to convince him but could not succeed and decided to continue the pregnancy. She said:

> *"...I had wanted to terminate the pregnancy. The staff at the medical shop told me that I can have abortion if the husband also agrees. Then I tried to convince my husband but he started insisting on having one more child and then told me to do whatever I felt like after that. So, I decided to give birth according to the wish of my husband..."*

6.5.3 Role of friends

The data revealed that friends did not have a strong influence on the decision of young couples related to abortion. Although six out of 30 case history respondents in the case histories reported that they had discussed with their friends regarding unintended pregnancy and abortion, the latters' roles were reported as being very limited. They were contacted in situations when couples were in a dilemma as to whether or not to terminate the pregnancy, or needed information on easy methods to abort, or recommendations of

places or people to visit and/or the costs for abortion. One of the respondents, explaining the reasons for visiting a friend, said:

"....It was because my wife wanted to abort and upon her request I visited a friend for suggestions. She wanted to know by asking others whether there was an easy way to abort but my friend did not suggest going for it. When I told her she too agreed to give birth..".

-Ramesh

Of the six respondents, who contacted their friends for suggestions, four of them were advised to have an abortion. In two cases, friends discouraged them from going for an abortion. They advised against abortion saying that their husbands would remarry if they become infertile after an abortion. Two respondents, who contacted their friends to get the address of an abortion service provider and an idea about costs, said:

"I had known a friend; I used to meet him every day. He said that his wife had an abortion in Pokhara from a nurse. He also told me that it was safe and it did not hamper the health. So my wife agreed to go there"

-Sakti

"At first I asked a friend of mine and he told me that I would have to go to the market for doing "curate" (curettage) and he also told me that it would cost about four to five thousand rupees".

-Saurav

One couple decided not to inform any family members about abortion but consulted only with friends. She said:

"We decided not to consult with the family members but my husband had asked for advice from his friends and they had all suggested visiting the health post".

-Tamana

6.5.4 Role of parents and other relatives

It is commonly believed that, in the Nepalese cultural context, family members - especially mothers-in-law - play an important role in decision-making processes associated with fertility planning and abortions. This study found that in some situations young couples do indeed discuss their parents and/or mothers-in-law, sister-in-law, parents-in-law or other close relatives. However, they indicated that they have little say in the final decision on abortion related matters. Nevertheless, suggestions from mothers-in-law and mothers were considered seriously before making the final decision. Nine out of the 30 case history respondents covered in the case studies had sought the advice of their parents and relatives regarding their unintended pregnancy. Five of them were discouraged from going for an abortion by parents or relatives who stressed the negative

health consequences of abortion. The remaining four gave suggestions in favour of abortion. Hema who was 22 years old and had 12 years of education wanted to have an abortion but changed her mind after getting suggestions from her mother-in-law. She said:

> *"...I went and told my mother in-law without my husband's knowledge. She scolded me and said that if my father-in-law comes to know then he would not spare us. She even told me that if I aborted the baby now then I would not be able to conceive later. That time I didn't know the consequences of abortion. I told my husband that if I aborted the baby I would not be able to conceive again. I convinced him saying that we have to bear child sooner or later. He got convinced and we dropped the idea of terminating the pregnancy."*

In some cases, the mother plays the role of getting information about the practicalities of abortion, especially if she was in favour of abortion and advised to their daughter accordingly. In such situations, the young women tended to follow the suggestions of their mothers. Sujana, a 16 years old woman who discussed abortion with her mother and decided to terminate a pregnancy, said:

> *"I told my mother. .....she was worried about how I was going to give birth at such a young age. My mother even discussed with a neighbour whom we call 'masterni didi' (Local school teacher). .... My mother was asking her what to do as I was young and my mother was very worried and I am the only daughter in the family.....She asked me to abort the pregnancy...I aborted....."*

The study found that family members, including mothers-in-law, generally were in favour of abortion where pregnancies occurred due to method failure, or if there was risk for the mother or future child; otherwise, they were not generally in favour. For example, Binita's family members including her mother-in-law, supported her for an abortion because the pregnancy was due to the failure of contraceptive pills and the doctor had suspected that she might have pregnancy complications if she continued. Binita said:

> *"...My husband was with me at the clinic so he knew from the doctor and I told about it to the mother in law at home..... the family members including the mother- in-law advised me for abortion so we went for it..".*

Interestingly, the study revealed that those women who discussed with family members or relatives did so with females only. None of the women interviewed in-depth reported that they discussed with male relatives, apart from husbands. The main reason cited for not discussing with other males was embarrassment. One of the respondents, who consulted about her intention to abort to sister-in-law and aunt but not with her father, said:

"...My husband and I talked about it and then we told the family members. We also told bhauju (sister-in-law) and phupu (aunt) as they have also aborted a lot of pregnancies, which occurred by mistake....but we did not tell my father.....how can we tell such things to our father....it is embarrassing.

-Saileja

In most cases, women did not discuss with family members or close relatives in the circumstances where couples knew that they were against abortion. For example, Geeta, who took abortificient medicine without informing any family members, said:

"They would have definitely shouted to me if I had I said anything. They didn't realize I was taking medicine or anything else".

-Geeta

6.5.5 Role of health service providers

The study showed that health service providers play an important role either in encouraging or discouraging couples to continue or end an unintended pregnancy. More than half of the survey respondents who had ever experienced unintended pregnancy and thought about an abortion mentioned that they had sought advice either from a doctor at the private nursing home or a government hospital. Interestingly, most health personnel advised young couples to carry on with the pregnancy, explaining the health risks they would have to face in the future and risks involved in late termination of pregnancy. In almost all of the cases, the couple adhered to the doctor's advice. Shakti, was a 26 year old man whose wife got pregnant for the second time who wanted to abort the pregnancy but, after consulting with a doctor, decided to keep the baby. He said:

"..... The doctor had suggested that abortion would make her physically weak; it was the second pregnancy so it would better to give birth. He said that mother's health would be affected if you go for abortion. So I decided to keep the pregnancy..."

Similarly, another respondent whose wife was pregnant at the time of the interview consulted a doctor for an abortion but who changed his mind after consultation, said:

"....I told him (doctor) I wanted to abort because of the age difference between the two children. The doctor suggested that it would make things difficult. It was better to have two children, and then use permanently methods...I thought of keeping it".

-Ramesh

The following are some excerpts from case histories which show the importance of health service providers in decision making regarding abortion.

"... I had gone to Pokhara to check at ...Joshi. I told her that I was studying and it was an unwanted pregnancy, so was it possible to abort or not, if it could be disposed

with medicines I was willing, but she replied that the medicines would make me weak and I should not be doing as such with the first baby. That we carried on with the pregnancy.."

-Menu

"...Along with my wife I went to Choudary Medical. There was a senior doctor. I've heard of abortion taking place there. I told the doctor about our problem and the doctor agreed to do it in Rs. 2000. I gave him Rs.2000 and he checked my wife. Then he informed that the baby was already of 3 months so it could be unsafe for the mother. If abortion is carried out so don't do it and he returned my money.

-Bikash

"...The doctor said since it's your 1st baby, aborting is not a good idea because it can cause problems like not having a baby in future. That's why carry on the pregnancy..".

-Saroj

"....The doctor advised against abortion as it was our first child it would be better not to abort. He added more that if the first one was aborted then there would be the chances of not conceiving the second time...".

-Kumari

"...Even my husband agreed with me and had made everything ready so we went to the hospital and consulted the doctor who told us that it would adversely affect the health and the womb as well. Later the womb will be incapable to carry child, rather give birth to this one and so the two will together grow up. So we decided to continue the pregnancy...".

-Poonam

The doctors' suggestions were important not only for continuing pregnancies but were also crucial for terminating pregnancies as well. Couples felt comfortable when a doctor accepted their request to terminate an unintended pregnancy. Binita became pregnant while using the oral contraceptive pill. She consulted a doctor about her unintended pregnancy and was advised to terminate her pregnancy. She said:

"....The doctor told me .....in my opinion it will be good to terminate this pregnancy. It is because pills might have a bad effect on the foetus in the womb so to avoid any problem later you think about terminating it now..."

In another case, a woman who had experienced an unintended pregnancy for a second time while using the withdrawal method indicated that she opted for abortion after consulting with a doctor. The doctor advised her to go for an abortion citing medical reasons after she had explained family and economical problems. Another respondent, Monika, 19 years old who had a similar story, said:

"....I went to Dr ...XX's clinic. I told her all my problems and I believe that even doctors can understand our problems. Although abortion is not allowed here in

Nepal and a woman can abort only if she has a lot of problems. The doctor told me that it is was okay.. you can do it since your pregnancy is only two months"

Despite visiting qualified doctors, a few respondents also consulted health personnel at NGO clinics, health and sub-health posts and medical shops including traditional birth attendants, and faith healers to discuss their unintended pregnancy. The most common reasons for visiting these health personnel were to get an idea about the possibilities of obtaining abortions and/or to obtain easy medicines to get rid of the pregnancy. On most occasions, these providers either referred to somewhere else or tried unsafe abortion.

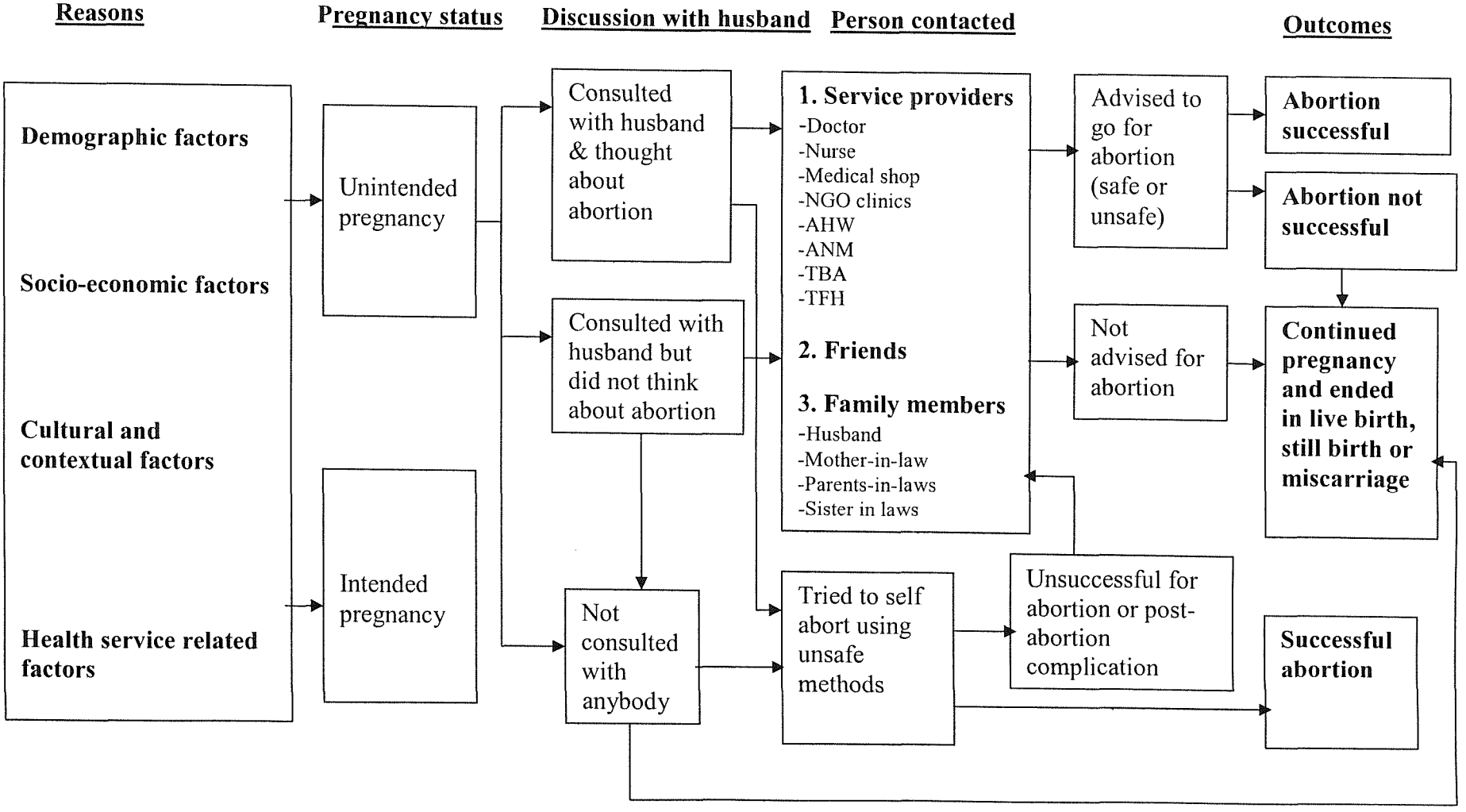
6.6 Pathways from unintended pregnancy to induced abortion

As mentioned before, 30 out of the 38 respondents who had ever experienced unintended pregnancy, attempted abortions or decided to continue pregnancy, were interviewed. Fourteen out of 30 respondents reported successful termination, while the remaining respondents tried for abortion but were not successful.

Diagram 6.2 shows the pathways from unintended pregnancy to induced abortion. When a woman experiences unintended pregnancy, she has the dilemma of whether or not to discuss about her pregnancy with her husband or other family members. The results suggest that the majority of women do not reveal their pregnancies within the few first weeks to their family members, friends or relatives, including husbands. Despite being pregnant without intention, the majority of these women simply continued with the pregnancy. However, some of them secretly tried to self induce abortions using methods that were generally unsafe. If the woman was unsuccessful in terminating the pregnancy, or had post-abortion complications, only then she did seek advice either from health service providers, friends or other family members. In such cases, they tended to follow their suggestions either for or against abortion.

Of those who did communicate about their unintended pregnancies, generally husbands were the first people informed. After discussion with the partner, either they tried to self abort using unsafe methods or they sought help from skilled, semi-skilled or unskilled health service providers. In some situations, young men and women also contacted their friends or other family members and relatives.

Diagram 6.2 Pathways from unintended pregnancy to induced abortion: Young person's pregnancy study in Nepal, 2003



The health service providers consulted included both skilled - such as gynecologists, trained medical doctors and staff nurses - and unskilled - such as auxiliary heath workers (AHW), auxiliary nurse midwives (ANM), medicines sellers, traditional birth attendants (TBA) and traditional faith healers (TFH). The family members or relatives discussed by the couples included mothers-in-law, parents-in-law, sisters-in-law and aunts. Issues such as costs for abortion, the health conditions of pregnant women or the foetus, as well as their demographic and socio-cultural circumstances, all affected the eventual decision as to whether or not to go for an abortion but, interestingly, at this stage, couple's decisions were mainly influenced by the advice they received from the person they contacted.

Of those case history respondents who received suggestions in favour of abortion from the people they spoke to, all of them reported that they tried either safe or unsafe abortion whereas, amongst those who did not get a specific recommendation, most decided to continue the pregnancy. The stories described below provide examples of some of the pathways described in diagram 6.2.

> Saurav, 20 years of old, who faced unintended pregnancy twice, said that the first time his wife was pregnant he did not want the child because he was studying and thought that it would trouble him to continue his studies so considered an abortion. He consulted with his mother and wife. His mother as well as his wife did not consent with his idea. So he agreed to continue the pregnancy at that time. After two years his wife again became pregnant. But this time, both partners did not want the child because they considered that their financial condition was not very favourable to raise two children. However, his wife was still against the idea of having an abortion. But he was able to persuade wife at the end and consulted with one of the friends whose wife had aborted. His friend advised him to abort and directed him to the place where he had taken his wife for an abortion. They visited a private doctor and had a successful abortion. They did not inform any of the family members due to the fear that they would stand against abortion.

> Nima, aged 22 years, had experienced three unintended pregnancies. First, she tried abortion by taking the medicines from a medical shop without informing anybody, including her husband. But it did not work. Then she consulted with *Dhami Jhankri* (Traditional faith healers) and took herbs. But this also did not work. She then took three tablets of family planning pills at a time. This also did

not work; instead it caused her amnesia, headache and lower abdominal pain. After that she took advice from the landlady and she told her to seek advice from another medical shop. Then she told her husband and he agreed to go for an abortion. Both of them went to another medical shop where they were told that she has to do "*curate*" which would cost about 2500 rupees (USD 35). Then they came back to the house and again discussed with the landlady. She told them that "*curate*" also caused weakness and it is expensive so she did not recommend her to go for an abortion. Therefore, she gave up the idea of terminating pregnancy.

After facing an unintended pregnancy, Kumar, 23 years old, asked his mother for advice. She told him to do what he thought was right. He accompanied his wife and went to a medical shop. He explained that the pregnancy was unintended and wanted to have an abortion. The pharmacist gave them the medicines for three days. The medicines did not work. They again went to the same medical shop where they were referred to a doctor. They visited that doctor and had an abortion.

Sanu, a 22 years old woman, had experienced unintended pregnancy twice in her life. She continued the first pregnancy to term fearing that abortion would affect her health. She conceived the second time when her first child was only one and a half years old. Firstly, she did not mention her pregnancy anyone and decided to go for an abortion. She tried to abort by consuming honey and raw tamarind. But this did not work; instead she had pain and some bleeding. After that, she visited a doctor at the private nursing home and had an abortion.

Kumari who is 23 years old had been pregnant only once. She and her husband had not desired the pregnancy at that time. Therefore, they discussed with each other and decided to have an abortion. They consulted with a doctor but he discouraged them citing the reason that abortion is not good in the first pregnancy. The doctor said that if the first one was aborted then there would be the chances of not conceiving again. After that both of them decided to continue the pregnancy to term. After three months, she was ill. She was admitted to the hospital. This time, the doctor suggested an abortion. She had an abortion.

6.7 Coping strategies

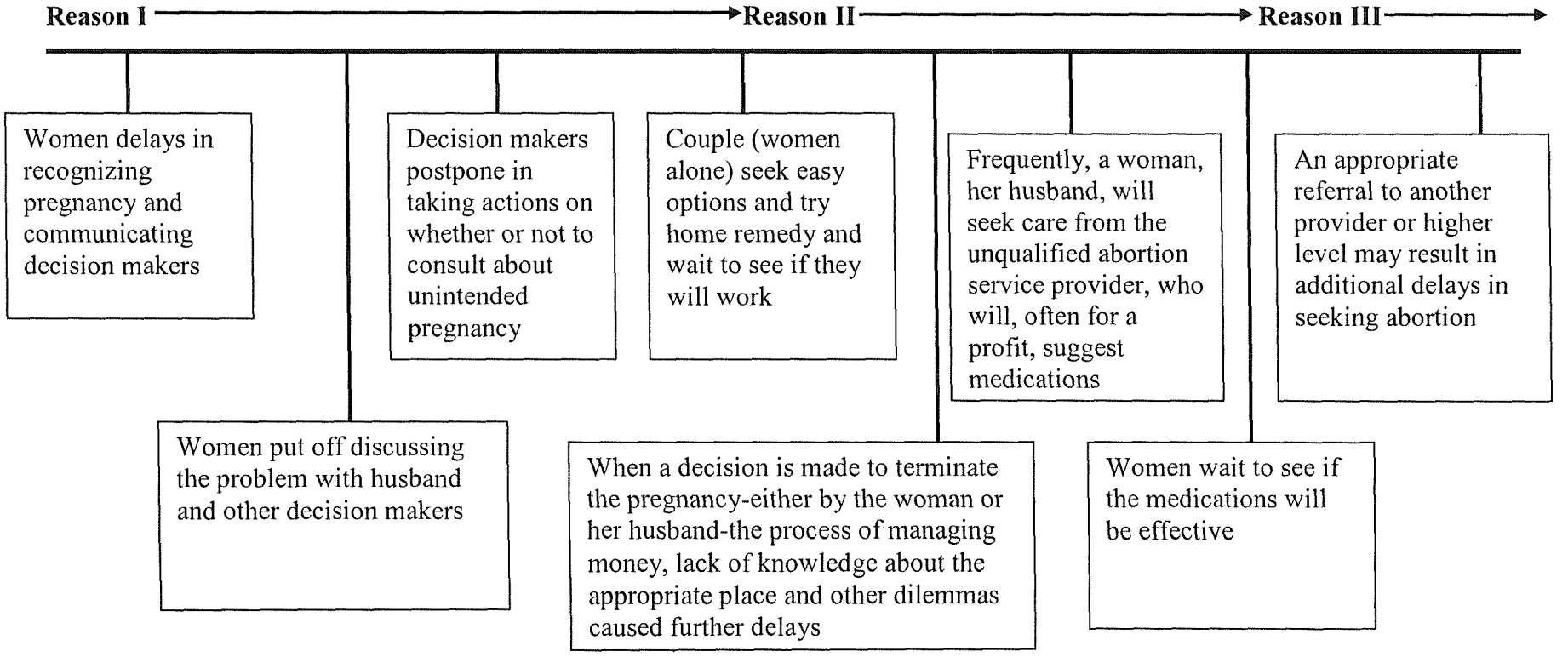
The case histories revealed that couples use multiple strategies to deal with unintended pregnancies. Some women did not take any action and simply carried the pregnancy which ended in live birth, miscarriage or still birth. Other women tried to self abort using oral traditional herbs or medicines. Yet other women sought abortion services from unskilled persons or 'quacks' and used unsafe methods of abortion. This was done after an unsuccessful self induced abortion. Given the social stigma attached to abortion and deeply rooted negative beliefs and attitude towards abortion and political (illegal for many centuries) and access to health service context of abortion (no legal abortion service available at the time) in Nepal, induced abortions are generally performed by untrained providers or are initially self induced. Five out of 16 (who were covered in the case studies and attempted abortion) women had attempted abortion by taking oral medicines. These medicines were sold to them by unskilled abortion service providers on request. If the medicine (liquid and tablets) did not work then women tend to continue the pregnancy. Women tried other unsafe methods of abortion when the medicines did not work for them. The case histories revealed that the actual procedures used by the untrained providers were dangerous and sometime barbaric; for example, involving the insertion of sticks pasted with cow dung, or herbal mixtures, the injection of unknown medicines or herbal mixtures into the uterus. Some women had tried to self induce abortion by consuming honey, chemical powders, rod tamarind, jaggery, antibiotics, oral pills and so on. On some occasions, women also visited traditional faith healers to get rid of unintended pregnancies especially when oral medicine fails.

Four women who visited skilled health personnel (of the case histories respondents), such as gynaecologists or other medical doctors, underwent dilate and curettage and other safe methods of abortion. Generally, before reaching to skilled health personnel, most women had tried one or more unsafe methods of abortion.

6.8 Timing of consultation for abortion

The earlier in pregnancy an abortion takes place, the safer it is for the woman's health and the less complicated for the provider. Data from this study revealed that most women reach skilled health professional in their first trimester. However, few women reported seeking care at late stage of pregnancy (during second trimester). Diagram 6.3 displays

Diagram 6.3 Delays in seeking abortion services: Young person's pregnancy study in Nepal, 2003



the reasons for delaying in seeking for abortion services. The case histories revealed that the three major reasons preventing young women in safe termination of pregnancy. First, young women do not recognize pregnancy and delay communicating to decision makers at home, and postpone going for consultations. Second, couples try to seek care from unqualified abortion service providers and wait to see if the medications will be effective. Third reason is that the service providers delay in referring in appropriate place for safe abortion. Most women who underwent abortions with skilled health personnel generally were in the later stage of their pregnancy (during second trimester). Therefore, they needed to have dilution and curettage procedures (D & C)[3]. This procedure is considered to be relatively risky compared with other methods of pregnancy termination such as manual vacuum aspirator, electric vacuum aspirator and medical abortion (WHO, 2003).

The case histories indicated that most young women were more likely to discuses their pregnancies with their husbands immediately, once they realized. However, women sometimes take months to recognize their pregnancies. A woman who discovered her pregnancy after four months said:

> *"I realized my 1st pregnancy after 3 months of conception, because I had my period in the 1st month and exactly a month later I found a little blood. I didn't know such things happened. I lost my appetite for further 4-5 months and also became weak. I came to know only after 4-5 months when the foetus moved".*
>
> *-Geeta*

The second major reasons for delays occurred due to the dilemma of partners and the family members on whether or not to terminate a pregnancy. The third reasons for delays occurred in trying to seek abortion services from unqualified personnel or try to attempt self induce using various traditional methods.

6.9 Underlying reasons for continuing pregnancy

Reasons for abortion are well documented in the literature. For example, Bankole and others (1998), using the data from 49 DHS surveys, have shown that desire to postpone a birth or stop childbearing, poverty and economic problems, age and marital status were the major factors associated with abortion. Similarly, Tamang and others (1999) found that wanting to limit the number of children, or to postpone a birth, or financial

[3] Dilation and curettage is a gynaecological procedure performed on the female reproductive system. The procedure involves dilating the cervix and inserting instruments to clean out the lining of the uterus while the woman is under an anesthetic.

constraints, were the main factors associated with abortions in Nepal. The present study confirms earlier findings. The main reasons cited were related to inadequate space between two pregnancies, completed family size, health complications and young age of parents. Worries for losing educational and employment opportunities, and poor family conditions, were other reasons reported by respondents.

Various studies have analysed reasons for abortion. However, very little research has been carried out on the reasons for continuing unintended pregnancy. In addition, little is known about why some women go for abortion and some don't. Therefore, in the present study, an attempt was made to explore these issues.

For many young men and women, more than one factor contributed to their decisions for or against abortion. In such situations, it is difficult to identify a single factor as the most important one, case histories revealed multiple reasons alongside their socio-economic and cultural context. In analysing the reasons for choosing not to terminate unintended pregnancies, six main issues emerged. They were:

- Considered abortion is 'sinful'
- Health concerns/ fear of becoming infertile
- Abortion costs/financial conditions
- Lack of knowledge of abortion services
- Fear of societies/stigma
- Pressure from the family for a child

6.9.1 Abortion is 'sinful'

Considering abortion as 'sin' was one of the main reasons for not going for an abortion when young couples experienced unintended pregnancies. Amongst the survey respondents with an unintended pregnancy, one-third of men and one-quarter of women reported that they did not go for abortion for this reason. This result also gain support from the findings from the case histories. For example, a friend of Sita discouraged her from using contraceptive methods and conceived unwillingly. She reported that a pregnancy was unintended and her husband wanted to have an abortion but she did not. She did not obey the instructions of her husband and decided to continue the pregnancy

to term. She thought that abortion was a sinful act and also a social crime. Explaining her opinion said:

> *" I'd already conceived, although it was unwanted, I couldn't throw it since it would be a sin..... so we decided on giving birth. I do not feel good about aborting a child who is already in the womb. Of course there are necessary conditions about abortion but I do not feel good about hampering one's health and killing the child. I feel no one should do it..... I feel that is a societal crime. A child is innocent; it does not know anything, why should it die for others. I don't feel good that it should die for no reasons of its own.*
>
> *-Sita*

In some cases, women changed their decision to have an abortion when they saw the moving child in their womb. A woman who wanted to have an abortion but later changed her decision after seeing the report of amniocentesis[4] said:

> *"...No, I didn't (go for abortion) because in video X-ray we saw the baby moving and even after seeing all this if I'll eat different medicines I thought that I would be committing sin..".*
>
> *-Geena*

6.9.2 Health concerns: physically weak and can't conceive

Unexpectedly, the survey respondents reported that mother's health concerns were not the main reason for not going for abortions (12 per cent amongst men and four per cent amongst women) but the case histories revealed that it is one of the more important issues. The case histories showed that young couples strongly believed that abortion makes women physically weak, infertile, even a chance of cutting the intestine and causing death while undergoing dilation and curettage (D & C). The following are selected excerpts from the case histories:

> *"..If we aborted then my wife's health would be at risk, she would be weak, after all we would however need a child later, so we decided not to abort after all.."*
>
> *-Ramesh*

> *"Both of us agreed to abort. I was the one who was more assertive when my wife believed that one more would not be of much problem. I thought twice and realized that abortion would have negative impact upon her health so I agreed with her...".*
>
> *-Shakti*

> *"..They told me if you abort this baby and if in case you cannot conceive later then your husband will re-marry. I too thought their notion was quite logical...".*
>
> *-Sanu*

[4] Amniocentesis is a common prenatal test in which a small sample of the amniotic fluid surrounding the foetus is removed and examined. The test is most commonly done when a woman is between 15 and 18 weeks pregnant to determine whether the baby has genetic or chromosomal abnormalities.

"..He (husband) had suggested that abortion would make her physically weak, it was the second pregnancy so it would be better to give birth.. ".

-Gopal

"...I had heard that "curate" (curettage) caused many problems. One woman had done "curate" (curettage) and her intestine was cut and she died. So I thought if something similar happened to her I would have to go to jail so I did not do the "curate" (curettage)... ".

-Saurav

6.9.3 Had no money

Another major barrier for not opting for abortion amongst young couples was the cost for the services. In the case histories, it was common to hear that *....my financial status was weak....we didn't have money*...and so on for one of the reasons for not seeking abortion services. Gopal was a student when his wife got pregnant. He felt unhappy and downcast when he knew that his wife had conceived. He consulted with a doctor about the possibility of an abortion. The doctor told him that abortion would cost him about four to five thousands Nepalese Rupees[5] (Roughly 54 to 68 US dollars at the time of writing). He could not afford the costs so decided to continue the pregnancy. Saurav, Sharada and Nima had similar reasons as Gopal. They said:

"...It (abortion) would cost about four to five thousands rupees. At that time I had no money and was afraid to ask for it and feared whether my parents would beat and throw me out of the family. So I did not ask for the money and it remained as it was... ".

-Saurav

"...It cost about four thousand so I did not want to abort at such an expense... ".

-Sharada

"...The landlady had told that "curate" (curettage) also caused weakness and as it was expensive also so I quit the idea of terminating it.. ".

-Nima

However, survey respondents did not mention the costs of abortion as being one of the barriers for choosing it.

6.9.4 Did not know where to go

Lack of knowledge about where to go and who could be contacted for an abortion was cited as one of the reasons for not aborting an unintended pregnancy. For example, Gopal, who is 26 years old and has completed ten years of education, said that he and his

[5] The per capita income of Nepalese people is US$ 210; more than half of the population survives on less than one dollar a day.

wife had talked about not giving birth but they continued the pregnancy because he did not know much about abortion. He said:

> *".. we didn't know much about abortion, I was studying, and my wife was more ignorant"..... we accepted the conception and decided on giving birth."*

Basanti and Tamana had similar experiences to those reported by Gopal. They experienced unintended pregnancies and thought about having an abortion but they were compelled to continue the pregnancy either because they were ignorant about the locations of abortion services or did not have a close person to consult or discuss. They said:

> *"..I did not even want a child then. But when it happened how could I throw it? I did not know anything about disposing the foetus... I did not know anything about abortion. Once I had felt like aborting, but I did not know how to do it, with whom and there was no one to suggest...".*
>
> *-Basanti*

> *"..I was ignorant of the places where they did abortion. That's why I couldn't go. Another problem was after the 3rd day of the medicine taking my husband went abroad and I had no one to consult with. So I did not consult with anyone..".*
>
> *-Tamana*

6.9.5 Social stigma: we have to live in the society

Social stigma was reported to be another barrier for not going for an abortion amongst young couples. Young men and women felt that abortion was against socio-cultural expectations so that if they went one then they would lose their prestige in the community. Therefore, a few couples were reluctant to seek an abortion even if they did not want to give birth. For example, Gyani wanted to have an abortion but, due to the fear of society, she decided to continue the pregnancy. She said:

> *"....I tried to comfort myself saying whatever happened, happened for the good. I felt in the society we've to live in accordance to other so I gave birth to a daughter..".*
>
> *- Gyani*

Sharada and Gyani, who could not have an abortion due to the fear of family members, said:

> *"...if the family members came to know of it they will think of bad of me so I told my husband that we would give birth to this one after which we would use the permanent device. He agreed and so we have a daughter now...".*
>
> *-Sharada*

> *".....I was afraid of anyone shouting at me so I finally decided to give birth...".*
>
> -Gyani

Interestingly, only about two per cent of the survey respondents reported that they could not go for abortion due to the fear of the law.

6.9.6 Family pressure and distrust

Some respondents mentioned that family pressures for having a child and the possibility of distrust from husband also hindered their efforts in obtaining abortions. Amongst the women surveyed, a few said that they did not have an abortion due to the pressure to keep the child by family members. One in ten women and one in twenty men reported that mothers-in-law opposed abortions of their most recent unintended pregnancies. Menu and Devendra are good examples of this.

> Menu became pregnant two months after her marriage. She did not want a baby that at that time but her husband and in-laws had desired one. She had completed her intermediate in education and wanted to study further. She had talked about aborting the baby with her husband but he refused vehemently. She continued the pregnancy to term and gave birth.

> Devendra and his wife wanted to postpone their first pregnancy. After failing to get pregnant after one and half years of marriage, his mother-in-law pressurised to his wife to become pregnant. After she did so, he wanted to abort but his wife did not agree. He said:
>
> *"....My wife's family had threatened her saying it's been one and half years and still you don't have a baby now your husband will leave you. It's a female nature so she immediately got worried and she pressured me for the baby. I felt a bit fumed after she conceived and even discussed with her to abort it but she denied...".*
>
> *-Devendra*

In some cases, women felt reluctant to abort because the family members - including the husband - suspected that the pregnancy was not from the current husband. So, even if they did not want to they are compelled to give birth. Basanti was a typical example of this; she narrates her story:

> *"I could not talk to my elders at home because my husband was the suspicious type. On top of that my pregnancy occurred soon after marriage. That was why I could not talk to anyone about abortion. I felt they would suspect me of carrying someone else's baby and they would deride me. My village is an orthodox society; the environment was not suitable to discuss such matters with anyone. First of all the pregnancy was unwanted so the tension left me diffident. I always used to be*

afraid. The family might think negatively about me, I never talked to my husband. If I had talked to him he would have been more suspicious. That was why I never talked to anyone. Later, I gave birth to a son".

-Basanti

6.10 Discussion and conclusions

In this chapter, issues of decision making regarding whether or not to terminate an unintended pregnancy, the range of people involved in the process and their roles have been presented. It also examined the factors associated with continuation of pregnancy despite being unintended. The study revealed that issues related to unintended pregnancy and abortions are rarely discussed amongst young couples. Social shame and a culture of silence were the main reasons cited for women's reluctance to consult with their partners and other family members, friends and health service providers in regard to their unintended pregnancy. The result suggest that lack of inter-spousal communication on pregnancy planning and abortion was not only contributing to the high prevalence of unintended pregnancy but also compelled young women to undergo unsafe abortion practices.

The study revealed that unintended pregnancies amongst married couples are common. Given the circumstances - in which young women have relatively less power than men in fertility decision making, and are often pressured by their mothers-in-law or other relatives to get pregnant immediately after marriage to secure their marital relationship or to avoid marital breakdown - this finding is not surprising. Rather, it suggests that the socio-cultural context compels Nepalese young couples to go though with childbearing, even when the conception was unintended.

The results suggest that, although a considerable proportion of young married couples reported unintended pregnancy and considered abortion, only few of them actually discussed abortion with anybody within or outsides the family. Of these who did discuss, very few followed through with abortions. A certain proportion of young couples who decided to terminate their pregnancy were unable to carry out their decision either because they lacked financial resources or because their attempts at self induced abortion failed. The study also revealed that young men and women have many socio-economic and cultural, as well as health service related barriers in talking or seeking abortion services.

The study showed that abortion prevalence amongst young couples in Nepal is low despite the high level of unintended pregnancies. There are no existing population estimates available for the country, so it is difficult to know to what extent the estimates derived from the present study are accurate. Given the sensitive nature of the topic, and the context of the previous illegality, most abortion prevalence studies had to deal with problems of under-reporting. This present study is no exception to this problem; however, the mix of qualitative and quantitative methods, good supervision and well trained interviewers used in this study hopefully will have minimised this potential bias. It is possible that some clandestine abortions, particularly amongst those who never informed their husbands or other family members, may still have been missed. One of the explanations for the low prevalence of abortion in the study may be that respondents were young people, so most of them wanted to *postpone* childbearing, rather than *limit*. Therefore, despite considering them to be unintended, many young couples decided to continue their pregnancies even in cases where this may have affected the woman's educational and employment opportunities.

This study demonstrates that couples used various methods to deal with unintended pregnancies. The methods ranged from obtaining various abortifacients from pharmacists or herbs from traditional faith healers and trying to self induce, to contacting unskilled abortion providers and undergoing dangerous practices. One striking finding was that even amongst those who visited qualified medical personnel, most of them had tried to self abort themselves first. The data also revealed that women who received support from the husbands, family members and can afford to visit private doctors were more likely to go for safe abortion procedures compared with those who do not have such support. This result emphasized the need of supportive role of the husbands and family members in accessing safe abortion services.

The pathways from unintended pregnancy to abortion clearly indicate that multiple factors intervene during the decision making stage, making the process dynamic and situation specific. In most cases, husbands are the major decision makers. Husbands not only play the major role in the decision itself, but are also involved in the steps for carrying out the decision if the decision was taken by them. In some situations, women had initiated an abortion but they could not proceed without the consent of their husbands. Very few women took the decision alone, in nearly all cases when a woman

thought that the husband would not consent to terminate a pregnancy. Contrary to earlier research findings in other countries, women's age and level of education did not appear to influence decisions regarding abortion. Instead, women experiencing pregnancies with one or more short birth intervals, and/or who were mistrusted by their husbands in relation to suspected extra marital sexual relationship and/or were facing other hardships, were the ones who made the decision alone.

Health service providers also play an important role in the decision making process regarding termination of pregnancy. They also play an important role in steering towards safe or unsafe methods of abortion, or they entirely change the couple's mind to continue unintended pregnancies. Therefore, health service providers should be provided with accurate information on safe and unsafe abortion so that they can refer their clients to where they can obtain safe abortion services.

The study revealed that some women discussed with their mothers-in-laws, sisters-in-laws, parents and other close relatives regarding abortion but these have little power in the final decision on such matters. In some situations, such as when they have a dilemma or need information about easy methods of self induced abortion or where to locate abortion service providers, the young men and women contacted their friends. However, friends do not seem to have a major influence on the eventual decision.

In addition to the advice received, for most couples economic issues played a central role in the decision making phase, both in terms of the costs of raising a child and the costs of an abortion. Safe procedures were too expensive for some young couples, which forced them to continue a pregnancy or seek less skilled providers or undergo a self induced procedure. Religious or cultural beliefs such as that abortion is a 'sinful act' and 'pressure from the family' also intervened during the decision making process. In addition, social stigmatisation concerning abortion, and the fear of sterility or other possible ill-health consequences impeded young couples from terminating an unintended pregnancy. One of the striking findings is that respondents did not cite the fear of the abortion law as a major barrier to seeking an abortion. This suggests that abortion services were available despite being illegal in the country at that time. A few limited earlier studies have found that abortion was quite common even when it was illegal (Tamang *et al.*, 2000; Upreti *et al.*, 2002).

The study revealed that most women sought abortion in their first trimester. However, few women reported seeking care during second trimester. The major reasons for not obtaining abortion services from an appropriate place are not recognizing pregnancy, delaying communicating to decision makers, postponing going for consultations and trying to seek care from unqualified service providers. Therefore, health service should give importance of reducing delay in abortion seeking behaviour.

The findings suggest a need to scale up the family planning service delivery mechanisms as well as a need to target young couples who wish to postpone the childbearing. Although changing deep-rooted socio-cultural beliefs and practices takes time, efforts should be continued. The results also suggest the need to enhance women's decision making capacity regarding their reproductive rights. The study revealed the important role of husbands, indicating that men should be targeted in programmes, such as public education and advocacy campaigns against unsafe abortion. Recently legalised abortion in the country does not necessarily mean that young women can utilise the services and terminate their unintended pregnancy. The wide array of other socio-cultural and health factors associated with abortion decisions need to be addressed in order to increase the utilisation of abortion services by young couples. The study pointed to the need to re-think how young couples seeking an abortion should be treated and the kind of information they need to be given in order to truly address their reproductive needs and support them in their choices.

Further research is needed on how decisions regarding abortion may change throughout the gestation period and the reproductive behaviour of the young couples after getting an abortion. Retrospective studies such as this may have problems of recall lapse so that it would not able to cover all the intervening factors associated with decision making related to abortion. Prospective studies which actually follow up pregnant women throughout the gestation periods could avoid such problems.

CHAPTER 7
CONSEQUENCES OF UNINTENDED PREGNANCIES

7.1 Background

Unintended pregnancy can have serious consequences for men, women, the community and for society as whole, and various studies have documented some negative health, social, psychological, and economic consequences. These can include unsafe abortions leading to maternal morbidity and mortality, reduced pre-natal and post-natal care, infant death and illness, pre-term birth, low birth weight baby, unstable marriages, and the restriction of educational and occupational opportunities leading to poverty and limited roles for women (Kabir, 1989; Baydar, 1995; Shane, 1997; Klima, 1998; Tamang *et al.*, 1998; Cobb *et al.*, 2001; Senanake, 2001; Binn-pike *et al.*, 2002; Sonfield, 2003). These studies also document other socio-psychological consequences such as worries, and poor parent-child interaction, and lower children's education performance.

Although earlier studies have documented the impact of unintended pregnancy on mother's health and children's wellbeing, very little empirical evidence has been found on the *expected* consequences compared with *real* experiences. One of the major advantages of comparing these is to help in identifying gaps between the expected and real experiences and design appropriate intervention. Furthermore, no earlier studies in Nepal have explored young couples. It is considered that individuals' health maintenance behaviours depend on various socio-cultural, economic, demographic and contextual influences including their perceived risk on the matter. Collecting this kind of information in local cultural contexts enhances our appreciation of the problems, and is useful for the design of culturally appropriate and effective health services to meet young couples' needs.

The aim of the present chapter is to explore the expected socio-psychological and health consequences of unintended pregnancy, and to compare these with real reported experiences amongst young couples in Nepal. After a brief overview of data sources and methods of analysis, relevant findings on socio-psychological and health consequences of unintended pregnancies from the in-depth interviews are presented. This is followed by the results from the quantitative survey which was carried out after the in-depth

interviews. The next section describes the results from case histories which illuminate various consequences of unintended pregnancy and these are compared with expected consequences of unintended pregnancy. Finally, discussion and conclusions are presented.

7.2 Data sources and methods of analysis

Both qualitative and quantitative data are used in this chapter. For the qualitative data, all 66 in-depth interviews (17 each for young men and women, 16 each community leaders and health services providers) conducted before the quantitative survey, and all 30 case histories (11 men and 19 women) conducted after the survey were included in the analysis. Key background characteristics of all respondents in the qualitative study are presented in Annexes XII, XIII, XIV and XVI. One core question was asked to the respondents in the in-depth interviews and additional questions or prompts were made based on their responses (see section five in Annex VII). The main question asked was as follows:

- *In your opinion, what are the likely consequences of unintended pregnancy?*
  - *Social consequences?*
  - *Psychological consequences?*
  - *Health consequences?*

A few additional questions on personal experiences of any types of consequences of unintended pregnancy in their life times were asked of the respondents in case histories.

In the quantitative survey, individual interviews with 997 married women aged 15-24 years and 499 married men aged 14-27 years were carried out. In line with the qualitative study, six questions (three closed-ended and three open-ended) on the consequences of unintended pregnancy were asked (see Annexes IX and X, number J6 to J11 in section J). They are as follows:

- *Do you think that there would be any negative health consequences of unintended pregnancy?*
- *If yes, what are they?*
- *Do you think that there would be any negative social consequences of unintended pregnancy?*
- *If yes, what are they?*
- *Do you think that there would be any psychological consequences of unintended pregnancy?*
- *If yes, what are they?*

Detailed descriptions of the respondent selection procedures in all phases of the research are presented in Chapter Three.

Table 7.1 summarises the data sources and analytical approach used in this chapter. A thematic approach was used to analyse the qualitative data. First of all the interviews were translated from Nepali into English. After reading all the interviews, the major themes related to consequences of unintended pregnancies were identified. In the next step, codes were developed and all the interviews were coded and linked with the background characteristics of respondents. Tables were prepared for every theme and relevant quotations were extracted and, finally, interpretation was carried out. The computer software package called atlas/ti was used to follow the steps described above. In view of the objective of this chapter, cross tabulations were produced from the quantitative data using the STATA computer software package.

Table 7.1 Data sources and analytical approach: Young person's pregnancy study in Nepal, 2003

Data sources	Analytical approaches
In-depth interviews and the case histories	• Interviews were translated into English • Review of the transcript • Major themes identified and codes were developed based on early interviews • Coded and modifications in the codes were done if needed • Codes were liked with background characteristics • Relevant quotations were extracted with number of responses • Charts for every major themes were developed • Interpretation • The computer software Atlas/ti was used in organizing and searching and retrieving text
Quantitative	• Frequencies and cross tabulations • The computer software STATA and SPSS were used

7.3 Perceived socio-psychological consequences: From in-depth interviews results

In analysing the in-depth interviews, the following eight major issues related to the perceived socio-psychological consequences of unintended pregnancy were identified.

- Relation with spouse and relatives
- Domestic violence
- Depression/mental tensions

- Physical and emotional support to the child
- Educational and employment opportunities
- Impact on family income
- Abandonment of the child
- Social embarrassment

7.3.1 Relations with spouse and other relatives

The majority of the respondents opined that misunderstandings and quarrels with spouses and relatives are one of the most common consequences of unintended pregnancy. Respondents gave different scenarios or situations in the family to support their views. They believed that unintended pregnancy creates tension in the family, which leads to frequent arguments between spouses and with family members. As a consequence, women do not receive adequate support from their husbands or other family members. Some respondents thought that if there is no mutual understanding in advance between spouses for a pregnancy, then they lose their faith in each other, blame each other, misbehave with the family members and will not help in household chores; all these gives rise to disputes with the spouses and the family, and may end in divorce.

Most of the young married men (13 out of 17) thought that lack of inter-spousal communication before a pregnancy is the main cause of misunderstandings between the spouses. Men said that misunderstanding arises especially in a situation when a woman gets pregnant from pressure either from the spouse or other family members. In those circumstances, couples blame each other for a minor reason and worsen their relationship. It can result in frequent quarrels and sometimes ends up in divorce. One of the respondents said:

> *"...unintended pregnancies might cause misunderstanding between the spouses, quarrel, it will reduce faith between them and the wife will be scared of the husband which might lead to divorce also.....".*
>
> *-Ramu*

Interestingly, about half of the men said that women would not behave properly with other family members if they experienced unintended pregnancies. This may cause disputes within the family, and women may enter the 'bad books' of the family. In contrast, some men perceived that if a woman experienced an unintended pregnancy, then she may not be cared for and will not receive support from her husband and other

family members which causes dispute in the family. Very few men expressed that when a woman experiences a pregnancy against her wish, then she might insist for abortion which will create room for her husband to doubt her fidelity.

Similarly, half of the young women also perceived that unintended pregnancies may result in an unpleasant relationship with the spouse and other family members. Compared with men, women had different views on the reasons for misunderstandings and quarrels in the family. They thought that when a woman experiences unintended pregnancy, the misunderstanding was mostly with mothers-in-law, or other family members, rather than with the husband. Explaining the situation, they said that pregnant women would not be able to lend her hand in household chores either due to weakness, health reasons or her resentment towards other family members for forcing her to get pregnant against her wish. This causes problems in their relationship, and they would end up having misunderstandings and quarrels. For example, a young married woman said:

> *"...the woman will be weak and will not be able to take care of her pregnancy (in case of an unintended pregnancy)...she will not devote herself to household chores. As a result the family members will hate her and accuse of her of being lazy and not being able to do such petty works...then.. quarrel may start..".*
>
> *-Sonali*

Similar to men, only a few women perceived that clouds of doubt, such as extramarital sexual relations, might be aroused in case of an unintended pregnancy and could ruin the relationship.

Health service providers also believed that an unintended pregnancy can be a cause of bad relationships with spouses and other family members. However, they had a different opinion on the issue of misunderstandings and quarrels. Unlike men and women, they talked about the responsibility of having a child in terms of caring and providing education, which neither of the spouses may be willing to take. This could lead to disputes between spouses and other family members.

In addition to the explanations given by the young men, women and health service providers, a few community leaders considered that financial problems were the root cause of disputes in the family. One of the community leaders came up with rather an exceptional view. According to his opinion, misunderstandings and quarrels may occur between the spouses because friends of the man may tease him by saying that he become a father too early, which brings shame to the society.

7.3.2 Domestic violence

Amongst the four types of respondent covered in the in-depth interviews (young men, women, community leaders and health service providers), a few young men and women considered that domestic violence can occur as a result of unintended pregnancy. Six men and four women perceived that domestic violence could result with quarrels and disputes as a result of unwanted child birth in the family. They perceived that it is especially more severe when the husband does not want a child and wife conceives. In such situations, taking responsibility for a child will be a cause of dispute in the family.

Some men, who considered that domestic violence is one of the consequences of unintended pregnancy, felt that unintended pregnancy brings too many children into the home so creating a problem to provide education and food and shelter. They said that family members have to share limited resources with many members, which deteriorates the economic condition of the family that will lead to domestic violence. They also thought that if a woman conceives against the desire of the husband then she would be taunted and beaten by him.

Compared to men, women had different perceptions on why domestic violence takes place at home. They felt that, in the case of an unwanted birth of a child, both the spouses step behind in taking the responsibility for a child resulting in domestic violence. Usually it begins with an argument, then blaming each other, and ends up beating. Unlike men, women also thought the desire for a son is a very strong reason that often leads to domestic violence when a woman fails to provide one. One of the respondents said:

> *"...if they expect a son and if it turns out to be a daughter, the family members will despise both mother and a child...violence starts"*
>
> *-Malina*

7.3.3 Depression

The majority of the respondents believed that depression amongst young couples is one of the outcomes of unintended pregnancy. Terms such as depression, sadness, worries, tension, disturb, upset, stress were frequently mentioned by the respondents. A few respondents felt that women not only worried about how to bring up and educate their children but also experienced effects on their health and family relationships. They believed that such pregnancies could affect women's "psyche" and therefore her mental

health. Providing an example of a negative impact of unintended pregnancy on women's mental health, one respondent said a Nepalese proverb.

> "*.....chita le mareko manche lai jalauncha, chinta le jiudai manche lai jalauncha (funeral fire burns a dead body while grief burns an alive body, woman will have similar mental tension when she experiences an unintended pregnancy)*"

The majority of the men and women interviewed considered that pregnant women may be depressed and mentally tense, mainly for two reasons. First, they would be worried about the economic and financial burden of unintended children coming into their lives. Second, they may be stressed about an unpleasant relationship with their spouses or other family members. A few women respondents even thought that in the case of an unintended pregnancy, women may try to commit suicide. One of them mentioned that mental tension during pregnancy could affect the psychology of a child as well. She said:

> "*She will be mentally upset, this will have effect on the psychology of the child because at the time of pregnancy a mother must be cheerful, take care of her health, take daily baths, maintain her hygiene, eat good diet and take regular exercise to have a healthy baby*".
>
> - *Jamuna*

Service providers did not have anything new to say over and above the views provided by the men and women. However, they stressed that women may be mentally upset which may have an effect on the health and the psyche of the foetus. Very few community leaders raised the issue of depression or stress; instead, they were more concerned about the age of the mother. They thought that an unintended pregnancy could have problems especially when it occurred to very young women. In such a situation, she will fear giving birth to a baby and thus immerse herself into depression.

7.3.4 Physical and emotional support to the child

The majority of the respondents believed that couples start loving their children after the birth irrespective of intendedness before or during the time of pregnancy. In contrast, a substantial minority of respondents (18 out of 66) perceived that couples provide less physical and emotional support to a child if it was unintended. Interestingly, amongst the four categories of respondents, only the young men and women thought that couples provide less attention to an unintended child.

Of those young men who thought that couples provide less attention to unintended children, most of them considered that couples may show aggressive behaviour such as shouting and scolding, and using dirty language to unintended children. A few of them talked about the possible negligence of the mother towards a child, such as not giving food on time, or not breasting enough.

A few married women also talked about negligence of a child but in a different ways. They perceived that the mother neglects her own health so that the foetus will be affected. They believed that women do not take tetanus vaccinations, eat nutritious foods and even sleep in uncomfortable positions so that she will have a miscarriage, abortion or stillbirth. In addition, women considered that, even after the birth of the child, she will not take care of it. She will blame the child for everything bad that happens to her and will not take care of the baby properly.

7.3.5 Education and employment opportunities

Studies have shown that young age pregnancies, especially if unplanned, create poverty, as it obstructs the opportunity of economic progress by curtailing the parents' education and reducing their employment prospects (Singh and Wulf, 1990; Ferrando, 1993; Spitz *et al.*, 1996). Overall, the anticipated impact of unintended pregnancy from the present study corroborates these earlier findings of real impact. The majority of the respondents believed that unintended pregnancies amongst young couples can be a major obstacle to their educational attainment as well as to their career development. Respondents believed that couples can neither pursue nor complete their studies or utilize their talents. They said that they can lose their job so their dreams and plans could collapse.

Overall, men thought that there could be loss of opportunities for education as well as employment. They said that, after experiencing such pregnancies, women could be mentally worried and disturbed; as a result they may lose her interest in study. Such a situation may force young men to discontinue their study, job and other career building opportunities. Explaining the situation, one of the respondents said:

> *"...if a young man gets a golden opportunity to get into a good job and at the same time if he has to stay back at home and look after his wife and the baby. Even if he gets a job abroad then he cannot go as he has to take care of his wife and child".*
>
> *- Subasish*

Similar to men and women, the health service providers and the community leaders also felt that such pregnancies can interfere in young couple's educational and professional achievements.

7.3.6 Impact on family income

Most of the respondents considered that an unintended pregnancy could have a negative impact on the family income. Respondents thought that an unintended pregnancy would curtail education and employment opportunities of parents (especially mothers); therefore, they cannot contribute to family income. They further added that parents have to spend money on the baby right from the womb and need to work hard, which may be difficult in pregnancy, especially for women. In addition, they thought that the baby would be a financial burden because they do not only have to provide food, clothing and shelter to the child, but also had to educate and think about the child's future. This may have further adverse effects on the economic status of the family.

Young men considered that husbands would face many problems in the case of unintended pregnancy since they are the breadwinners of the family. They added that they have to provide financial support from conception to childcare. A few of them even thought that it would be not only a problem for the family but also for the society as a whole. One of the respondents said that, due to poverty in the family, society has to face many problems such as thieves and robbers. Giving an example, he said:

> *"She will have problem to afford caring and educating the child therefore she will cheat and steal to fulfil these demands...".*
>
> *-Madhav*

The majority of the young married women had the same opinion as that of the men. For example, a young married woman, 23 years old with nine years of education, said that not only would the children not receive education and become unemployed, but, if care was not given properly, then the children might turn out to be robbers and thieves:

> *"...In case of unintended birth, child may not get proper food and education. The children will grow up to become unemployed, as they will not be educated..... Some will not be cared at home and grow up to become thieves and robbers.....Trivial theft and larceny will eventually turn them into larger gangs".*
>
> *-Yasmine*

The opinions of the health service providers and the community leaders were not markedly different from those of the men and women. For example, one of them said:

"...if she conceives an unplanned pregnancy then she will have to invest in it. She will have to spend money for education and care taking which will influence her economic condition..".

- Eshwor

7.3.7 Abandonment of an infant

A few of the respondents considered that the abandonment of an infant is one of the social outcomes of unintended pregnancy. Two out of 17 men thought that women left the new born children in the temple or courtyard of hospital for an adoption. A few women thought that when a woman gets pregnant without her desire then she becomes very aggressive towards that pregnancy and the child later on. They considered that women try to abort in the first instance; if not successful, then they give birth and either try to abandon or do not care for the child at all.

7.3.8 Social embarrassment

Respondents thought that social shame is one of the problems of unintended pregnancy. They believed that the Nepalese young women are in a very difficult position in regard to timing of childbearing. For example, if a woman does not conceive soon after the marriage then the society will taunt her and give her bad names such as *'thari' and 'bhanji'* (infertile). On the other hand, if she conceives soon after marriage, then they "backbite" and see her in a negative light.

Gossip and "back-biting" were the words commonly used by men to highlight social shame. More than half of the young married men said that the societies will "back-bite" if a couple bears children at the wrong time. They even suspect that such women may have had extra marital sexual relationships. Further, if the couple want to abort a pregnancy then the society accuses them and calls them criminal, which may lead to family disputes. One of the respondents said:

"A woman will try to terminate this type of pregnancy and if the people in the society know about it then they will back bite about her. They will call her criminal...this might cause disputes between the family members"

-Manoj

Overall, the opinions of women and service providers were similar to those of the men. However, one of the young married women added that it is not only women who will be

despised by society if she has an unintended pregnancy, but the child too has to face such hatred from society later on.

Except for one, the overall responses of the community leaders were similar to the young men, women and health service providers. One of the community leaders believed that there is no fear from the society in the case of an unintended pregnancy. He said that if a woman is educated it would not make any difference to her because she knows what is right and what is wrong for her and the family. But if she is not, then she will "lend her ears" to all the "back-biting" and get tense and feel bad about what others say to her.

7.4 Perceived health consequences: Results from the in-depth interviews

In analysing the perceived health consequences in the in-depth-interviews, the following four major themes were identified:

- Pre-natal and post-natal care
- Unsafe abortion
- Post-abortion complications
- Low birth weight baby

7.4.1 Pre-natal and post-natal care

Studies have found that women with unintended pregnancies are less likely than others to seek and received prenatal (ANC) and post-natal care (PNC) (Orr *et al.*, 2000; Jouce *et al.*, 2002). The present study further explored this matter. Although only about half of the respondents covered in the in-depth interviews raised issues of ANC or PNC behaviour, their opinions were very similar to earlier findings. Most of these respondents perceived that women who have unintended pregnancies are likely not to go for ANC or PNC, and do not take nutritious food during pregnancy. Some respondents were even of the view that women with unintended pregnancies do not take care of their pregnancies and do not take enough rest, and fail to take the prescribed medicines, iron folic tablets and vitamin A. They further said that such careless behaviour towards their pregnancies would make them weak and cause complications during delivery. A 23 year old married woman said:

> *"...in such cases (in unintended pregnancy) the female does not take good care of her health, does not take rest or even keep herself clean...so she might have problem during delivery and with the child later on".*

Three out of 12 women who raised issues of ANC and PNC believed that couples do not go for checkups for their baby as well. Surprisingly, most of the health service providers and the community leaders did not mention the impact of unintended pregnancy on ANC and PNC seeking behaviour of women. But those who did mention it had similar opinions to those of the young married men and women.

7.4.2 Unsafe abortion

The majority of the respondents perceived that abortion is the most likely consequence of unintended pregnancy. They viewed that many couples seek unsafe abortion which could lead to hazardous effects on the women's health. Respondents described several methods of unsafe abortion practices in their communities. For example, most of the respondents mentioned that unsupervised use of different herbal or allopathic medicines for self induced abortion or care seeking from unskilled providers are the most common methods of abortion in their areas. In addition, respondents reported that women take honey, *gud* (jaggery) and raw tamarind, *kubindo* (a vegetable of a pumpkin family), *simrik* (crimson colour), *gahat (*a kind of cereal), spoilt milk, sour and hot food, insert cow dung into the vagina, press the belly, and jump from a height to abort a pregnancy. They also mentioned that women take strong antibiotics and painkillers sold by 'quacks', or seek help from traditional birth attendants or midwives.

The majority of the married men and women perceived that women take oral or injecting medicines (strong antibiotics or painkillers) or herbal medicines or food to terminate their unintended pregnancy. One man said that he had heard that people in the village hold a hot brick on their stomach to abort a pregnancy. Similarly, another woman said that people insert cow dung or herbs into the vagina. A few of them also reported that women may visit traditional faith healers. Two married women said.

> *"..They (women) will take home medicines, like Kubhindo, Pumpkin for about one and a half month. They wrap their fingers with cotton by measuring with a measuring tape and keeping it in the vagina. There is a herb "bhote ko dawai" (Tibetan's medicine) they also take it or might go to the "dhami jhankri" (traditional healer) and take the water given by him to terminate the pregnancy....They might themselves press the belly and might take advice from the "suddeni" (traditional birth attendant)".*
>
> *-Chadani*

"..Women take large number of pills, take advice from the traditional birth attendants or midwife. They also use cooked herbs, push dung into the vagina, and put a packet of herbs into vagina or stork it with a thin straw".

-Jamuna

As with the men and women, the health service providers also mentioned similar harmful practices of unsafe abortion. They said that women insert sticks into their vagina and inject a liquid by mixing rum glycerine into the uterus. A few of them talked about taking oral medicines, honey and pressing their belly to abort. The following are some of the excerpts from the interviews with health service providers.

"I knew about the women who tried to terminate it by inserting a stick inside which lead to septic abortion and she nearly died".

-Gyaneshwori

"..When I was in Kaski, a woman tried to abort by mixing rum and glycerine and injecting it in the uterus. She had come to us because her abdomen was paining..."

-Jeevan

"I have heard that they go to the untrained and they use various things or put in methods also.... they put 'jadibuti' (herbs)also, I have heard that they put something like 'kath(wood) but I haven't seen this. The TBA at village, they take their help, and I heard they use wild herbs and grind it and use it. .....They contact with 'Dhami' (TFH), "Sudeni" (TBA) etc.."

-Rama

"..They will do "curate" (curettage), take household herbs, they will press the belly and try to terminate it by pushing some foreign things into the vagina. They take help from "suddeni" (TBA)..... There is a trend of pressing belly in the Tharu community and some even take honey..."

-Shreyam

The community leaders too said that they have heard of different "disgusting" and "unhygienic" methods of abortion, like drinking pieces of glass with water or milk, dipping their husband's underwear in water and drinking it and making a child jump on top of a pregnant women's stomach. They further added that women take cooked turmeric powder, black sesame seeds, lift heavy loads and ride a bicycle to bring an abortion. Similar to other respondents, they also talked about visiting traditional birth attendants, taking different kinds of medicines, honey and *kubindo.*

7.4.3 Post-abortion complication

Although the majority of the respondents mentioned different methods of unsafe abortions to deal with unintended pregnancy, only a few of them emphasised the negative consequences of such abortions. Of those who did mention these, excessive bleeding was one of the most frequently mentioned consequences. Others consequences mentioned were permanent infertility, weakness and even death of the women. The rest were of the opinion that it could cause infection, and pain in the abdomen.

More women than men, community leaders and the health services providers were aware of the negative health impacts of unsafe abortion. Women perceived that pregnant women may die due to heavy bleeding as a consequence of abortions. They also considered that infertility, weakness and pain in the abdomen are some complications of unsafe abortion. One of the health service providers said:

> *"...This (abortion) will cause infection later, which might cause permanent infertility... she may be weak....she may have excessive bleeding. ..she may die..".*
>
> *-Sabita*

7.4.4 Low birth weight baby

Twenty-one out of 66 respondents considered that the birth of an underweight or weak baby is an outcome of an unintended pregnancy. Fifteen out of these 21 respondents (4 men, 5 women, 3 service providers and 3 community leaders) believed that a new born baby would be underweight or born pre-maturely due to not taking nutritious diet or vitamins during pregnancy. One of the respondents said:

> *"... She won't pay attention to the food she's taking and day-by-day she becomes frail. In fact both mother and the child become weak. Sometimes the baby is born underweight...".*
>
> *- Kishore*

The remaining six (2 each of men, women and 2 community leaders) talked about the mother being mentally tense and thus affecting the "psychology" of child which would make the child very unhealthy.

Very few respondents felt that an unintended pregnancy affects the actual survival of a child. Six (5 men and one woman) respondents talked about the survival of an infant or foetus. Men thought that the foetus may die in the womb because the mother does not take care of her diet and does not eat nutritious food during pregnancy.

7.5 Survey results

This section presents the findings of the quantitative survey. As mentioned before, six questions related to negative consequences of unintended pregnancy were asked in the quantitative survey. First, respondents were asked whether or not they think that there would be any negative psychological, social or health consequences (three different questions). Then, those respondents who gave affirmative response were further asked about types of consequences. First of all, the findings related to the perceived negative psychological consequences of unintended pregnancy are discussed followed by negative health and social consequences. It is expected that couples with an experience of unintended pregnancy may have higher level of knowledge of consequences compared with those who never been pregnant or those who did not have unintended pregnancy. Similarly, perceptions on the consequences may vary by the age and level of education of the respondents since these can be associated with exposure of information. Therefore, the perceived consequences were also analysed by selected key background characteristics of the respondents.

7.5.1 Perceived psychological consequences

Table 7.2 presents the perceived negative psychological consequences of unintended pregnancy. Over 90 per cent of the respondents believed that couples would experience psychological effects of unintended pregnancies. Over half of the men and 43 per cent of the women considered that mental tension, sadness and worries were the main consequences of unintended pregnancy. Respondents thought that couples with unintended pregnancy would be worried about the health of the women, the impacts on education, the possibility of having a disabled child, less time to enjoy and losing work. Interestingly, a higher proportion of women than men perceived that worries for bringing up and educating children are among the consequences. Other consequences mentioned were related to mental disturbance, committing suicide and getting an abortion.

Tables 7.3 and 7.4 show the perceived negative psychological consequences of men and women according to their pregnancy histories, current age and the level of education respectively. Amongst men, no major differences were observed on the perceived negative psychological consequences according to the age and the pregnancy history of their wives. However, men with secondary or higher level of education were more likely

to perceive unintended pregnancy could have negative psychological consequences than those men with primary or less level of education (Table 7.3). Similar findings were observed amongst women (Table 7.4).

Table 7.2 Perceived negative psychological consequences of unintended pregnancy: Young person's pregnancy study in Nepal, 2003

Perceived negative psychological consequences	Men		Women	
	N	%	N	%
Any negative psychological consequences of unintended pregnancy?				
Yes	450	90.2	917	92.0
No	49	9.8	80	8.0
Total	**499**	**100.0**	**997**	**100.0**
Types of consequences				
Mental tension or sadness	245	54.4	367	40.0
Worries about bringing up and education of children	179	39.8	500	54.5
Women might suffer feelings of low status and oppression	36	8.0	24	2.6
Mental perturbation due to too much thinking	36	8.0	51	5.6
Worries about terminating pregnancy	23	5.1	89	9.7
Women worries over bad health, education, disabled child, no time to relax, lost work	18	4.0	47	5.1
Other (lack of care for the child, women may try to suicide)	32	7.1	28	3.0
N	**450**	*	**917**	*

** Total percentage may exceed 100 due to multiple responses.*

As regards to the specific types of perceived negative psychological consequences, no marked differences were observed according to their pregnancy intentions, age and level of education. However, the results indicate that men with higher age group were more likely to perceive that women could be mentally disturbed as a result of unintended pregnancy than men with lower age groups. In contrast, women in the lower age group (20-24 years) were more likely to perceive so. Interestingly, men with above secondary level education than men with primary or less level of education believed that couples with unintended pregnancy give low status to themselves and feel dominated from others (Table 7.3). This is also true in the case of women as well (Table 7.4).

Table 7. 3 Percentage distribution of young married men according to their views of likely negative psychological consequences of unintended pregnancy by pregnancy history, current age and level of education: Young person's pregnancy study in Nepal, 2003

Any negative psychological consequences	Pregnancy history			Current age			Education		
	Unintended	Intended	Never been pregnant	15-19	20-24	25-27	Primary or less	Secondary	Above secondary
Yes	91.5	88.6	91.1	83.3	90.3	90.8	81.3	92.5	96.8
No	8.5	11.4	8.9	16.7	9.7	9.2	18.7	7.5	3.2
Total per cent	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
N	**176**	**211**	**112**	**24**	**236**	**239**	**139**	**266**	**94**
Types of consequences									
Mental tension/sadness	53.4	56.1	52.9	50.0	55.9	53.5	47.8	56.1	58.2
Worries about bringing up and education of children	41.6	38.0	40.2	35.0	39.9	40.1	39.8	41.9	34.1
Women might suffer feelings of low status and oppression	6.2	10.7	5.9	5.0	8.0	8.3	6.2	7.7	11.0
Mental perturbation due to too much thinking	6.8	8.6	8.8	0.0	5.6	11.1	7.1	9.3	5.5
Worries about terminating pregnancy	6.8	4.8	2.9	5.0	4.7	5.5	3.5	5.3	6.6
Worries over bad health, education, disabled child, no time to relax, lost work	3.1	3.1	6.9	10.0	4.2	3.2	7.1	1.6	6.6
Other (does not care for the child, women may try to suicide)	6.2	7.5	7.9	5.0	7.0	7.4	7.9	6.9	6.6
Total per cent	*	*	*	*	*	*	*	*	*
N	**187**	**161**	**102**	**20**	**213**	**217**	**113**	**246**	**91**

** The total percentage may exceed 100 due to multiple responses.*

Table 7.4 Percentage distribution of young married women according to their views of likely negative psychological consequences of unintended pregnancy by pregnancy history, current age and level of education: Young person's pregnancy study in Nepal, 2003

Any negative psychological consequences	Pregnancy history			Current age		Education		
	Unintended	Intended	Never been pregnant	15-19	20-24	Primary or less	Secondary	Above secondary
Yes	92.5	92.0	90.4	88.2	93.3	88.9	93.5	97.0
No	7.5	8.0	9.6	11.8	6.7	11.1	6.5	3.00
Total per cent	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
N	**478**	**363**	**156**	**254**	**743**	**404**	**493**	**100**
Types of consequences								
Mental tension/sadness	36.1	42.5	45.4	37.5	40.8	36.8	41.2	46.4
Worries about bringing up and education of children	57.7	51.8	51.1	51.3	55.6	59.6	52.3	46.4
Women might suffer feelings of low status and oppression	2.5	2.4	3.5	2.2	2.7	1.7	2.6	6.2
Mental perturbation due to too much thinking	4.8	5.1	9.2	8.0	4.8	4.5	6.1	7.2
Worries about terminating pregnancy	10.9	8.7	8.5	8.5	10.1	8.6	10.0	12.4
Worries over bad health, education, disabled child, no time to relax, lost work	4.5	6.0	5.0	6.7	4.6	4.2	5.4	7.2
Other (does not care for the child, women may try to suicide)	2.9	2.4	5.0	4.5	2.6	2.5	3.5	3.1
Total per cent	*	*	*	*	*	*	*	*
N	**334**	**442**	**141**	**224**	**693**	**359**	**461**	**97**

* *The total percentage may exceed 100 due to multiple responses.*

7.5.2 Perceived social consequences

Table 7.5 shows the perceived negative social consequences of unintended pregnancy. The results shows that considerably more women than men felt that there are social consequences from unintended pregnancy. Of those who believed that there are social consequences, most of them mentioned the economic impact on the family and the society due to too many unwanted children. Similar to the findings of in-depth interviews, a large proportion of respondents thought that unintended pregnancies may create misunderstandings between husband and wife and also with family members that may result in frequent quarrels in the family.

Table 7.5 Perceived negative social consequences of unintended pregnancy: Young person's pregnancy study in Nepal, 2003

Perceived negative social consequences	Men		Women	
	N	%	N	%
Any negative social consequences of unintended pregnancy?				
Yes	328	65.7	815	81.7
No	171	34.3	182	18.3
Total	**499**	**100.0**	**997**	**100.0**
Types of negative social consequences				
Financial problems due to many unwanted children	141	43.0	357	43.8
Possible misunderstandings between husband/wife and family members, quarrel may start	140	42.7	319	39.1
Social shame	117	35.7	336	41.2
Family members might not provide care to the pregnant women and she might not receive support	54	16.5	189	23.2
Unintended child may become thief and social crime would increase	15	4.6	14	1.7
Society can not provide good education to the children	18	5.5	38	4.7
Other**	10	3.0	9	0.9
N	**328**	*	**815**	*

** Total percentage may exceed100 due to multiple responses*

*** Other includes abortion rate may increase, deficiency in manpower due to unhealthy child born, abandonment of child*

Over one-third of men and women considered social shame is one of the social consequences. No major differences were found between men and women in the opinion on the types of negative social consequences of unintended pregnancy. However, women were more likely than men to believe family members might not provide care and support during the pregnancy and after delivery.

Table 7.6 Percentage distribution of young married men according to their views of likely negative social consequences of unintended pregnancy by pregnancy history, current age and level of education: Young person's pregnancy study in Nepal, 2003

Any negative social consequences	Pregnancy history			Current age			Education		
	Unintended	Intended	Never been pregnant	15-19	20-24	25-27	Primary or less	Secondary	Above secondary
Yes	68.8	65.9	60.7	62.5	62.7	69.0	51.1	68.4	79.8
No	31.2	34.1	39.3	37.5	37.3	31.0	48.9	31.6	20.2
Total per cent	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
N	**176**	**211**	**112**	**24**	**236**	**239**	**139**	**266**	**94**
Types of consequences									
Financial problems due to many unwanted children	41.3	47.5	36.8	46.7	42.6	43.0	32.4	47.8	41.3
Possible misunderstandings between husband/wife and the family members, quarrel may start	46.3	42.4	36.8	33.3	42.6	43.6	56.3	39.6	37.3
Social shame	33.9	36.7	36.8	46.7	33.1	37.0	35.2	33.0	42.7
Family members might hate and not provide care to the pregnant women and she might not receive support	15.7	15.1	20.6	20.0	18.2	14.5	15.5	15.4	20.0
Unintended child may become thief and social crime would increase	5.8	2.2	7.4	13.3	6.1	2.4	1.4	6.0	4.0
Society can not provide good education to the children	4.1	7.2	4.4	13.3	7.4	3.0	2.8	7.1	4.0
Other **	3.3	2.9	3.0	0.0	2.1	4.2	3.2	3.1	1.3
Total per cent	*	*	*	*	*	*	*	*	*
N	**139**	**121**	**68**	**15**	**148**	**165**	**71**	**182**	**75**

** The total percentage may exceed 100 due to multiple responses.*

*** Other includes abortion rate may increase, deficiency in manpower due to unhealthy child born, abandonment of child*

Table7.7 Percentage distribution of young married women according to their views of likely negative social consequences of unintended pregnancy by pregnancy history, current age and level of education: Young person's pregnancy study in Nepal, 2003

Any negative social consequences	Pregnancy history			Current age		Education		
	Unintended	Intended	Never been pregnant	15-19	20-24	Primary or less	Secondary	Above secondary
Yes	81.0	84.0	78.8	81.0	82.0	82.2	80.9	84.0
No	19.0	16.0	21.2	18.9	18.0	17.8	19.1	16.0
Total per cent	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
N	**478**	**363**	**156**	**254**	**743**	**404**	**493**	**100**
Types of consequences								
Financial problems due to many unwanted children	45.5	42.3	42.3	43.2	44.0	44.9	43.4	41.7
Possible misunderstandings between husband/wife and family members, quarrel may start	34.6	44.3	40.7	41.7	38.3	44.6	34.3	40.5
Social shame	43.7	39.3	38.2	42.7	40.7	34.3	45.4	48.8
Family members might hate and not provide care to the pregnant women and she might not receive support	24.0	21.3	25.2	22.3	23.5	19.0	27.8	17.9
Unintended child may become thief and social crime would increase	2.3	1.3	0.8	2.4	1.5	0.9	2.5	1.2
Society can not provide good education to the children	5.4	4.9	1.6	4.9	4.6	4.2	4.8	6.0
Other **	1.3	1.0	0.0	0.5	1.3	0.6	1.9	0.0
Total per cent	*	*	*	*	*	*	*	*
N	**305**	**387**	**125**	**206**	**609**	**332**	**399**	**84**

** The total percentage may exceed 100 due to multiple responses.*

*** Other includes abortion rate may increase, deficiency in manpower due to unhealthy child born, abandonment of child*

Tables 7.6 and 7.7 show the percentage distribution of men and women according to their perceived negative social consequences by pregnancy histories, current age and level of education. The results show that men whose wives ever had an unintended pregnancy were slightly more likely to think that couples with unintended pregnancy could face social consequences compared to those men whose wife had never been pregnant (69% VS 61). Similarly, men aged 25-27 years than aged 15-19 years are more likely to think unintended pregnancy could have such impact. A clear difference was also observed by the level of education. Men who had achieved above secondary level education were more likely to think that couples with unintended pregnancy could face social consequences compared to men who only had primary or lower level education. However, amongst women, no major variation was observed.

With regards to the specific types of social consequences, few variations by their background characteristics were noticed. For example, more men whose wife had ever experienced unintended pregnancy than those whose wife had never been pregnant believed that couples could face misunderstanding between spouses and with family members. In contrast, women who had an unintended pregnancy were more likely to believe that misunderstandings with spouse and family members would be one of the social consequences of unintended pregnancy than women who never had an unintended pregnancy.

Men aged 15-19 years were more likely than men aged 25-27 years to perceive that women with unintended pregnancy could face the problems of social shame and providing a good education for the children. Amongst women, there is no much difference found in this aspect.

Comparatively, a higher proportion of men with primary or less level of education than above secondary level education believed that couples with an unintended pregnancy might have misunderstandings with spouse. In contrast, a higher proportion of men with above secondary level education than primary level educated men believed that women could face the problems of social shame (Table 7.6). This is also true amongst women (Table 7.7).

7.5.3 Perceived health consequences

Nine in every 10 young men and women interviewed believed that an unintended pregnancy has negative consequences on women's health. As expected, women were more likely than men to believe that an unintended pregnancy weakens the health of mother. Similar to the in-depth interviews, over one-third of men and women believed that women do not take nutritious foods during pregnancy, thereby making them weak. Interestingly, a higher proportion of men than women considered that women may try unsafe abortion. Similarly, women were more likely than men to mention low birth weight and an unhealthy or disabled baby as consequences of unintended pregnancy. (Table 7.8).

Table 7.8 Perceived negative health consequences of unintended pregnancy: Young person's pregnancy study in Nepal, 2003

Perceived negative health consequences	Men		Women	
	N	%	N	%
Any negative health consequences of unintended pregnancy?				
Yes	435	87.2	896	89.9
No	64	12.8	101	10.1
Total	**499**	**100.0**	**997**	**100.0**
Types of consequences				
Mother's health may become weak	200	46.0	480	53.6
Mother's health might become weak because of not taking nutritious foods during pregnancy	159	36.5	323	36.0
Women may try unsafe abortion	144	32.6	241	26.9
Women might not go for pre-natal checkups	105	24.1	194	21.7
Maternal deaths might occur	56	12.9	82	9.2
Possible low birth weight, unhealthy or disabled baby	26	6.0	106	11.8
Possible pre-term birth or difficulty for child to survive	3	0.7	10	1.1
N	**435**	*	**896**	*

** Total percentage may exceed100 due to multiple responses.*

Tables 7.9 and 7.10 show the percentage distributions of men and women according to perceived negative health consequences of unintended pregnancy amongst young men and women according to their pregnancy experiences, age and level of education. The results show that men whose wife had experienced an unintended pregnancy were more likely to believe women could have negative health complications than men whose wife never been pregnant. Similar to men, women who had ever experienced unintended

Table 7.9 Percentage distributions of young married men according to their views of likely negative health consequences of unintended pregnancy by pregnancy history, current age and level of education: Young person's pregnancy study in Nepal, 2003

Any negative health consequences	Pregnancy history			Current age			Education		
	Unintended	Intended	Never been pregnant	15-19	20-24	25-27	Primary or less	Secondary	Above secondary
Yes	88.1	88.2	83.9	79.2	87.3	87.9	82.7	89.1	88.3
No	11.9	11.8	16.1	20.8	12.7	12.1	17.3	10.9	11.7
Total per cent	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
N	**176**	**211**	**112**	**24**	**236**	**239**	**139**	**266**	**94**
Types of consequences									
Mother's health may become weak	47.1	40.9	54.3	57.9	45.1	45.7	46.1	42.6	55.4
Mother's health might become weak because of not taking nutritious foods during pregnancy	38.7	36.6	33.0	26.3	37.4	36.7	33.9	38.8	33.7
Women may try unsafe abortion	28.4	39.2	26.6	26.3	30.1	35.7	36.5	29.1	37.3
Women might not go for pre-natal checkups	25.8	23.1	23.4	10.5	22.3	27.3	23.5	24.9	22.9
Maternal deaths might occur	12.9	11.8	14.9	21.1	11.2	13.8	14.8	11.8	13.3
Possible low birth weight, unhealthy or disabled baby	7.1	4.3	7.4	5.3	5.8	6.2	1.7	6.3	10.8
Possible pre-term birth or difficulty for child to survive	0.6	1.1	0.0	0.0	1.5	0.0	0.0	1.3	0.0
Total per cent	*	*	*	*	*	*	*	*	*
N	**186**	**155**	**94**	**19**	**206**	**210**	**115**	**237**	**83**

** The total percentage may exceed 100 due to multiple responses.*

Table 7.10 Percentage distribution of young married women according to their views of likely negative health consequences of unintended pregnancy by pregnancy history, current age and level of education: Young person's pregnancy study in Nepal, 2003

Any negative health consequences	Pregnancy history			Current age		Education		
	Unintended	Intended	Never been pregnant	15-19	20-24	Primary or less	Secondary	Above secondary
Yes	92.7	87.9	85.9	88.2	90.4	88.9	89.9	94.0
No	7.3	12.1	14.1	11.8	9.6	11.1	10.1	6.0
Total per cent	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
N	**478**	**363**	**156**	**254**	**743**	**404**	**493**	**100**
Types of consequences								
Mother's health may become weak	55.1	50.5	56.0	51.3	54.3	56.5	52.6	46.8
Mother's health might become weak because of not taking nutritious foods during pregnancy	36.3	37.6	31.3	31.7	37.5	32.3	38.1	40.4
Women may try unsafe abortion	26.0	27.6	28:4	26.3	27.1	24.0	28.7	29.8
Women might not go for pre-natal checkups	21.2	21.6	23.1	19.6	22.3	17.8	21.7	36.2
Maternal deaths might occur	9.3	8.5	10.4	11.2	8.5	10.0	7.4	13.8
Possible low birth weight, unhealthy or disabled baby	12.0	11.9	11.2	11.2	12.1	12.8	10.2	16.0
Possible pre-term birth or difficulty for child to survive	1.1	1.6	0.0	0.9	1.2	0.8	1.1	2.1
Total per cent	*	*	*	*	*	*	*	*
N	**319**	**443**	**136**	**224**	**672**	**359**	**443**	**94**

** The total percentage may exceed 100 due to multiple responses.*

pregnancy were more likely to perceive women could have negative health consequences than women who never been pregnant. The data also indicate that the greater the age and level of education, the greater the chance of believing that women could suffer negative health consequences.

With regards to the specific types of perceived negative health consequences, major differences were observed by the current age amongst men and by level of education amongst women. For example, a higher proportion of men aged 15-19 than men aged 25-27 years believed that mother might become physically weak (58 % VS 46%) or could die (21% VS 14%). In contrast, more men aged 25-27 years than men aged 15-19 years believed that women do not take nutritious food during pregnancy, try unsafe abortion and do not go for pre-natal checkups (Table 7.9).

Amongst women respondents, more women with primary or lower education than above secondary education thought that women become physically weak. In contrast, a higher proportion of women with above secondary level of education than primary or lower education believed that women do not take nutritious food during pregnancy, try unsafe abortion, do not go for pre-natal check ups and give preterm births (Table 7.10).

7.6 Experiences of socio-psychological consequences: Results from case histories

7.6.1 Relation with spouse and other relatives

To some extent, the perceived opinion and real experiences corresponded in relation to the issue of relationships between the spouses and with other family members as a consequence of unintended pregnancies. Case studies revealed that the relationships between spouses and family members do deteriorate as a result of unintended pregnancy. Fourteen out of 30 respondents (4 men and 10 women) reported that their relationship either with their spouses or other family members were unpleasant when they experienced unintended pregnancy.

Both women and men recalled their experiences of misunderstandings between their spouses and with their family members. Most women confirmed that they were looked upon as inferior, and did not get support from the family members. They were even told that they were in the "bad books" of the family when they couldn't help in the household

works during the time of pregnancy. One woman narrates her personal experience as follows:

> *"...I am not in the good books of the family. I couldn't work, I was tensed on one hand and the family members didn't understand. I think that if that pregnancy not occurred I would have good relations with my family members".*
>
> *- Menu*

Similarly a man with two living children and had tried to abort third pregnancy of his wife but could not succeed; he said:

> *"...Yes, I've had small fights at home with my wife. My wife had some misunderstanding with my mother..."*
>
> *-Devendra*

Shakti, 26 years old man with two living children described a similar relationship with his wife. He said:

> *"....We quarrelled frequently when she conceived third time. I tried to explain our situations by scolding her a little, but since she had more say in the matter, I gave up. Because of this, we had a bad relationship for 5/6 months....."*

7.6.2 Domestic violence

A Nepalese study conducted amongst 1250 women aged 15-49 years showed that 88 per cent women reported occasional domestic violence (WHO, 1997). Some of the respondents of in-depth interviews of present study considered that domestic violence would be one of the consequences of unintended pregnancy; however, none of respondents covered in the case histories reported experiences of domestic violence in their real life when they experienced unintended pregnancies.

7.6.3 Depression

The case histories revealed that depression and mental tension were one of the major consequences of unintended pregnancy amongst young couples. Real experiences and perceived opinion were similar on these issues. Those respondents who experienced unintended pregnancies said that depression and stress became a part of their life. They said that they were worried about how they would bring up their children and fulfil his/her every need. Some of them even mentioned that their aims and goals in life would remain incomplete after such pregnancies. One of the respondents said:

> *"....I felt like crying, sad and afraid. I felt I was not of age and also not mature enough to give birth to a child. I was inexperienced as I was recently married. I was unaware of family matters; I did not know what was to be done in the family.*

I was not quite adapted within; I used to walk around with them but was a kid myself who had suddenly become pregnant, so I was very gloomy...".

- Sita

Another twenty-four years old young married woman said:

"..When I heard about my first pregnancy, I felt really very worried. I was worried about how to give birth, how to care for a child and what to do next ..".

7.6.4 Physical and emotional support to the child

Although some respondents perceived that couples provide less physical or emotional support to a child if it is unintended, no evidence was found to support this in the real experiences of men and women. They reported that even if their pregnancies were unintended they started to love the child after they decided to continue. Even if they despised a pregnancy throughout the gestation period they fell in love after giving birth and started enjoying. A woman narrates her experience:

"...Well .... I did not want to have baby now but it happened... well the first time I came to know about it I did not feel nice about it. But soon after I started liking the pregnancy..... Especially, when it started kicking I had a peculiar feeling. When the baby gave a kick for the first time I was surprised..... Till then I did not even know that the baby kicks... that was surprising and happiest thing that has ever happened to me...".

-Geena

Similarly, another woman who had an unintended pregnancy and an unsuccessful attempt to abort said:

"No, never. I never blamed or hatred the child after birth ....".

-Hema

Tamana had a similar experience with Hema and Bisnhu. She said:

"After the unsuccessful abortion I started having a positive view towards it and even regretted for having the medicine. I prepared myself mentally for giving birth to this baby and eventually delivered the baby....I had taken that child in an optimistic way. One definitely loves the baby after it is born so I loved him/her as one loves the first baby. I didn't differentiate. I tried to give the necessary things such as nourishment, care, tender love, immunization etc all myself...".

-Tamana

7.6.5 Education and employment opportunities

The case histories revealed that intended pregnancies amongst young couples curtailed their educational and employment opportunities in line with the expectation of the respondents of the in-depth interviews. Respondents mentioned that they had left school

or college, and couldn't utilize the good opportunities as a result of unintended pregnancies. A young woman aged 20 narrates her experience:

> *"..Now there are many training opportunities in the groups so I could have learnt new things but after having children one cannot do anything and your day is spent looking after them and you cannot do what you want to do. Though I am also in a group but there are many groups and there are other trainings like painting, stitching and I think if I could have joined those groups and attended those trainings, I could have learnt new things that would help me in the future. I think it would have been possible if the daughter was not in the womb at that time".*
>
> *-Sumana*

Menu, Sita and Gyani have similar experiences as above.

> *"I felt very sad. I was studying and all of a sudden I was going to be a mother... I was worried how to raise the child and also that it was going to hamper my studies. I was anguished till its birth.....If I had not been pregnant so soon I would have studied B.E , I would have got a better job than this.."*
>
> *-Menu*

> *"....Yes. My first pregnancy was unintended.....because of that I couldn't study. I was mentally afflicted because before I was talented and had a good memory. After that pregnancy I was worried and thought of useless things. My memory has weakened perhaps because I thought of senseless things....."*.
>
> -Sita

> *"...It (unintended pregnancy) made me more depressive. The child was troublesome; I couldn't go to any places and couldn't do anything that I wanted to do..."*.
>
> *-Gyani*

Case histories also documented that few women wanted to continue their study after having an unintended birth but they couldn't do so mainly because of not receiving support from mothers-in-law. One woman said:

> *".....I was and I still am interested in studying further....I could have continued my education after birth and my mother had told me to continue the study. She looked after my child but my mother-in-law didn't allow me..."*
>
> -Sujana

7.6.6 Impact on family income

The case histories suggest that an unintended pregnancy does have a negative impact on the family income. Altogether, 11 out of 30 respondents (2 men and 9 women) mentioned that they had difficulties with money when they experienced unintended pregnancy. Most of the respondents mentioned that unintended pregnancy compelled them to stay at home so that they were unable to work which had affected their family

incomes. In addition, they also reported that they had to spend money to care for pregnancy, such as costs for medical check ups, nutritious food and delivery when they were not prepared for. This all increased their expenditure that obviously affected their family finances. One woman said:

> *".....Yes I also had faced such problem that made me sad and I think that made me weak physically. I had to leave my work due to that pregnancy. I cannot do any work I am weak by heart and I think that I cannot do any type of work. That affected my income.."*
>
> *-Nima*

Similarly, Sharada 24 years old, six yeas of education, mother of two daughters, had considered her third pregnancy was unintended. She tried to abort but unsuccessful. She described:

> *"..... This affected my financial status to some extent. My wage is Rs 50-60. At the time of pregnancy I couldn't work. How can I manage to raise 3/ 4 kids? Moreover I have to look after parents and the rest of the family. In such conditions how can I feed, educate, and clothe them? This indeed is a big problem....."*

7.6.7 Abandonment of an infant

Although very few respondents felt that abandonment of an infant would be one of the consequences of unintended pregnancy, the case histories revealed that none of the respondents covered in the present study ever had such experiences in their life.

7.6.8 Social embarrassment

As mentioned in the earlier section, many respondents expected that couples would have to face social embarrassment if they experienced an unintended pregnancy. However, none of the respondents reported that they experienced such problems when they had such pregnancies. In contrast, some of them mentioned that it is a personal matter, so society does not say anything; it is the person who has an unintended pregnancy who suffers from it. For example, one respondent who had unintended pregnancy once said:

> *"..No I did not encounter such problems. I don't think people will say anything about it because it is you who is suffering. Even if they do say anything then it won't matter as you are the one who has to suffer..".*
>
> *-Saileja*

7.7 Experiences of health consequences: Results from case histories

7.7.1 Pre-natal and post-natal care

Overall, a clear difference was noticed between the perceived opinion and the actual behaviour regarding pre-natal and post-natal care in the case of unintended pregnancy. Despite a pregnancy being unintended, most women reported that they had gone for pre-natal or post-natal check ups. They reported that after some months of pregnancy they felt like going for ANC as well as PNC despite the unintended pregnancy. One woman, explaining reasons for going for ANC checkups, said:

> *"If she does not have ANC checkups then either the foetus in the womb or the mother herself is affected. If she does not care for her health so she might have problem to deliver children. If she had gone for checkups she might have known about any difficulty she would have.... Neglecting an unintended pregnancy will harm the health of the woman and she will have difficulty delivering the child...Therefore....I used to go for checkups and eat good food. The only thing is that I was worried for untimely pregnancy in the beginning..".*
>
> *-Sumana*

Sanu and Sarada also had regular checkups during and after the pregnancy despite the fact that their pregnancies were unintended; they said:

> *".....I always went for regular check ups and ate nutritious foods..".*
>
> *-Sanu*

> *I was tense because of this pregnancy, but later I went for check ups and eat a healthy diet.*
>
> *-Sarada*

However, a few women did mention that they did not go for check ups and did not care about food during pregnancy.

> *".....My husband and family used to urge me to go for check ups and to take nutritious food. But I didn't feel to go in the time of my 1st child since it was unintended. I didn't care. I used to care only for my health, not for the child...".*
>
> *-Menu*

> *"...No. I did not go for check up during last unintended pregnancy.."*
>
> *-Basanti*

No difference was observed in ANC and PNC seeking behaviour of women in terms of their background characteristics and other circumstances.

7.7.2 Unsafe abortion

As discussed in Chapter Six, unintended pregnancy is common amongst Nepalese young couples but most of them do not seek for abortion. Of those who sought abortion, most of them had used unsafe methods in the first instance. The actual ways or the procedures used by couples for terminating unintended pregnancy were similar to those perceived by the young married men, women, the health service providers and the community leaders. Nima, 22 year old married women who tried several unsafe ways to abort her pregnancy, is a good example of this.

> *"...Yes, I have tried it on my own..... When I was pregnant second time, I took medicine from medical shop and when it did not work I took herbs from "dhami jhankri" (traditional healers) and when this also did not work then I did not try anything for a while. I thought that it would not work so I left the use of these medicines. Then again I took 3 pills (Nilocon) in the morning without taking anything but this caused amnesia, headache so I did not take it again. I wanted to terminate this pregnancy so I took the advice from the landlady and she told me to seek advice from the medical. I went to medical... and get curate".*

7.7.3 Post abortion complications

The perceived consequences of unsafe abortion were accurate when compared with the real life experiences of the women who went for unsafe abortion. Although most of the respondents did not seek abortion, those who had experience of unsafe abortion did face such consequences. They frequently mentioned bleeding, lower abdomen pain, back pain and weakness after having an abortion. One of the respondents said:

> *"..When I had an abortion in my last pregnancy.... I had bleeding for sometime.... I have pain in lower abdomen and whole body....bleeding sometime.....felt weak ....I am not able to do the work like before..., I feel lazy. When I have the menstruation, I have a black type of water....."*
>
> *-Gyani*

In contrast, some women who had abortions from trained personnel did not report such experiences. The following are the some excerpts from case histories.

> *"..No, I've not. I had did curate from the doctor. Nothing happened...".*
>
> *-Poonam*

> *"....Well, I didn't confront anything as such. After the curate I right away went for sowing...".*
>
> *-Sanu*

> *".....No my wife does not face any such health problems. Only thing was that I was mentally upset and that I had to spend some money on it. The health is as it was before, it has no harm on health.*
>
> *-Bikash*

7.7.4 Low birth weight baby and infant and child survival

Although a considerable number of respondents in the in-depth interviews thought that low birth weight baby, preterm birth, difficulties for infant and child survival would be outcomes of unintended pregnancies, none of the respondents in the case histories reported such incidences in their real life.

7.8 Discussion and conclusions

The results presented in this chapter provide a fairly comprehensive understanding of the consequences of unintended pregnancy in Nepal. Since perceptions and expectations are a very important part of decision making process, this study started with analysing the perceived consequences of unintended pregnancy and then compared these with real experiences. The study revealed that conflicts with spouses and family members, depression, worries or mental tension, loss of education and employment opportunities were the major anticipated socio-psychological consequences of unintended pregnancies amongst young couples. In most cases, the perceived opinions corroborated with real experiences. For example, most of the respondents in the in-depth interviews as well as the quantitative survey believed that unintended pregnancies mostly affected young couples' relationships with their spouses and other family members, ability to work and employment opportunities, worries, depression, and additional financial burdens to the family. These perceptions were generally confirmed by the case histories (Table 7.11). This suggests that young couples who experienced unintended pregnancy faced a number of difficulties in their real life.

In contrast, some of the perceived opinions on the possible consequences were not mentioned by the respondents who had real experiences of unintended pregnancies. For example, a substantial number of respondents in the in-depth interviews reported that domestic violence, abandonment of an infant, less physical and emotional support to the child were the possible outcomes of unintended pregnancy. However, these outcomes were either not or less frequently mentioned in the case histories or in the survey. Furthermore, none of the respondents covered in this study perceived infanticide as a possible consequence of unintended pregnancy. An earlier Nepalese study showed that infanticide is one of the outcomes of unintended pregnancy (Tamang *et al.*, 2000).

Table 7.11 Possible main negative consequences of unintended pregnancy: A comparison of findings from three data sources: Young person's pregnancy study in Nepal, 2003

Possible negative consequences	Sources of data		
	In-depth interviews (expected)	Survey (expected)	Case histories (Actual reported experiences)
A. Socio-psychological consequences			
Relation with spouse and relatives	***	**	**
Domestic violence	**	*	none
Depression/mental tensions	***	***	***
Less physical and emotional support to the child	**	none	none
Educational and employment opportunities	***	**	**
Impact on family income	***	***	**
Women might not receive support from family members	**	*	*
Abandonment of the child	*	none	none
Worries about bringing up and education of children	**	***	*
Social embarrassment	**	**	none
Women might suffer feelings of low status and oppression	none	*	none
Social crimes may increase	none	*	none
B. Health consequences			
Do not go for prenatal and postnatal care	***	**	*
Unsafe abortion	***	**	**
Post-abortion complications	**	*	*
Low birth weight baby /pre term baby	**	*	none
Mother's health become weak/ do not take nutritious food during pregnancy	*	**	none
Maternal deaths	*	*	none

**** indicates high proportions making this point, ** indicates moderate proportions and * indicates very small proportions. 'None' denotes either 'no response' or do not believe that might happen*

This could be explained in three ways. First, once a child was born, young women said they made no distinctions amongst their children whether it was intended or unintended at the time of conception. Most young women said unintended children received the same amount of affection as other children in the family. Second, information on real experiences was collected from a small number of respondents in the present study, which may not be adequate to observe such outcomes. Third, domestic violence, infanticide, abandonment of a child are not only illegal in the country but very sensitive matters to report. Therefore, the possibility of underreporting of such events cannot be ignored.

The study revealed that there are some differences between the perceived opinions and real experiences when it comes to the health consequences of unintended pregnancy. For example, most of the respondents in the in-depth interviews and a moderate proportion of the respondents in the survey mentioned that women with unintended pregnancy are less likely to go for prenatal or postnatal check ups; however, the case histories showed that this was not completely true. Case histories revealed that most women visited health centres for prenatal or postnatal care despite their pregnancy being unintended. It is largely explained by the fact that most couples who reported unintended pregnancy wanted to postpone their pregnancy, so in the beginning they worried and get upset. Therefore, they did not take immediate action for prenatal care. But, when these young women were not successful in their attempt to abort or decided to keep the pregnancy for other reasons then they go to health centres for prenatal or postnatal care. This suggests that prenatal and/or postnatal care are not dependent on the pregnancy intendedness.

As expected, most of the respondents in the in-depth interview and moderate proportion of respondents in the survey felt that an abortion is one of the primary consequences of an unintended pregnancy. Although most of the Nepalese young couples who participated in this study did not seek abortion, those who did so were generally unsafe in the first instance. The perceived opinion and real experiences of respondents on the methods of unsafe abortion were very similar. This confirms that various methods of unsafe abortion prevail in the community.

As against the views of the in-depth interview respondents, relatively fewer proportions of the survey respondents reported post-abortion complications. No reasons can be found why only few respondents of the survey mention post-abortion complications. The case histories revealed that those women who had used unsafe abortion methods experienced health complications. As expected, those women who visited trained personal for abortions did not report such experiences. This suggests that the person from whom young couples seek abortion services is very important whether or not they experience post abortion complications. This finding has an important programme implication especially while designing the IEC materials on safe abortion services.

Interestingly, some of the perceived health consequences of unintended pregnancies were not reported in the real experiences. For example, many respondents of the in-depth interviews felt that low birth weight, preterm birth and infant and child survival were

possible outcomes of unintended pregnancy, but real experiences did not support these opinions. This could be due to two main reasons. First, the data suggest that most young women went for antenatal care and postnatal care despite their pregnancy being unintended. This may reduce the risk of experiencing such adverse health outcomes. Second, the number of respondents covered in the case histories may not be adequate to observe such outcomes.

Overall, the survey data suggested that higher educated and older age group men and women were more likely to expect that, unintended pregnancy could have negative consequences. This could be true because the better educated couples who have stronger motivations (due to better knowledge) than uneducated to prevent unintended pregnancy and can foresee the impact of having the child in their life. As against the expectation, men and women with higher level of education mentioned that couples with unintended pregnancy could give low status to them and feel dominated. One of the explanations could be notion of 'social shame'. As in many societies including Nepal, there is a culture norm or expectation on the behaviour of an educated person. If a couple have too many children, there may be a social shame for them. As expected, less educated men and women were more likely to believe that misunderstandings between the spouses may be the consequences of unintended pregnancy.

The study findings suggest some important programme implications. Unintended pregnancy affects individual, families and communities. Therefore, communicating this problem to the public, increasing community and individual understanding about prevention and improving access to necessary services should be an essential component of the reproductive health programmes. The results revealed that unpleasant relationships and worries were the major socio-psychological consequences of unintended pregnancy. A comprehensive counselling service that aimed to address worries and mental tension of couples, and enable young couples and their families to make responsible choices and timely decisions are required. Health service providers should be equipped to deal with all the social-psychological issues related to unintended pregnancy amongst young couples. Programmes that focus to identify couples, families and individuals at risk of unintended pregnancies, provide contraceptive and family planning issues into marital counselling are needed.

Further research is needed on the impact of unintended conceptions in relation to antenatal and postnatal care seeking behaviours, birth outcomes, family formation, and parent-child interactions. Research that examines the impact of young age fatherhood on their life and child wellbeing would be helpful to understand the other aspects of the problems.

CHAPTER 8
SUMMARY CONCLUSIONS AND RECOMMENDATION

This chapter summarises the findings of this research and discusses their implications. The chapter concludes with a discussion of key recommendations and suggests future research directions and policy strategies to be considered regarding young couple's reproductive health in Nepal.

8.1 Summary

An accounting of both intended and unintended pregnancies is needed for forecasting future fertility rates. Whilst demographers are concerned about forecasting issues, public health specialists are concerned about the preventive measures of unintended pregnancies by promoting appropriate contraceptive knowledge and uptake of effective use. In a country like Nepal, where the use of contraception is limited, large unmet needs for contraception exist and abortion has been recently legalised, it is particularly important to assess the extent of unintended pregnancy more precisely and to identify associated factors. However, the concept of measuring pregnancy intendedness has been the subject of recent conceptual and methodological critiques. Although not extensive, research conducted outside of Nepal has shown that the definitions used by most of the WFS Surveys, DHS Surveys are inadequate to capture all the criteria of pregnancy planning intentions of women or couples. Therefore, there is a growing concern amongst some researchers about how to define pregnancy intendedness in different socio-cultural settings and to measure the prevalence more precisely than in previous studies. In addition, very little is known about how Nepalese young couples take decisions on whether or not to terminate an unintended pregnancy, and the roles of husbands, other family members, friends and health service providers are in the decision making phase. Even less is known about the possible impacts of unintended pregnancy on young couples. This research was conducted to help to fill some of the gaps in these areas in Nepal.

The main objectives of this research were to explore the definition of terminologies related to pregnancy intentions, to identify the determinants of unintended pregnancy, to understand the decision making process regarding abortion and to explore the consequences of unintended pregnancy amongst young couples in Nepal. The ultimate

aim was to identify the strategies by which the reproductive and sexual health of these young couples can be improved most effectively.

To address the above objectives, a population-based study entitled "Determinants and consequences of unintended pregnancy amongst young couples" was conducted in five districts of Nepal in 2003. The study used both qualitative and quantitative research methods. In the qualitative study, 66 in-depth interviews (with young men and women, service providers and community leaders) and 30 case histories (with young women and men) and 127 free listing (with young men and women, community leaders and health service providers) were conducted. The respondents for the qualitative methods were selected purposively. In the quantitative study, a sample survey with 997 married women aged 15-24 years and 499 married men aged 15-27 years using a two-stage cluster sampling technique was carried out. The interviews were carried out by trained interviewers who were the same sex as the respondents. The data from the 2001 Demographic and Health Survey of Nepal were also used to estimate the prevalence of unintended pregnancy amongst young women and to enable comparison. The major findings of the study are summarized below in four sub sections. The first section presents the findings related to definitions of terminologies regarding pregnancy intention. The prevalence of unintended pregnancy and its determinants are summarised in the next section. The following sections summarised the findings related to the decision making on abortion and consequences of unintended pregnancy.

8.1.1 Understandings of terminologies related to pregnancy intention

- **A wide range of terms for 'pregnancy' and 'abortion' were used**

The study revealed that 42 terms for 'pregnancy' and 37 for 'abortion' were used by the respondents. Apart from Nepali language, many respondents mentioned the local words for 'pregnancy' and 'abortion' in their own dialect. The local words were totally different from one ethnicity to another. *Pet bokakkeo* for pregnancy and *Bacha falne* for abortion were the most frequently mentioned words.

- **The terminologies related to pregnancy intentions that were used in previous studies are difficult to understand and rarely used spontaneously**

The study revealed that the terminologies related to pregnancy intentions that have been used in previous wide scale survey questions are not only difficult to understand easily by the Nepalese people but are also rarely used. Respondents did not use the terms 'planned', 'unplanned', 'intended', 'unintended', 'wanted' and 'unwanted' spontaneously. When interviewers introduced the terms and asked for meanings, the respondents generally understood these terms but they had their own definitions. There was no unanimous opinion between the respondents on the meaning of these terms; however, their definitions revolved around lack of desire for a child on the part of both or one of the partner, contraceptive failure, timing of child bearing, understandings between the partners, physical and socio-economic situations of the couple, pressure from the partner or the family members, potential costs of bringing up of the child, preparations for antenatal check up and safe delivery kits beforehand.

- **Most respondents used the words 'intended' and 'unintended'**

Comparatively, more respondents used the words 'intended' and 'unintended' than 'planned', 'unplanned', 'wanted' or 'unwanted'. Also, the respondents found it very difficult to distinguish the meaning of the terms 'planned', 'unplanned', 'intended', 'unintended', 'wanted' and 'unwanted'. After probing, the respondents mentioned their own wide ranges of criteria to distinguish between the words used.

- **The criteria used to define pregnancy planning in the DHS and other fertility related studies do not adequately capture the major conditions of Nepalese young couples**

The study revealed that intending to become pregnant and stopping contraception were not sufficient for the respondents to call a pregnancy 'planned' as found in previous studies elsewhere. The study found that mutual understanding between husband and wife, the bearing in mind the future of the child prior to conception, the capability of the parents (both physical, economic), the determination of the parents to have a child and freedom from potential pressures are also important criteria for categorising a pregnancy as 'planned'.

8.1.2 Prevalence and determinants of unintended pregnancy

- **On average, a woman has at least one unintended pregnancy before the age of 24 years**

Amongst the survey respondents, about 85 per cent of women had even been pregnant and 78 per cent of men reported their wife ever having been pregnant. A total of 503 and 156 unintended pregnancies were reported by 412 women and 125 men respectively. About one in two women and one in three men reported at least one unintended pregnancy.

- **Unintended pregnancy higher than estimated from recent DHS data**

This is the first study in the country which has used both conventional and modified definitions of intendedness of pregnancy guided by extensive exploratory methods. The study found that the prevalence of unintended pregnancy amongst currently pregnant women was 43.6 per cent as against the 32 per cent estimated from DHS using a conventional definition of unintended pregnancy. Using a modified definition, the prevalence was 55.8 per cent amongst the same group of women.

- **Despite high prevalence of unintended pregnancy, the abortion rate is low**

Of those respondents who reported unintended pregnancy, about one in 15 women (6.5%) and one in 10 men (8.8 %) attempted an abortion. Most of these attempts were not successful. In most cases, young couples who decided to terminate their pregnancy were unable to carry out their decision, either because they lacked financial resources or because their attempts at self induced abortion failed. Amongst those who went for consultation, one in six women and one in three men were successful in terminating their pregnancy.

- **Amongst men, higher number of living children, living in western regions, higher education, poor household wellbeing, and low self esteem were associated with higher level of unintended pregnancy after controlling for the effects of other factors**

Multivariate analysis shows that the odds of men reporting unintended pregnancy amongst those with three or more children were 2.98 times higher than the odds of men with no living children. Men residing in Kaski district were more likely to report unintended pregnancy than those from Ilam. Men with college and above level of education were more likely to have experienced unintended pregnancy than men with no education. The lower economic status men tend to be associated with a higher level of experience of unintended pregnancy. Similarly, the odds of men with low self esteem reporting unintended pregnancy was double that of men with high self esteem.

- **Amongst women, younger age, higher number of living children, lower ideal family size, living in the western region, higher level of education, low number family planning methods correctly known and poor household wellbeing were associated with higher level of unintended pregnancy after controlling for the effects of other factors**

After controlling for the effects of the other factors, the results show that the odds of women aged 20-24 years reporting unintended pregnancy were 60 per cent lower than women aged 15-19 years. The odds of women reporting three or more children were 5.57 times higher than the odds of women with no living children. The result also show that larger the ideal family size, then lower the likelihood of reporting unintended pregnancy. Women who know five or less family planning methods were more likely to report unintended pregnancy. Women residing in Kaski and Lalitpur districts were more likely to report unintended pregnancy than those in Ilam. The odds of women reporting unintended pregnancy increased with the level of education and lower economic status women tend to be associated with greater levels of unintended pregnancy.

- **Unexpected association between exposure to mass media and unintended pregnancy**

Men and women who have frequent exposure to mass media were more likely to report unintended pregnancy compared with those who were less exposed.

- **Amongst men, an unexpected association between decision making power and unintended pregnancy**

Decision making was a composite score of five variables related to individual's decision making power in the household, fertility control and own health care. Moderate decision making power men tended to be less likely to report unintended pregnancy compared with those reporting no or little power. This finding is difficult to interpret.

8.1.3 Decision making in accepting or terminating unintended pregnancy

- **Most couples do not discuss abortion**

Amongst the survey respondents about three-quarters of men and women reported that they had discussed contraception. However, 84 per cent of men and 73 per cent of women mentioned that they had not discussed abortion during the previous 12 months. The case histories revealed that most couples discussed abortion only when they experienced an unintended pregnancy. Embarrassment and a culture of 'silence' were the main reasons cited for women's reluctance to discuss with their partners and other family members, friends and health service providers in regard to their unintended pregnancy and abortion.

- **A substantial proportion of men and women thought about terminating pregnancy but did not take any action**

Amongst those who experienced an unintended pregnancy, one-quarter of women and over one-third of men thought about terminating the pregnancy; however, of these only half of women and about one-third of men actually discussed with health services providers, friends or family relatives. The majority of women and men did not take any action.

- **Multiple strategies used to deal with unintended pregnancy**

After getting pregnant unintendedly, the majority of women did not take any action and simply carried on with the pregnancy. Some tried to self induce abortion using traditional oral herbs or medicines such as consuming honey, chemical powders, rod tamarind, jaggery, antibiotics, contraceptive pill and so on. Only after failing to induce abortion, some went on to seek abortion services from unskilled providers or 'quacks' using unsafe methods of abortion. The actual procedures used by the untrained providers were dangerous and sometimes barbaric. On some occasions, women also

visited traditional faith healers to abort the pregnancy, especially when oral medicine failed. As a last resort, women visited skilled health personnel for abortion. Generally, before reaching this stage, women had tried one or more unsafe methods of abortion.

- **Multiple factors intervene during the decision making stage, making the process dynamic and situation specific**

Decision making related to whether or not to terminate the pregnancy is mainly dependent on the role of the husband and health service providers consulted. On some occasions, women had initiated an abortion but they could not proceed without the consent of their husbands. Very few women took the decision alone. Women's age and level of education made no difference in making decisions on abortion independently. Instead, women experiencing pregnancies with very short intervals, suspected by their husband for extra marital sexual relationship and facing economic hardships tended to take the decision independently.

- **Husbands play the major role in decision making phase, women have no or little role**

Husbands are generally the main decision makers regarding abortion. Husbands not only play a crucial role in decision making regarding abortion, but are also involved in the whole process of carrying out the decision. In cases where women thought about terminating a pregnancy but they could not proceed their decision without getting permission from their husbands.

- **Health service providers play the major role in decision making phase**

The study shows that health service providers play an important role in the decision making process. More than half of the survey respondents who ever experienced unintended pregnancy and thought about an abortion mentioned that they sought advice from private or public health service providers. In most cases, young couples adhered to the service providers' advice.

- **Mothers-in-laws, sisters-in-laws, parents and friends have little role in the final decision making on abortion**

In some situations, mother-in-laws, family relatives and friends also played important roles, but this was situation specific. The study reveals that a significant proportion of young women consulted their mothers-in-laws, sisters-in-laws, parents and other close relatives regarding abortion but that these had little power in the final decisions. In some situations, such as when they had a dilemma or needed information about easy methods of self induced abortion, or to locate abortion service providers, the young men and women contacted their friends. However, friends did not seem to have a major influence on decision making.

- **Economic issues play a central role together with religious beliefs, social stigma and concerns over future sterility in decision making**

The study also shows that, for most couples, economic issues played a central role in the decision making phase, both in terms of the costs of raising a child and/or the costs of an abortion. Safe procedures were too expensive for some young couples which forced them to continue a pregnancy or to seek less skilled providers or undergo a self induced procedure. Religious or cultural beliefs such as 'abortion is a sin' and 'pressure from the family' also intervened during the decision making process. In addition, social stigmatization concerning abortion and the fear of sterility or other health concerns are also had strongly effects on young couples' decisions.

- **Multiple reasons impacted to delay consultation**

Amongst women who went for consultation with health services providers for abortion, most of them did so in the first trimester. Of those who delayed, the study revealed three main reasons: delay in recognizing pregnancies and communicating to family decision makers, postponing going for consultation and trying to seek care from unqualified abortion service providers.

- **Considering abortion is a 'sinful' act, lack of money, lack of knowledge of abortion service, fear of social stigma and pressure from the family to have child were the major underlying reasons for not choosing abortion**

For many young women and men, more than one factor contributed to their decisions against abortion despite unintended pregnancy. Amongst the survey respondents, one-third of men and one-quarter of women reported that they did not go for abortion because they thought it was a sinful act; a similar finding was observed in the

qualitative data also. Difficulty in affording the cost of abortion and lack of knowledge about where and whom to contact for terminating a pregnancy were other reasons for continuing a pregnancy. Some couples were reluctant to go for an abortion due to fear of social stigma and pressure from the family to have a child.

8.1.4 Consequences of unintended pregnancy

- **Misunderstandings with spouses and family members, depression, worries and mental tension, loss of educational and employment opportunity were the major negative socio-psychological consequences of unintended pregnancy**

Most of the respondents in the in-depth interviews and the quantitative survey believed that unintended pregnancy would affect the young women's relationship with their husband and other family members. The reported real experience of women also confirms these anticipated negative consequences. Depression and mental tension were other major negative outcomes mentioned by the majority of the respondents. Young couples also worried about the restriction of educational and economic opportunities due to unintended pregnancy.

- **Domestic violence, abandonment of an infant, low birth weight baby, less physical and emotional support to the child were not frequently mentioned**

Although a substantial number of respondents in the in-depth interviews reported that domestic violence, abandonment of an infant and less physical and emotional support to the child would be possible negative outcomes of unintended pregnancy, only a very few respondents in the survey and case histories mentioned these outcomes. Many respondents in the in-depth interviews felt that low birth weight, preterm birth and poor infant and child survival were possible outcomes of unintended pregnancy, but the reported real experiences did not strongly support these opinions.

- **Reduced prenatal and postnatal care and resort to unsafe abortion were the major health consequences of unintended pregnancy**

Most of the respondents in the in-depth interviews and a moderate proportion of the respondents in the survey mentioned that women with unintended pregnancies are less likely to go for prenatal or postnatal check ups. However, the case histories revealed

that most women visited health centres for prenatal or postnatal care despite their pregnancy being unintended.

Most of the respondents in the in-depth interviews and a moderate proportion of respondents in the survey felt that an abortion is one of the primary consequences of an unintended pregnancy. Although most of the young couples who participated in this study did not seek abortion, those who did so generally attempted unsafe methods in the first instance.

- **Post-abortion complications and maternal death were less frequently mentioned**

As against the expectations of the in-depth interview respondents, relatively low proportions of the survey respondents reported post-abortion complications. The case histories revealed that those women who had used unsafe abortion methods experienced health complications.

- **Comparatively, higher education and older age group men and women were more likely than their counterparts to perceive negative outcomes of unintended pregnancy**

The survey data showed that the more educated and older men and women were more likely to perceive that unintended pregnancy could have negative consequences. Men and women with higher levels of education mentioned that women with an unintended pregnancy could suffer feelings of low status or oppression. Less educated men and women were more likely to believe that misunderstandings between the spouses may be a consequence of unintended pregnancy.

8.2 Discussion and conclusions

While international attention focuses on unintended pregnancies amongst unmarried young people, for young people in Nepal such events occur overwhelmingly within the context of marriage (Dahal *et al.*, 1993; Tamang *et al.*, 2002; Choe *et al.*, 2004). Despite the rising age at marriage and laws prohibiting marriage before the age of 20 years without the consent of parents, 40 per cent of women aged 15-19 were married (Ministry of Health (Nepal) *et al.*, 2002). Despite a steady increase in contraceptive use,

successive national surveys in Nepal indicate that the prevalence of unintended pregnancy amongst women of reproductive age increased from 25 per cent in 1991 to 35 per cent in 2001 (Ministry of Health (Nepal) *et al.*, 2002). Other community level studies consistently indicate that unintended pregnancy amongst young people aged 15 to 24 years somewhere between 26 to 39 per cent (CREHPA, 1996; Puri, 2002; Tamang *et al.*, 2002). The major limitation of these studies is that they use a conventional definition of measuring pregnancy intendedness which has already been the topic of methodological criticism. There is increasing recognition of problems of validity relating to questions used in national/international studies to elicit pregnancy planning/intentions status (Cleland and Scott, 1987; Cartwright, 1988; Macro International, 1994). An increasing body of evidence suggests that previous definitions of pregnancy intention were not adequate and points to some improved approaches of measurement (Barrett and Wellings, 2002; Gerber *et al.*, 2002). However, these studies were conducted amongst specific groups of people who visited antenatal clinics, so the findings can not be generalised to the general population. Therefore, one of the questions of this research was to explore the meaning of terminologies related to pregnancy intention and used both conventional and modified definition to measure unintended pregnancy.

The results of this study indicated a discrepancy between current frameworks for understanding terminologies related to pregnancy planning intentions and the beliefs of young couples in Nepal. The results corroborated to some extent recent work elsewhere on this topic and indicated the possibilities for further improvement. For example, the criteria for 'planned pregnancy' were somewhat similar to Barrett and Wellings's (2002) study conducted in the United Kingdom; however, the present study added some more criteria. Barrett and Wellings found that partner agreement and reaching the right time in terms of lifestyles were also important, together with intending to become pregnant and stopping contraception. The present study found that mutual understanding between spouses, thinking about the future of the child prior to conception, the physical and economic capabilities of the parents, and the determination of the parents to have a child and freedom from pressure, are also important. This result suggests that Nepalese people define the terminologies related to pregnancy intentions in different ways from those used in earlier major studies, such as the DHS. The DHS only considered timing of childbearing as the criterion of being mistimed, unwanted or

unintended. The present study clearly suggests that these conventional criteria to measure pregnancy intention are inadequate. Suitable modifications to measurement would help to improve public health and clinical programmes aimed at preventing unintended pregnancy. Some suggestions on actual questions with specific wording are presented in the research recommendation section of this thesis.

8.2.1 Prevalence and determinants of unintended pregnancy

Researchers and policy makers believe that programmes should be designed to reduce the problems associated with unintended pregnancy and induced abortion by addressing the needs of high-risk groups, where these can be identified. Therefore, one aim of this investigation was assess the extent of the problem and identify the risk factors for unintended pregnancy amongst young couples in the sample through multivariate analysis. To document the prevalence of unintended pregnancy more accurately, the present study used both conventional and modified definitions of unintended which were guided by an extensive exploratory research. This study found a high level of unintended pregnancies compared with the Nepal DHS 2001. This study revealed that in addition to timing of childbearing, some intermediate demographic outcomes, inter-personal factors and personal factors are also very important to consider in order to appropriately measuring unintended pregnancy.

The probability of having an unintended pregnancy is significantly higher amongst women aged 15-19 years with higher numbers of living children and smaller size of desired family size. This finding was not surprising because younger women want smaller families than older women. Another reason is the low use of contraception amongst young women (33 % amongst women aged 15-19 VS 49 % amongst young women aged 20-24 years). In-depth interviews revealed various barriers including reluctance to ask husbands about using contraceptive methods and feeling shy to obtain them. The association between number of living children and unintended pregnancy could be explained by the fact that the decline in desired family size in Nepal has resulted in an increase in exposure to the risk of experiencing an unintended pregnancy. As fertility preference declines, the number of years between the completion of a woman's desired family size and the end of potential childbearing rises, thus leading to an increase in the time during which unintended pregnancy can occur. However, it

could depend on when woman enters the reproduction phase and when she is exiting (through sterilization).

Another important findings of this study is the association between contraceptive knowledge and unintended pregnancy amongst women. Just knowing the names of the contraceptive methods was not associated with unintended pregnancy, but the number of methods correctly known was independently associated with the likelihood of unintended pregnancy. Women who knew five or less methods correctly were more likely to experience unintended pregnancy than those who knew six or more methods correctly.

Respondents from Kaski and Lalitpur districts (western region) were more likely to report unintended pregnancy than those from Ilam and Morang (eastern region) of the country. One reason for this observation may be due to cultural differences between these districts. Ilam and Morang districts have low mean age at marriage compared with Kaski and Lalitpur, and early childbearing is not considered as problem for the family. This suggests that family heath programmes need to be culturally appropriate.

One of the issues that may arouse readers' curiosity is the finding that variables such as maternal education and household economic status do not always show the expected effect: an inverse relationship with the odds of having unintended pregnancy. Women and men who completed secondary or higher level education had higher odds of reporting unintended pregnancy. This is a confirmation of a similar finding from a study conducted in Nigeria and from a cross national study in six developing countries (Westoff, 1981; Okonofua *et al.*, 1999). One explanation for this occurrence could be that, as fertility controls comes within a person's calculus of conscious choice, and as people become more aware of the desirability of family planning, the individual may come to expect every birth to be a result of careful planning. When the expectation is not met, the informed individuals - that is, those who believe that they could have controlled the timing or number of their children - are more likely to report unintended pregnancy than respondents who do not believe that issues of fertility can be under their conscious control. In developing countries, the people who are likely to catch the vision of family planning earliest are the more educated, and may be more likely to report unintended pregnancy than those in lower educational status. Another possible explanation would be that better educated couples who have stronger motivation than

uneducated couples to prevent pregnancy were not using contraceptives. Although data from this study suggest that there is no significant difference is contraceptive use amongst women with no education and high level education.

Although it is difficult to establish casual associations in cross sectional studies, the results reveal that those who had regular access to mass media were more likely to report unintended pregnancy. One explanation could be that exposure to mass media widens the peoples' horizons and may enhance individuals' capability of making informed choices and/or motivation for small family norms. However, these possibilities would need more research to explore further.

Interestingly, there was no statistically significant difference observed between rural and urban participants in reporting of unintended pregnancy. As expected, the results revealed that men with low self esteem were more likely to experience unintended pregnancy compared with those who have high self esteem. Men who have moderate decision making power were less likely to report unintended pregnancy than those who have no power. Interestingly, these two variables were not statistically significant for women. This indicates that if one of the partners has moderate decision making power then it has some positive implications on preventing unintended pregnancy. But the results are not very conclusive.

As against expectation, son preference is not statistically significant in this analysis, but it should be mentioned here that most of the respondents covered in the qualitative study felt that it is one of the key factors involved in unintended pregnancy in their communities. Previous studies conducted in Nepal and India documented strong sex preference (Griffiths *et al.*, 2000; Leone *et al.*, 2003). This requires further research.

Birth interval is identified as being one of the major factors of unintended pregnancy in the literature. However, this study did not collect birth interval data due to logistic problems associated with it. The main problem of collecting birth interval data is inclusion of pregnancy history related questions in an individual questionnaire. Since collecting pregnancy history data is very time consuming and, given the time frame and limited resources available to this study, it was decided not to include these questions in the survey. Including birth interval data could improve the results in future studies.

In conclusion, unintended pregnancy amongst young couples is very high. The results clearly suggest that certain group of young couples have heightened risk of experiencing unintended pregnancy. One of the implications of this result in the coming years at the societal level is - if the current trend continues fertility may not decline to replacement levels in Nepal very soon. A programme that aimed to prevent unintended pregnancy should target such sub groups of couples. The results also revealed that younger couples with higher level of education, and higher exposure to mass media were more likely than their counterparts to report unintended pregnancy. These results suggest the 'transition phenomena in pregnancy intention' in developing countries like Nepal where total fertility is still high and the desired fertility is falling rapidly. Whereas, young couples are increasingly beginning to realize that they could control their fertility but family planning services are not reaching according to their needs for these young couples to translate their thinking into real life.

8.2.2 Decision making process

This research also covered the decision making process in accepting or seeking termination of unintended pregnancy. The results revealed that inter-spousal communication on pregnancy planning and abortion issues is very rare. Young couples are also very reluctant to talk with other family members, friends and health services providers when they experience unintended pregnancy. Considering socio-cultural context and the low status of women, the finding is not surprising. This suggest that, despite 45 years long history of family planning programmes in the country, the programme have not succeeded in communicating messages to encourage young couples to discuss openly and plan in their fertility.

The study revealed that men are the decision makers on fertility regulation. Young women often get pressure from mothers-in-law or other relatives to get pregnant immediately after marriage to secure their marital relationship. This kind of risk forced these women to accept pregnancy immediately after marriage even if they did not want to. This finding indicates that only providing contraceptive methods are not adequate to prevent unintended pregnancy amongst young women, socio-cultural practices associated with having children also need to be addressed.

As abortion is such a sensitive topic, the level of induced abortion is difficult to measure directly. This analysis shows that, despite high level of unintended pregnancy amongst young couples, very few of them went for abortion. There are no population based prior estimates available in the country, so it is difficult to say to what extent the estimates of the present study are accurate. It is unlikely that the present study identified every abortion in the community during the study period. Some of the abortion cases, particularly those carried out clandestinely or those hidden from husbands and other family members, are likely to have been missed. Thus, the generalisability of this finding may be limited. However, one of the explanations for the low prevalence of abortion is that respondents for the present study were young, so most of them wanted to *postpone* childbearing *rather* than limit. Therefore, despite considering a pregnancy unintended, many young couples decided to continue their pregnancy. Health concerns after abortion such as infertility could have discouraged women from terminating a pregnancy in young age. Similar findings have been found in Indian studies (Ganatra and Hirve, 2002; Johnston, 2002)

The study revealed that couples use multiple strategies to deal with their unintended pregnancies. These strategies ranged from trying self induced abortion, seeking abortion services from unskilled providers, including traditional faith healers, through visiting skilled health personnel for abortion. The picture that emerged from the study is that a substantial number of women are using or attempting to use unsafe abortion methods to terminate their unintended pregnancy. Before reaching trained personnel, young women had already tried one or more methods of unsafe abortion. This finding is well supported by earlier studies in Nepal and its neighbouring countries. The data also showed that women who received support from the husbands and family members, and also can afford to visit private doctors, were more likely to go for safe abortion. These results highlight the need of supportive role of husband and family members in accessing safe abortion services. It also suggests an urgent need for awareness campaigns for preventing unsafe abortion amongst young women.

Although only a few of the respondents mentioned post-abortion complications in this study, an earlier study estimated that more than half of the maternal deaths in Nepal are due to abortion complications (Thapa *et al.*, 1992). Although abortion has been made available in selected government hospitals only very recently, there is a risk that women

face difficult social environments and that the subordinate status of women does not allow them to access the services. Opinion poll surveys showed that over 70 per cent of Nepalese do not know that women have a legal right to abort a pregnancy and that services are available from the government hospitals (CREHPA, 2002). Initiatives are required to bridge these information gaps so that women take full advantage of the legalisation of abortion.

As expected, the study revealed that husbands are generally the main decision makers regarding abortion. Husbands not only play a crucial role in decision making regarding abortion, but are also involved in the whole process of carrying out the decision. On some occasion, women took the decision alone, but this occurred only when they knew that the husband would not consent to terminate a pregnancy. This is consistent with results from studies conducted in India and Bangladesh (Begum *et al.*, 1978; Ahmed *et al.*, 1997; Hossain *et al.*, 1997; Akhtar *et al.*, 1998; Ganatra and Hirve, 2002; Khan and D'costa, 2002). In contrast to previous research, women's age and level of education did not affect the likelihood of women making a sole decision. Instead young women, those with very short birth intervals, and/or who think that the husband could suspect her of having an extra-marital sexual relationship and/or facing economic hardship may take the decision independently. Health service providers also play an important role in the decision making process on abortion. A significant number of women discuss with their mothers-in-law, sisters-in-law, parents, other close relatives and friends about terminating a pregnancy but these have little power in final decision. This suggests that men and health service providers have a crucial role to play in preventing unintended pregnancy and seeking or suggesting safe ways of terminating a pregnancy.

The study identified several hurdles which contribute to limiting women's access to safe abortion services. First, lack of knowledge amongst young couples particularly on the legal provisions and sources where they could obtain safe abortion services. As a result, either they do not use the services or they seek the procedure at a late stage. The study revealed that, in many cases, they have to under go D & C procedure to terminate their pregnancies which is considered to be a risky method compared with MVA[1] or medical abortion - a technique administering pharmaceutical agents, such as misoprostol and mifepristone. Second, religious sensitivity and the social stigma attached to abortion has

[1] Manual Vacuum Aspiration (MVA) is performed with the use of a handheld syringe as a source of suction for removing uterine contents.

so far discouraged couples and families from seeking abortion service. Finally, lack of money is another major barrier for couples not to terminate a pregnancy from qualified personnel.

In conclusion, within the family, there are many factors that prevent young women from terminating their unintended pregnancies. One is the lack of control of women over their reproductive behaviour in the context of gender disparity. With all the decision making power laying with men, such young women have hardly any option but to accept unintended pregnancy. Introduction of these issues in a country where young women have little say in most matters is a major challenge. A *civil* right to abortion does not necessarily amount to social right; as mentioned earlier abortion is not only a legal issue but it also covertly webbed in social, moral and religious contexts. Therefore, unless the issue is placed and addressed within the larger framework of women's empowerment, legalisation will be only a curtain behind which unsafe abortion would continue to thrive. To make people aware of the consequences of late termination of pregnancy, unsafe abortion practices and enhance the utilization of the recently available facilities, the health managers and promoters have to find a way to disseminate information about safe abortion services and the sources where these can be obtained.

8.2.3 Consequences of unintended pregnancy

Another research question was concerned with attempting to understand the consequences of unintended pregnancy. The data presented in Chapter 7 demonstrate that unintended pregnancy can have serious negative consequences. These consequences are not only confined to young couples; in fact, unintended pregnancy carries serious consequences for families, new born babies and societies. First, unintended pregnancy can lead to abortion. The majority of the respondents of the in-depth interviews and a moderate proportion of the survey and the case histories respondents mentioned unsafe abortion as one of the consequences. This is not a new finding; earlier studies have well documented this phenomenon. What is new in this context is the wide range of methods used for abortion; a number of myths and misperception such as taking hot food, crimson colour, raw tamarind, *gahat* (a kind of serial), spoilt milk, prevailed amongst young women.

Second, previous studies have attempted to measure the impact of a pregnancy's intention status on a wide variety of child and parental outcomes (Baydar, 1995; Brown and Eisenberg, 1995; Marston and Cleland, 2002).; these show that unintended pregnancy can carry appreciable risks for children, women, men and families. The present study strengthened these results. Although the real experiences did not strongly support the hypothesis that women with unintended pregnancy are less likely to go for antenatal and postnatal care, the majority of the respondents of the in-depth interviews and the survey expected this consequence. This suggests that prenatal or postnatal care not entirely depend on pregnancy intendedness. Similar contradictory findings have been observed in the case of birth weight of baby, emotional support to the child.

Third, even if most unintended pregnancies did not end up in abortion, it is quite apparent from the analysis that young couples could face profound negative socio-psychological consequences as a result of unintended pregnancy. Depression and mental tensions, bad relations with spouse and relatives, and restrictions on educational and employment opportunities leading to poverty were the major consequences experienced by the respondents. This suggests that, even where young couples do not choose the option of terminating pregnancy, they need counselling services which can reduce their depression and mental tension and improve the relationship with their spouse as well as increasing their self esteem.

In conclusion, the consequences of unintended pregnancy are of great concern to the study participants. Even though the laws have been liberalized, many factors, including couples' ignorance about the law, service, cost, religious beliefs, costs and health concerns of mother, can pose important obstacles. This clearly implies that abortion services should not only be available, but also affordable and accessible, and efforts are required to de-stigmatise abortion. Considering the complexity of these forces, no single or simple remedy is likely to solve the range of problem, particularly because the interrelationships amongst all of these factors are not well understood. Nonetheless, the information obtained in this research, along with past experiences in the public heath sectors of addressing complex health and social problems, are all helpful in developing a plan of action to address this important national problem. The ICPD Programme of Action states that: "Prevention of unwanted pregnancies must always be given the highest priority". Because not all unintended pregnancies can be prevented, however,

health promotion strategies must address the problem of unsafe abortion. Only then will we make significant strides in ensuring women's rights to have children when they want and to avoid childbearing when they do not.

8.3 Recommendations

Several recommendations emerge from this research; these are divided into two main categories - programmatic and the area of future research.

8.3.1 Programme recommendations

- **Develop IEC materials in local languages**

The study documented wide ranges of local vocabularies were used for 'pregnancy' and 'abortion' and from one community to another. Therefore, any programme including IEC materials that aimed to prevent unintended pregnancy should use terms that are familiar to men and women and must build upon cultural context. One way of doing this would be decentralize the IEC materials design authority to the district level. The main purpose of the IEC materials should be designed to encourage young couples to plan their pregnancy, avoid abortion and use safe abortion services if required.

- **Scaling up family planning services**

Analysis shows that number of contraceptive methods correctly known was strongly associated with unintended pregnancy. Knowing only the name of methods does not have any impact amongst young couples. Therefore, functional knowledge of all the family planning methods should be provided to inform choice in order to prevent unintended pregnancy. It is clear from this study that particular groups of young couples such as young age, more than two living children, lower number of desired children, poor, and low self esteem, are at significantly elevated risk of unintended pregnancy. Thus, scaling up family planning services tailored to their needs is required.

- **Empower women and educate family members**

The finding suggests that socio-cultural barriers such as sex preference, social shame or culture of silence are limiting young women's ability to consult/discuss unintended pregnancy and abortion with their husbands, family members, friends and health service

providers when needed. Young women often required permission from their husbands, mothers-in-law or other relatives to visit health facilities for their own health care. The low status of women and the inability to negotiate with their husbands and family relatives are contributing factors for unintended pregnancy and unsafe abortion practices. Programmes that encourage inter-spousal communication and enable young women to take their own decisions in all areas of life including those related to reproductive right independently are required. Programmes that aim to educate family relatives and husbands to allow them to decide and also make them aware about the advantages of involving women in the decision making are required. These can be achieved through community level health workers or community based groups such as young mothers' groups, forest users groups and other consumers' groups.

- **Educate the public about the major public and social burdens of unintended pregnancy**

The results clearly suggest that unintended pregnancy amongst young couples is a major public health problem in Nepal. It has a significant impact on couple's health and their wellbeing. Because of unsafe abortions, with the limited resources of the government, hospitals have to deal with post-abortion complications. Therefore, public education on this matter is required. Given the low status of women, programmes must target not only young married women but also family decision makers such as husband and mothers-in-laws. Appropriate IEC materials should be designed to reach young married couples, pregnant women, antenatal attendees, mother of children under five years. Such campaigns can be integrated into existing national health information and communication centres under the Ministry of Health.

- **Integrate public education and advocacy campaigns against unsafe abortion into existing reproductive health programme of the Ministry of Health**

The analysis demonstrates that couples used various unsafe methods for abortion. Methods ranged from obtaining various abortifacients from pharmacists or herbs from traditional faith healers, and trying to self induce using home remedies, to contacting unskilled abortion providers and undergoing dangerous procedures. To inhibit young men and women from these practices, comprehensive public education and advocacy campaigns against unsafe abortion should be launched under the ongoing reproductive

health programme of the Ministry of Health. Such programmes should ideally include the following activities.

- Educate young couples especially women about the health impacts of unsafe abortion
- Impart knowledge to young couples on safe and unsafe abortion. Information such as that abortion should be avoided if possible, and should not be considered as a substitute of contraception, should be included. However, messages should also cover the evidence that abortion is very much safer than giving a birth if done in the early stage of pregnancy (before 12 weeks of pregnancy) by trained personnel.
- Raise awareness of the recently legalized abortion law. Details on abortion which is still punishable by law should also be given. Cost effective media channels such as radio, TV and news papers can be used for dissemination of information
- Give messages about planning pregnancies, avoiding abortion and, if needed, going for safe abortion services
- De-stigmatization of abortion is also necessary. Analysis suggests that a religious belief such as abortion is a 'sinful act', social stigmatization and family member's opposition concerning abortion are impeding women from terminating their pregnancies. Although it will take time to change the cultural beliefs, efforts should be made. Organizing sensitization workshops to the religious leaders, community level stake holders are the one ways of implementing it. Various religious events such as '*Saptaha*' or '*kotihome*' can be utilized through such religious leaders.
- Sensitise unskilled health service providers including traditional faith healers and develop timely referral mechanisms in appropriate health facilities for when couples consult about unintended pregnancy or abortion. Discouraged unskilled health service providers for carrying out termination of pregnancy.
- Organize sensitization meetings, advocacy workshop for local authorities and other stake holders at the district and community levels. One of the opportunity to sensitise these stake holders could be orientation training organized by Ministry of Local Development under the decentralised programme in certain interval of time.
- Promotion of talk programmes and debate competitions on abortion related issues in secondary schools and colleges
- Empowerment of women is required to address the gender discrimination especially on sex preference

Various channels or strategies can be adopted to implement these recommendations. For example, programmes related to raise public awareness or sensitisation could be

implemented through involving frontline health workers/volunteers such as village health workers, trained birth attendants, female community health volunteers, mother's groups, auxiliary nurse midwife, and maternal child health workers. Other needs comprehensive response through National Health Service or educational system of the country. INGOs/NGO or community based organizations who are implementing reproductive health programmes could be encouraged to integrate some of these activities.

- **Provide safe abortion and make it accessible, affordable**

No forms of contraception, not matter how widely they are used can replace the need for abortion. A recent study showed that increased contraceptive use alone was unable to meet the growing need for fertility regulation in situations where fertility was falling rapidly (Marston and Cleland, 2003). This study also documented that couples have faced unintended pregnancy and tried for abortion despite using contraception. It also found that cost of abortion and location of the service forced young women to continue a pregnancy or seek less skilled providers. Therefore, safe abortion services should be accessible and affordable. Involving staff nurses for early termination of pregnancy at primary health centres and setting up a transparent affordable cost for abortion should be implemented. Possibilities of introducing medical abortion should be explored.

- **Provide emergency contraception**

The findings suggest that a number of couples reported that they were using traditional methods of family planning. Although it will take time to replace traditional methods with modern, efforts should be continued. During the in-depth interviews, respondents reported their pregnancy happens 'all of sudden' or 'accidentally' or by 'mistake'. Therefore, emergency contraception can help to prevent unintended pregnancy amongst couples who are relying on traditional methods of contraception and do not want to use modern methods of contraception. Increasing knowledge and availability of emergency contraception amongst young couples is required.

- **Increase the involvement of men**

The results show a vital role of men in the decision making on whether or not to use contraception and/or terminate a pregnancy. They also have a significant role in

choosing service providers for abortion, and providing financial and emotional support to women. Therefore, men should be equally informed about the dangers of unsafe abortion and fully involved in the use of family planning. Programmes have ignored men in preventing unintended pregnancies in Nepal until recently. The government has recently recognised this and included men in the recently developed reproductive health strategies. Many NGOs now run reproductive health programs which encourage men to recognize their equal responsibility in all aspects of sexuality: decision-making, obtaining and using contraception. We need to examine what works and what doesn't, before the projects can be scaled up and expanded to wider areas.

- **Provide counselling services to those couples who are facing or likely to face unintended pregnancy**

The research pointed out that most young couples experience depression and mental tension and are worried about educational and employment opportunities due to unintended pregnancy. This may affect the health of the mother and the new born baby. Mental health consultation needs to be available for those couples who face unintended pregnancies. Health professionals should explore factors, such as psychological distress and low self-esteem, which may have contributed to, or resulted from, the unintended pregnancy. Through the therapeutic process, it is important to enhance the coping ability of young women to equip them with ways to prevent future unintended pregnancies. Antenatal check up services could be capitalized upon for such services to women. A special counselling service for newly married couples could help in reducing unintended pregnancy.

Health service providers need to be trained to recognise that young married women are a high risk group and offer them information, counselling and services, taking into consideration women's relative lack of mobility and power inside and outside homes.

- **Culturally appropriate, effective reproductive and sexual health education should be developed and implemented**

Culturally appropriate, effective "reproductive and sexual health education" should be developed and delivered to young people. Such activities should be provided through the basic educational system and activities, as well as through other innovative

mechanisms such as non-governmental organization-sponsored youth clubs (for out of school young people). The educational content should include topics of relationship, basic reproductive anatomy and physiology, sexual development, marriage, sex and sexuality, negotiations skills, gender issues, value clarifications, harmful practices, contraception, pregnancy and abortion. Such education builds skills and equipped young people to deal with problem when arises. Recently, the school based curriculum has been modified and 25 master trainers were trained on how to teach sexual health education in the school in initiation of curriculum development centre, Ministry of Education with technical support from Safe Passages to Adulthood Programme, University of Southampton and SOLID-Nepal (a Nepalese NGO). The revised curriculum should be used in a few districts and should be expanded if found to be practical and to show positive results. However, some challenges are expected at the implementation level. Some groups can be expected to fear that providing knowledge about sexual health and making related services available might lead to increased promiscuity and loss of parental control. Perhaps there isn't a great deal of disagreement on the need to provide some sex education to young people, but public opinion will vary widely on related issues: What is the appropriate age for sex education? What types of information should the curriculum include? Who should provide instructional services? How to provide logistic and training support? How to reach the out-of-school young people? It is important to recognize that there is no one silver bullet to fix all these problems, it will take some time but efforts should be made. The role of media is important in this context.

8.3.2 Research recommendations

- **Definition of terminologies related pregnancy intentions should be modified**

The study suggests that the Nepalese people define the terminologies related to pregnancy intentions in different ways from those assumed in most surveys. The criteria used for wanted, unwanted, intended, unintended, planned and unplanned in earlier studies are inadequate. Therefore, definitions of these terminologies should be revised and modified definitions should be used in further research in this area. The following criteria could be included in the definition which aims to measure unintended pregnancy in future:

- Whether or not the couple were using contraception at time of conception

- Whether or not the couple have prior mutual agreement to have a child
- Whether or not couples were determined to have a child before pregnancy
- Whether or not the couple think that is the right age for childbearing
- Whether or not the pregnancy is due to pressure from spouse or family members
- Whether or not the pregnancy was wanted then, wanted later or not wanted at all (conventional criterion)

- **Revisions needed in conventional research instruments**

It is evident from the study that the terminologies related to pregnancy intentions that were used in the past are not only difficult to understand and describe easily by the Nepalese people, but also rarely used. Comparatively, more respondents used the words intended or unintended than planned, unplanned, wanted or unwanted. Therefore, terms understandable to the respondents should be used in research protocols in future research.

- **Research on levels, trends of abortion required**

Abortion was illegal in the country until recently, so no population based data are available for the country. This study revealed a low prevalence of abortion amongst young married couples. This could be due to many reasons including young couples wanting to postpone the childbearing rather than limiting. Now abortion is legal. It is very important to collect, update and analyse abortion data in the country. Direct estimates of abortion prevalence are likely to face some problems in some years to come due to no proper information recording system. Therefore, an indirect estimate of abortion prevalence and its trend using residual, complications, rumours methods are required monitor the future changes on abortion practices.

- **Further research on the relationship between mass media, sex preference and birth interval and unintended pregnancy in prospective in nature required**

This research indicated that men and women who have had regular access to mass media were more likely to experienced unintended pregnancy than those with none or

low exposure, after controlling the effect of other variables. Similarly, despite strong support for son preference as a reason for unintended pregnancy from the qualitative data, this effect in the quantitative was not statistically significant. Therefore, further research is required to on these issues. Including birth interval data in the analysis of identifying factors affecting unintended pregnancy can increase the value of the results. A retrospective study such as this might be generating biased results, as feelings about pregnancy may change throughout the gestation period as well as after the birth. This type of study also can not establish an association. Furthermore, this study would not be able to cover all intervening factors with decision making related to abortion due to recall lapse. Therefore, prospective studies which actually follow up pregnant women throughout the gestation periods could avoid such problems.

- **Investigate gender roles and life skills that affect reproductive health of young married women**

Research is needed that explores the ways in which gender roles/expectations and power imbalances in family structures affect young married women. Research is needed to examine ways in which social constraints make young women particularly vulnerable and unlikely to exert choices for motherhood. This research has suggested that young couples face problems in accessing information and services, in making decisions about fertility, contraception and unintended pregnancy. Further research is also needed to identify the circumstance under which young women may be able to exercise greater autonomy in these matters.

- **Antenatal and postnatal care seeking behaviour in unintended pregnancy should be investigated**

Although this study indicated that prenatal care and postnatal care does not depend on the pregnancy intendedness, the results are not generalisable due to small number and the qualitative nature of the data. Researches conducted in other countries have shown mixed results. Therefore, prospective studies looking at the association between pre and postnatal care and unintended pregnancy is one of the important areas for future research.

8.4 Major challenges

There are many challenges ahead in implementing recommendations made in this thesis. These can be broadly grouped into four: socio-cultural, managerial, financial and political conflicts and social unrest. The socio-cultural challenges include: religious restrictions and cultural taboos, especially on women's ability to make choices about their reproductive lives, communities' indifference or lack of appreciation of the programmes; low level of community participation; conservativeness and low self-esteem amongst women and men in the societies. For example, introducing sexual health education to the school is still a subject of controversy at the community level, sometimes teachers and implementing agencies themselves are reluctant. Providing 'abortion rights to women' is another debatable topic and challenging task. Programmes that aim to provide this service may have to face many the challenges such as access to safe abortion service, skilled human resources and advocacy including strong religious beliefs and cultural practices against abortion services.

The managerial constraints includes lack of conceptual clarity and adequate skills of service providers at all levels in dealing with young couples' issues, inadequate information and communication materials and limited exposure of services to information and services pertaining to young couple's reproductive and sexual health and lack of proper monitoring and evaluations systems. Most of the obstetrics and gynaecologist are concentrated in the major cities and there is lack of trained doctors and nurses at the district and lower level health facility. Moreover, lack of sufficient equipment in the district level and limited hospitals equipped with MVA units and the high prevalence of 'quacks' could be major challenges to implementing some of the programmes recommended above.

The third major challenge is the financial. There are three basic sources that support reproductive health programmes in Nepal: government budgets, donors, and individual users. Reproductive health programmes in Nepal are heavily rely on the support from external donors. Moreover, most of the NGOs in Nepal are dependent on donor funding for the introduction of new programmes. Almost all NGOs face some difficulties in programme expansion, continuation and sustainability due to the financial constraints. The reinstated of global gag rule by the United Sates that inhibits overseas groups receiving U.S. family planning funding from discussing, advocating, or providing

abortion counselling or services, even if the groups use non-U.S. funds, poses financial challenges for implementing any recommendation related to improving the reproductive health in many countries. Nepal is no exception to this; rather it could be badly affected in its provision of basic reproductive health for its people.

Finally, ongoing political conflicts and social unrest could undermine the effective implementation of any programme in the country. There is no one 'magic stick' which can fix all these challenges but we need to initiate, learn from the past and face the challenges ahead.

8.5 An overview of the major contributions of the research

The contribution of this research can be divided into two areas - reflecting the broader and the local contexts. A primary contribution of the research in the broader context is that it demonstrates the problems involved in the conventional definition of measuring pregnancy intentions, and suggests some alternative means of measuring them. The alternative definitions provided in this thesis address most of the methodological criticisms raised in recent years regarding the measurement of pregnancy intentions. For many years, pregnancy intention has been used as the basis for forecasting fertility, and as a means of estimating the unmet need for contraception. Both these measures could be improved through the use of the alternative definition(s). This can be regarded as a major practical contribution that may enable improved theorisation in the future in this most important area. Further, the research demonstrates how a mix of research methods was essential in order to achieve this outcome, especially in such sensitive areas as unintended pregnancy and abortion.

Despite there being a large number of young couples in Nepal, no intensive research has thus far been conducted to address the issue of unintended pregnancies and abortion. This research addressed the dynamics of unintended pregnancies and the measurement and definitional challenges, and explored the demographic and psycho and socio-cultural factors that are associated with incidence. Thus, a further contribution of the research in the local context is that it helps to fill some major knowledge gaps in this area. The research provided high quality data that can be used to contribute to improving the ways in which young couples and society in general deal with unintended pregnancies and abortion issues, and will help to bring these issues to the attention of

policy makers and programme planners. Moreover, it highlights the programmatic implications, suggests strategies for implementation, and highlights some major challenges as well as areas for future research. The study findings will also be very useful in refining national reproductive health policy and strategies for young couples' reproductive health, both for the government as well as the NGOs/INGOs and other private organisations working in this area in Nepal.

Since the study coincided with the legalisation of abortion in the country, the data obtained can serve as a baseline to enable comparison of changes over time as the implications of the new legal position are manifest.

8.6 Final reflections

The findings generated from this research paint a picture of the problems of unintended pregnancy amongst young couples in Nepal where age at marriage is low, accessibility, affordability and acceptability of contraception is a problem and abortion was illegal for many centuries and has been legalized recently. The study clearly suggests that unintended pregnancy occurs largely within the early years of marriage in Nepal. In a country like Nepal where contraceptive choice and use are limited, abortion forms a part of fertility regulation either to limit or postpone births. Unsafe abortions are more likely to be sought by poorer, less educated and less knowledgeable couples. Lack of financial resources, socio-cultural practices and the low status of women are hindering young married women from seeking safe abortion services. Various factors intervene during the decision making process that make it dynamic and situation specific. The findings reconfirm some of the earlier findings on the consequences of unintended pregnancy, and identify some new consequences which had not been documented before.

This study has some limitations. This study explored past behaviour, which leads to possible reporting bias due to recall problems. In addition, the study sample could not be made nationally representative due to the security problem in travelling to mid-western and far western region of the country, the limited resources and time available. Some of the results presented in this thesis are based on the qualitative findings which are based on purposively selected sample. Moreover, given the sensitive nature of the topic, studies attempted to collecting information on unintended pregnancy and abortion histories have to deal with problems of

underreporting. This study is no exception to this problem. It is possible that some unintended pregnancy or clandestine abortions, particularly amongst those who never informed their husbands or other family members, may still have been missed. However, some strategies employed such as the use of mixture of research methods, the modification of survey questionnaires after extensive exploratory research, the rigorous training of interviewers, allocation of adequate time in building the rapport with respondents and provision of repeated visits, on site supervision and feedbacks may have helped to minimize some of these problems.

Although the study has some methodological limitations that inhibit generalisation of the findings, I believe that most of the findings depicted in this thesis have important programme and policy relevance not only for the country, areas or community where the research took place, but for institutions working worldwide to improve young couples' reproductive health in similar socioeconomic and cultural settings. This research provides some broader lessons to all those concerned with women's health advocacy and with the advancement of reproductive rights.

Barriers to conducting research on unintended pregnancy and induced abortion are many, and range from institutional hostility to women's refusal to answer questions during the fieldwork. The fieldwork was conducted during the time of the Maoist-government conflict, which has already taken about 10 thousands lives in the past eight years in Nepal. The research team was fortunate in the sense that there was a cease-fire between the government and Maoists during the fieldwork periods. Even then, it was not entirely safe to travel to remote villages to conduct individual interviews. However, the research team did not face any major problems. The study team were warmly welcomed by the respondents and extended their support during the fieldwork. There is no reason to believe that the findings of this study were affected by the situation. Therefore, I believe this study brings forward the reality of unintended pregnancies and induced abortions and generally represents a true picture of much of the country at this point in time.

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Annexes

Annex I. Map of Nepal showing study areas: Young person's pregnancy study in Nepal, 2003

Annex II. Estimated sample size with different level of target precision and confidence interval: Young person's pregnancy study in Nepal, 2003

Assumed prevalence+	Target precision	CI	Estimated sample size in random sample	Adjusted for design effect (assuming 2 is the design effect)	Adjusted for refusal and non response rate (15 percent)	Households to be covered (assuming 0.30 young married women in a household)
23	± 5	95	272	544	640	2133
23	± 5	90	192	384	452	1506
23	± 4	95	425	850	**1000***	**3333***
23	± 4	90	299	598	704	2344
23	± 3	95	755	1510	1776	5921
23	± 3	90	532	1064	1252	4172

* *Proposed sample size*

\+ *Based on the proportion of young women ever had experiences of unintended pregnancy estimated in DHS Nepal, 2001*

Annex III. An example of sampling frame for first stage sampling: Young person's pregnancy study in Nepal, 2003

District	VDC	Ward number	Household number	Cumulative Household	Selected VDC/Ward
Ilam	1	1	161	161	
Ilam	1	2	157	318	156
Ilam	1	3	174	492	
Ilam	1	4	129	621	
Ilam	1	5	126	747	
Ilam	1	6	118	865	
Ilam	1	7	84	949	
Ilam	1	8	104	1053	
Ilam	1	9	113	1166	
Ilam	2	1	94	1260	
Ilam	2	2	184	1444	
Ilam	2	3	98	1542	
Ilam	2	4	50	1592	
Ilam	2	5	107	1699	
Ilam	2	6	220	1919	
Ilam	2	7	89	2008	
Ilam	2	8	91	2099	
Ilam	2	9	149	2248	
	.	.			
	.	.			
Ilam	Muni-1	1			
		2			
		.			
Morang					
Chitwan					
Lalitpur					
Kaski					
Total number of households				366367	

Selection interval (I) = total cumulated households/the required number of clusters i.e. 366367/124 = 2955. Assuming that the random start at 156, the first cluster chosen is the one whose cumulate is smallest number exceeding 156. The second was selected by adding 156 to Selection interval or 156+ 2955=3111. In this way, 124 clusters were selected.

Annex IV. An example of sampling frame for second stage sampling: Young person's pregnancy study in Nepal, 2003

Cluster	Household number and head of the household (Updated in the field)	Selected household
1	01	
	02	
	03	
	04	04
	05	
	06	
	07	
	08	
	09	09
	.	
	.	
	70	
	.	
	.	
	100	
	.	
	.	
	124	
Cluster 2		
.		.

Sampling interval (I) 125/27 = 4.63.

Withdraw a lottery, which has number one to five. Suppose, number four is selected then the first house will be number four listed in the list. For the second household will be selected by adding 4.63 to I, or 4+ 4.63 = 8.63, means household nine is selected. And continue the exercise until 27 households are selected.

Annex V. Questionnaires for free listing with young married women (aged 15-24 years) and men (aged 15-27 years), community leaders and health workers: Young person's pregnancy study in Nepal, 2003

Ice breaking questions

What are all the good and bad things about the health services available in this area?"

1. What are all the terms used for "Pregnancy" in this area/community?
   (Please try to get meaning attached to each term)

2. What are all the terms used for "Abortion"?
   (Please explore the terms and associated meanings e.g. positive/negative, active/passive etc.)

3. Some young married women do not want to get pregnant or want to delay their pregnancy but unfortunately in many occasions they become pregnant. Why do you think that happened to the young women?

4. What are all the factors that hinder young women from using contraception in this area or community?

5. Where do young couples go for the consultation after having unintended pregnancy?

6. What are all the places women go or can go for an abortion?

   - Views on attitude towards that place
   - Opening time
   - Gender of service provider
   - Accessibility (distance)
   - Cost
   - Safety
   - confidentiality
   - Behaviour of the staff

7. Who are all the important people who can contribute to making a decision to have an abortion? *(put in order of importance)*

Annex VI. Guidelines for in-depth interviews with service providers and community leaders

PLEASE SPEND SUFFICIENT TIME TO BUILD RAPPORT WITH THE RESPONDENTS AND REMIND HIM/HER ABOUT CONFIDENTIALITY OF THEIR RESPONSES. BEFORE ASKING ANY QUESTIONS PLEASE REMEMBER HIS/HER REPONSES IN EARLIER INTERVIEWS IF ANY?

1. Background and sources of information

Topic Focus	Core questions	Additional questions or prompts
Background	Could you please tell me a little bit about yourself? Who takes care mostly of family members in case of illness etc in this village/areas?	Age, marital status, ethnicity, education, occupation, Who take the decision to seek care? Generally how it is decided? Who mainly influences the decision in the households in this village/area?
Time allocation	Please tell me how young married men and women spend their day in this area/community? What generally do they do in their free time?	How frequent they watch television? Radio? Do they watch any programme that relate to mother's health, child's health, family planning etc?
Sources of information	How do young people in this community/area usually obtain information on reproductive and sexual health such as personal hygiene, sexuality, contraception, maternal health, pregnancy, abortion etc.?	Whom or what do they rely on for information? What about mass media? School or college etc? What about friends? Parents? Other family members?

	How do young married people in this community/area usually obtain information on maternal and child health, contraception, pregnancy, abortion etc?	Whom or what do they rely on for information? What about partners? Other family members? What about mass media? School or college etc? Do you think that young couples discuss about contraception, pregnancy abortion?
	Can you list for me all the places where young people can visit for health services such as contraception, maternal health, abortion etc?	Hospitals, PHC, HP, SHP, private doctors, pharmacy, private nursing home etc.
	How do young people feel about visiting health services to obtain information?	If they feel comfortable in visiting health services, then why do you think that they feel so? If they feel reluctant to visit health service providers for RH information, then why? Feel embarrassed? Perceived that service provider react oppositely? Privacy?

2. Family planning

Topic Focus	Core questions	Additional questions or prompts
Views on contraception and services	What is your general impression about the family planning services in this village/area?	

	As you know, in our country, many young couples want to delay their first pregnancy but very few young married couples use contraception. As a consequence, they become parents when they are not ready/do not wish to become parents at that time. In your opinion why they (young couples) do not use contraception? ***(Explore individual factors)*** What are the factors that hinder young couples to use contraception? ***(explore societal/contextual factors and barriers)***	Status of women (lack of decision making power, power relationship) Family, mother in law, cultural (how?), quality of services (money, opening hours, gender of service provider, privacy, side effects, perceived attitude towards contractive etc. How the decision takes place? Who is the influential person in those matters? What is the role of mother in law? What is role of husband? Other relatives? Peers? etc.
Timing of child-bearing	In your opinion, when is the ideal time for having children? Why do you think so? How do you describe for right time for pregnancy for a couple? Wrong time pregnancy? Too late pregnancy and too early pregnancy?	Ideal time for a young woman? When it is too early? Too late? Ideal time for other, in general? Are young people changing their ideas about this? For women? For men?

	(Descriptions relating to intentions/plans/desires might come out here. If so probe what words they would attach to them)	

3. Understanding of terminologies on pregnancies

Topic Focus	Core questions	Additional questions or prompts
Terminologies related to pregnancy	A number of words have been used in the past to describe pregnancies, and I am going to go through these words. Could you tell me what the words mean to you?	
	What does "planned pregnancy" mean to you?	Right time? Plan to have child? Trying for baby? Targeting fertile periods? Stop contraception in order to have baby? Discuss with partner before pregnancy? Taking longer view of how baby will fit into the life? Conscious decision to become pregnant? Pre-pregnancy preparation? Anything else?
	What does "intended pregnancy" mean to you?	Is this similar to the term "Planned"? Why not similar?
	What does wanted pregnancy mean to you?	Is this similar to the term "Planned or intended ?" What are the

		differences? Which term do you think is suitable to describe this type of pregnancy?
	What does "unplanned pregnancy" mean to you?	Accident/mistake? Just happens? Becoming pregnant without intending to? Failure of contraception (method failure)? Thought about and "if happens, it happens? Not thought about it in advance? Not right time? Not thought about the long term? Failure to use contraception (user failure) ? Anything else?
	What does "unintended pregnancy" mean to you?	Can pregnancy become wanted despite unplanned? Is this similar to the term "Unplanned"?
	What does unwanted pregnancy mean to you?	Is unwanted pregnancy is similar to unplanned? In your opinion, which word is best to describe this type of pregnancy? Why?

4. Unintended pregnancy and Abortion

Topic Focus	Core questions	Additional questions or prompts
Unintended pregnancy	Why do young married women have unintended pregnancy? Or What are reasons for experiencing pregnancy even though	Non use of contraception, contraceptive failure, less power in decision making about their fertility choice, pressure from spouse or mother in law or other relatives? Societal pressure etc?

	young couples do not want at all or want to delay?	
Abortion	What are some ways that people say a woman could terminate a pregnancy? How can a couple/woman deal with unintended pregnancy, if happened? Of the women you know-in your family, or among your friends, relatives and neighbours-how many do you know (have heard) that they have terminated a pregnancy at some time or the other? Can you tell me any event of abortion that you have heard about have seen in your village, community or work place?	Whom they contact/consult with first? What suggestions he/she may give her/them? Do they also use any oral medicine? Do they also try any other traditional methods? What are those medicines/methods? With whom they consult next? What methods are used for abortion? How they terminate the pregnancy? How the decision was made? Who was the influential person in those matters? What was the role of mother in law? What was role of husband? Other relatives? Friends or neighbours? etc. What happens if there is a conflict?

5. Attitude to early pregnancy and abortion

Topic Focus	Core questions	Additional questions or prompts
Early pregnancy	Generally how people in this village/ areas think about teenage pregnancy? Why? Do you have same opinion or you have different opinion about it? What are the good and bad things about teenage pregnancy? How family/community treat a woman if she does not become pregnant soon after the marriage?	
Attitude towards abortion	How does people/community in this area/village think about abortion? I mean generally, communities are in favour or against about abortion? Why? What is your opinion about it? When is it acceptable for a woman to try to terminate a pregnancy?	Have enough children? Unplanned pregnancy or pregnant too soon after birth? Difficult economic circumstances? If the foetus is female, pregnancy could harm mother's health, pregnancy from premarital or extramarital relationship, abnormal foetus? Anything else?

6. Use and need of reproductive health services

Topic Focus	Core questions	Additional questions or prompts
Use of RH services	*Please ask only with service provider* Do young people come to you to take advice/service on maternal and child health, contraception, pregnancy, abortion etc? Can you remember any event? Could you tell me that event? What about married young women and men? Can you remember any event? Could you tell me that event? How do you reach among the young people? Or How do you publicise your facilities/services to the young people?	Why he/she/they came? What was your advice? Can you remember any event? Could you tell me that event? Are strategies used same for married and unmarried young people? If different then how?
Confidentiality	*Please ask only with service provider* According to you, how important is it to maintain confidentiality of the clients especially when they are young? If important then why?	What do you think about the level confidentiality of client (especially, young age) in your health centre?

	If not important then whey not? To what extent confidentiality of the clients (especially, young age) is maintained at your work place? Generally how do you do that?	
Need of RH services	What do you think are the most important feature of a reproductive health service should be for young people? What can be done to increase the utilization of the reproductive health services of young women/couples in your area/community?	For unmarried women and men? For married women and men?

Thank you so much for giving me your valuable time and speaking with me. Would you like to ask me any questions or want to give any further suggestions?

Annex VII. Guidelines for in-depth interviews with young married men and women

PLEASE SPEND ADEQUATE TIME TO BUILD RAPPORT WITH THE RESPONDENTS AND REMIND HIM/HER ABOUT CONFIDENTIALITY OF THEIR RESPONSES. BEFORE ASKING ANY QUESTIONS PLEASE REMEMBER HIS/HER REPONSES IN EARLIER INTERVIEWS IF ANY?

1. Family background and sources of information

Topic Focus	Core questions	Additional questions or prompts
Family background	Could you please tell me a little bit about yourself? Please tell me about your family?	Age, marital status, ethnicity, religion, education, occupation, family structure etc How is your maternal family? How was your schooling, and university education? How many members generally live in the family? Who take care mostly to the family members in case of illness etc? Who decides where to go in case of illness? Who mainly influences the decision? Why?
Time allocation	Please tell me about your average day? How do you enjoy yourself in free time?	How do generally spend your days? How frequent you watch television? Radio? Do you watch any programme that related to mother's health, child's health, family planning etc?

		Usually which programmes you mostly watch? Why? Which magazines normally you read? What topics do you like the most?
Sources of information	How do young people in your area/community obtained the information on reproductive health such as personal hygiene menstruation, the biology of sex/reproduction, marriage, sex, contraception, pregnancy, abortion, etc.? Whom or what do you rely on for information? Where do young married young people go to obtain this information? Is the same place or different? Are there any other people/places?	What about mass media? School or college? Friends? Parents? Brother/sisters? Other relatives? Hospitals, health post, Sub health post, health centre, private doctors, pharmacy, private nursing home, TBAs, etc. What about partners? Other family members? Have they ever discussed you about contraception, pregnancy abortion with you? What about mass media? School or college? What did you discuss? Can you remember about what was said? How did you feel at the time? How did they feel? Embarrassed?

2. Family planning

Topic Focus	Core questions	Additional questions or prompts
Views on contraception and services	What is your general impression about the family planning services in this village/area? As you know, in our country, many young couples want to delay their first pregnancy but very few young married couples use contraception. As a consequence, they become parents when they are not ready/do not wish to become parents at that time. In your opinion why they (young couples) do not use contraception? ***(Explore individual factors)*** What are the factors that hinder young couples to use contraception? ***(explore societal/contextual factors and barriers)***	Status of women (lack of decision making power, power relationship) Family, mother in law, cultural (how?), quality of services (money, opening hours, gender of service provider, privacy, side effects, perceived attitude towards contraceptive etc. How the decision takes place? Who is the influential person in those matters? What is the role of mother in law? What is role of husband? Other relatives? Peers? etc.
Timing of child-bearing	In your opinion, when is an ideal time for having children? Why do you think so?	Ideal time for a young woman? When it is too early? Too late? Ideal time for other, in general?

	What about men? When is the ideal time to become father? Why? How do you describe for right time for pregnancy for a couple? Wrong time pregnancy? Too late pregnancy and too early pregnancy? *(Descriptions relating to intentions/plans/desires might come out here. If so probe what words they would attach to them)*	For women? For men?

3. Understanding of terminologies on pregnancies

Topic Focus	Core questions	Additional questions or prompts
Terminologies related to pregnancy	A number of words have been used in the past to describe pregnancies, and I am going to go through these words. Could you tell me what the words mean to you?	
	What does "planned pregnancy" mean to you?	Right time? Plan to have child? Trying for baby? Targeting fertile periods? Stop contraception in order to have baby? Discuss with partner before pregnancy? Taking longer view of how baby will fit into the life? Conscious decision to become pregnant? Pre-pregnancy preparation?

	What does "intended pregnancy" mean to you?	Anything else? Is this similar to the term "Planned"? Why not similar?
	What does wanted pregnancy mean to you?	Is this similar to the term "Planned or intended?" What are the differences? Which term do you think is suitable to describe this type of pregnancy?
	What does "unplanned pregnancy" mean to you?	Accident/mistake? Just happens? Becoming pregnant without intending to? Failure of contraception (method failure)? Thought about and "if happens, it happens? Not thought about it in advance? Not right time? Not thought about the long term? Failure to use contraception (user failure) ? Anything else?
	What does "unintended pregnancy" mean to you?	Can pregnancy become wanted despite unplanned? Is this similar to the term "Unplanned"?
	What does unwanted pregnancy mean to you?	Is unwanted pregnancy similar to unplanned? In your opinion, which word is best to describe this type of pregnancy? Why?

4. Attitude to early pregnancy and abortion

Topic Focus	Core questions	Additional questions or prompts
Early pregnancy	Generally how people in this village/ areas think about teenage pregnancy? Do you have same opinion or you have different opinion about it? What are the good and bad things about teenage pregnancy? How family/community treat a woman if she does not become pregnant soon after the marriage?	
Attitude towards abortion	How does people/community in this area/village think about abortion? I mean generally, communities are in favour or against about abortion? Why? What is your opinion about it? When is it acceptable for a woman to try to terminate a pregnancy?	Have enough children? Unplanned pregnancy or pregnant too soon after birth? Difficult economic circumstances? If the foetus is female, pregnancy could harm mother's health, pregnancy from premarital or extramarital relationship, abnormal foetus? Anything else?

5. Unintended pregnancy and abortion

Topic Focus	Core questions	Additional questions or prompts
Unintended pregnancy	Why young married women have unintended pregnancies? (*Please explore individual, socio-cultural, economic and family and service provision context)* *Have you/your partner ever had such experiences? When?*	**Individual context:** None use of contraception, carelessness, attitude and beliefs on family size, power in fertility decision making etc. **Socio-cultural context:** Sex preference, pressure from partner, pressure from mother in law or other relatives, societal pressure etc. **Economic and family context**: Family size, family income, support from **Service provision context:** contraceptive failure, functional knowledge on contraceptives etc.
Consequences of unintended pregnancies	In your opinion, what are the possible consequences of unintended pregnancy? Social consequences? Psychological consequences? Health consequences?	**Socio-Psychological**: Relationship with partner and other relatives, domestic violence, depression and stress, abandonment of child, infanticide, physical and emotional support to the child, family income, educational and employment opportunities, fear of social stigmatization etc. **Health consequences**: Antenatal and postnatal maternal health care, unsafe abortion, post abortion complications, low birth weight baby, pre-term baby, infant and child survival etc.

Abortion	How can a couple/woman avoid unintended pregnancy? How can a couple/woman deal with unintended pregnancy, if one occurs? What are some ways that people say a woman could terminate a pregnancy? Of the women you know-in your family, or among your friends, relatives and neighbours-how many do you know (have heard) that they have terminated a pregnancy at some time or the other? *If she/his partner ever had experiences unintended pregnancy then asked* Have you/your partner tried to abort pregnancy? Can you tell the entire step you/your partner took to abort the pregnancy last time? If not terminated then, why not ?	Whom you contacted/consulted with first? What suggestions he/she gave you? Have you tried any oral medicine? Have you tried any other traditional methods? Was it successful? With whom you/your partner consulted next? What methods were used for abortion? How do you/your partner feel after abortion? Any health complications? How was the decision made? Is there any conflict on opinion continuing or terminating pregnancy or seek service or advice from any sources?

6. Use and need of reproductive health services

Use of services	Have you ever been to any of the sources you mentioned earlier? Was this visit made before you got married? Did you visit any of these places after marriage? Can you remember the first visit? How was your first experience like?	**(If have been)** How many times have you been? What for? When were first and the last time? For what reasons? How have you found out about the services? Family, friends etc? How did the visit go? Were you scared/nervous? How were you treated? Were you satisfied with the visit? Why/why not? **(If haven't been)** Is there any reason(s) why you haven't been along? Would you consider going to any of the services? Why/why not? Is it not affordable? Far away? Is the opening hours is not convenient for you? Is it because male/female service provider? Fear of confidentiality?
Need for services	What are your general impressions of the services available to young women in this area? What do you think are the most important feature of a reproductive health service for young women? If the services are poorly utilized by the young people then how it can be increased?	Have the services you attended been welcoming, friendly, helpful, confidential etc? Are the services, easy to get to, open at convenient times? Do they provide you with all the services you want/require? Different suggestions for married and unmarried?

Thank you so much for giving me your valuable time and talking with me about your personal matters. Would you like to ask me any questions or want to give any further suggestions?

Annex VIII. Guidelines for the case histories with young married men and women (those who have reported unintended pregnancies in the survey)

PLEASE SPEND ADEQUATE TIME TO BUILD RAPPORT WITH THE RESPONDENTS AND REMIND HIM/HER ABOUT CONFIDENTIALITY OF THEIR RESPONSES. BEFORE ASKING ANY QUESTIONS PLEASE REMEMBER HIS/HER REPONSES IN EARLIER INTERVIEWS IF ANY?

1. Family background and sources of information

Topic Focus	Core questions	Additional questions or prompts
Family background	Could you please tell me a little bit about yourself? Please tell me about your family?	Age, marital status, ethnicity, religion, education, occupation, family structure etc How is your maternal family? How was your schooling, and university education? How many members, who generally lives in the family? Generally who take an initiation for the treatment in your family in case of illness etc? Who generally takes the decision about where to go and what to do in case of illness of any family member?
Time allocation	Please tell me about your average day?	How do generally spend your days? How frequent you watch television? Radio?

	How do you enjoy yourself in free time?	Do you watch any programme that related to mother's health, child's health, family planning etc? Usually which programmes you mostly watch? Why? Which magazines normally you read? What topics do like the most?
Sources of information	How do young people in your area/community obtained the information on reproductive health such as menstruation, marriage, sex, maternal health, contraception, pregnancy, abortion, etc.? Are there any other people/places? How do young married women get this information? Is the same place or different? Have they ever told you about contraception, pregnancy abortion with you?	What about partners? Other family members? What about TV, Radio, newspapers etc? School or college? What did you discuss? Can you remember about what was said? How did you feel at the time?

2. Family planning

Topic Focus	Core questions	Additional questions or prompts
Views on contraception and services	What is your general impression about the family planning services in this village/area? As you know, in our country, many young couples want to delay their first pregnancy but very few young married couples use contraception. As a consequence, they become parents when they are not ready/do not wish to become parents at that time. In your opinion why they (young couples) do not use contraception*? (Explore individual factors*) What are the factors that hinder young couples to use contraception? ***(explore societal/contextual factors and barriers)***	Status of women (lack of decision making power, power relationship) Family, mother in law, cultural (how?), quality of services (money, opening hours, gender of service provider, privacy, side effects, perceived attitude towards contractive etc. How the decision takes place? Who is the influential person in those matters? What is the role of mother in law? What is role of husband? Other relatives? Peers? etc.

3. Marriage and children

Topic Focus	Core questions	Additional questions or prompts
Marriage	I would like to hear the story of your life. I specially want to hear about your married life, pregnancy (of your wife), and children- the events that happened in your life from the time that you got married, how the children were born, what difficulties and problems you faced, and what good things happened to you? First could you please tell me about your first marriage? Tell me about that time and what your situation was? What were the circumstances of your family at the time?	How it was organized? Was it arrange or love marriage? Who initiated? How old were when you at your first marriage? Who influence in the decision? Were you consulted?
Pregnancy and children	Could you please tell me about all the pregnancies you/your wife have had? Any difficulty with your pregnancy? Are you thinking to have additional child? If yes, son or daughter? Why? *(if she has son ask about daughter or vice versa)*	Number of pregnancy? Any unexpected pregnancy? What happened to that pregnancy? Any miscarriage? Number of children? Son, daughter?

4. Pregnancy, contraception and timing of childbearing

Topic Focus	Core questions	Additional questions or prompts
Current pregnancy situation ***(for currently pregnant women only)***	How is your current pregnancy?	How many months pregnancy? (If known or estimate), if already had termination then ask how many weeks pregnant when had termination of pregnancy? Attending for antenatal care? Why not?
Earliest awareness of pregnancy ***(ask about first and last pregnancy)***	When did you first think you/your wife were/might be pregnant? What made you think you were were/might be pregnant?	Pregnancy symptoms e.g. missed period, morning sickness, breast tenderness, other pregnancy symptoms
Confirming pregnancy ***(ask about first and last pregnancy)***	(Thinking back to your last pregnancy) How did you find out for sure that you/your wife were pregnant? What were your first thoughts when you found out you/your wife were pregnant? What did you do when you found out you/your wife were pregnant? Who did you tell when you found out you/your wife were pregnant?	Did you visit any places for test? Pregnancy test(s)-when, where? If not, why? Thoughts changed? How changed? Thoughts stayed same? How stayed the same? Any thoughts turned into action? Which thoughts? Why? Who first? Husband, mother in law, other family members, friends, health professional? Why?

Feelings about being pregnant ***(ask about first and last pregnancy)***	How did you feel when you came to know that you/your wife became pregnant? Why do you think you got just at that time? (Description relating to intentions/plans/desires might come out here. Is so, probe what words they would attach to them?	Obtain spontaneous reaction? And probe for pleasure, regret etc? Any psychological? How was the reaction of your husband? How was the reaction of mother in law? How was the reaction of other family members?
Contraception around the time of pregnancy ***(ask about first and last pregnancy)***	Were you or your spouse were doing something or used a method around the time you got pregnant?	*For those have used contraception around the time of contraception* What you did? Or what methods were used? How using the method? Knowledge and use of methods For those not using contraception around the time of pregnancy Why? Circumstances? Wanted to get pregnant? Distrust/dislike method? Fear of side effects? Last methods used? How long? Why stopped? If actively planning pregnancy, check what 'panning' involved? Planned with partner?
Orientation to motherhood	Do you have children? *(if not already known)* What are you feelings about having children?	Feeling generally towards having children? Having another child now?

	(Descriptions relating to intentions/plans/desires might come out here. If so probe what words they would attach to them)	Having children in the future? Have feelings changed over time? Any previous pregnancy? Miscarriage? Abortion/
Timing of childbearing	When do you think is the ideal time for having children? What do you think about the timing of your current/last pregnancy? How does this pregnancy (your last pregnancy) fit?	Ideal time for a woman? Ideal time for a man? Right time? Wrong time? Too early? Too late? Why do you think so? *(Descriptions relating to intentions/plans/desires might come out here. If so probe what words they would attach to them)*

5. Reasons and consequences of unintended pregnancy

Topic Focus	Core questions	Additional questions or prompts
Unintended pregnancy	Why young married women have unintended pregnancies? **Or** What are the reasons experiencing pregnancy even young couples do not want at all or want to delay?	Non use of contraception, contraceptive failure, less power in decision making about their fertility choice, pressure from spouse or mother in law or other relatives? Societal pressure etc.?

Perceived consequences	In your opinion, what are the possible effects (consequences) of unintended pregnancy on women, partner and family? Have you ever faced those problems? **(Socio- Psychological)** In your opinion, what are the possible health outcomes (consequences) of unintended pregnancy? Have you ever faced those problems? **(Health consequences)**	Socio-psychological effects on women? Effects on husband? Effects on family? What are they? And how? Depress, stress? Domestic violence? Problems in the relationship with partner or other family members? Abandonment a child? Infanticide? Lack of physical or emotional support to the child? Any effects on family economy or household income? Can you me give an example? Fear of social stigmatized? Curtail educational and employment opportunity? Any other? Reduced antenatal and postnatal care behaviour? Pre-term delivery? Underweight birth? Abortion, usually unsafe? Post-abortion complication on women's health? Any other?

6. Abortion

Topic Focus	Core questions	Additional questions or prompts
	How can a couple avoid unintended pregnancy? How can a couple/woman deal with unintended pregnancy, if one occurs?	

Abortion	What are some ways that people say a woman/couple could terminate a pregnancy? Of the women you know-in your family, or among your friends, relatives and neighbours-how many do you know (have heard) that you have terminated a pregnancy at some time or the other?	
	Have you/your partner ever tried to abort pregnancy? Can you tell the entire step you/your partner took to abort the pregnancy last time? Sometimes women have miscarriage if they have taken some herbs or pills or done some activity/procedure that brings about a loss of pregnancy. Had you done anything like that? If yes what? Could you tell me what happened and when?	Whom you contacted/consulted with first? What suggestions he/she gave you? Have you tried any oral medicine? Have you tried any other traditional methods? Was it successful? With whom you/your partner consulted next? What methods were used for abortion? Do you/your partner feel after abortion? Any health complications?

7. Decision making on terminating or continuing pregnancy

Topic Focus	Core questions	Additional questions or prompts
Decision about pregnancy	How did you come to the decision about terminating/continuing your pregnancy? **Or** You have the options of continuing your pregnancy, or opting for a termination: how do you think you will decide what to do? *(please try to get the individual situation, family context and socio-economic background when the decision was made)* <u>For women who are undergoing a termination of pregnancy</u>: Could you please tell me step by step how you terminated the pregnancy? How was the idea come? Who initiated it? How the decision was made?	Involvement of partner? Family members? Friends? Health professionals etc in decision making? Own attitude? Involvement of partner? Family members? Friends? Health service providers etc in decision making? What was the process of obtaining an abortion? Woman feelings about abortion? Partner's feeling about it? Any changes to contraceptive use/attitude to pregnancy a result of abortion?

8. Use and need of reproductive health services

Use of RH services	Have you ever been to any of them for help and advice on these matters? When?	**(If have been)** How many times have you been? What for? When was the last time? For what reason? Who and how it was decided? How have you found out about the services? Family, friends etc? What is you general impression about the services? How did the visit go? Were you scared or nervous? How were you treated? Were you satisfied with the visit? Why/why not? Did anyone accompany you?
	Can you remember after marriage, which was the very first place you went for RH services (including family planning services)? What was your first experience like?	**(If haven't been)** Is there any reason(s) why you haven't been along? Would you consider going to any of the services? Why/why not? Is it not affordable? Far away? Is the opening hours is not convenient for you? Is it because male/female service provider? Confidentiality maintained?

Need of RH services	What is your general impression of the services available to you in this area/community?	Welcoming, friendly, helpful, confidential etc?
		Are the services, easy to get, open at convenient times?
	What do you think are the most important feature of a reproductive health service for young women?	Do they provide you with all the services you want/require?
		For men? For women?
	If the services are poorly utilized by the young people then how it can be increased?	Different suggestions for married and unmarried?

Thank you so much for giving me your valuable time and talking with me about your personal matters. Would you like to ask me any questions or want to give any further suggestions?

Annex IX. Questionnaire for individual interviews with women: Young person's pregnancy study in Nepal, 2003

कपा
CREHPA

ID# ☐☐☐☐

DETERMINANTS AND CONSEQUENCES OF UNINTENDED PREGNANCIES AMONG YOUNG COUPLES IN NEPAL

MAY-JUNE 2003

Section A: Identification

A.1	District Name: 1. Ilam 2. Morang 3. Chitwan 4. Kaski 5. Lalitpur ☐
A.2	Name of VDC/municipality:_____ ☐☐
A.3	Ward No.: _____ ☐ Name of Tole _____
A.4	1. Urban 2. Rural ☐
A.5	Cluster No. _____ ☐☐☐
A.6	Household No. ☐☐☐☐
A.7	Name of household head_____
A.8	Sex of the head of the household 1. Male 2. Female
A.9	Name of the interviewer_____ Date_____
A.10	Name of field supervisor_____ Date_____

A.11 Household visit of respondent

Visited result	Visited Date			Result of visit
	Date	Month	Year	
First Time	☐☐	☐☐	☐☐	☐
Second Time	☐☐	☐☐	☐☐	☐
Third Time	☐☐	☐☐	☐☐	☐

Visited result codes (code for A.11)

1. Interview Completed
2. Interview Incomplete
3. Respondent not at home
4. Respondent refused
5. Others (specify).....

ID# ☐☐☐☐

Section B: Eligible respondents for individual interview

(This section is to be administered to the household head or most knowledgeable person in the household)

S.N	B.1 Name of ever married women aged 15-49 years and their husband	B.2 Completed age in years	B.3 Marital status 1. Married 2. Widow/widower 3. Divorce/separated	B.4 Eligible respondent (Currently married women aged 15-24 and men 15-27)
1		☐☐	☐	1
2		☐☐	☐	2
3		☐☐	☐	3
4		☐☐	☐	4
5		☐☐	☐	5
6		☐☐	☐	6
7		☐☐	☐	7
8		☐☐	☐	8
9		☐☐	☐	9
10		☐☐	☐	10

B.5 Number of married women aged 15-24 years in the household... .... ☐

B.6 Number of married men aged 15-27 years in the household..... ..... ☐

B.7 Number of persons usually living in the household..... ☐

WOMEN QUESTIONNAIRE

(To be administered to the married women aged 15-24years)

Informed Consent

Namaste! My name is..... and I am working with CREHPA, not for profit research organization based in Kathmandu. We are conducting a study about reproductive health of young married couples of five districts of our country. We would very much appreciate your participation in this study. We will be asking same questions to 1000 married women and 500 men. The information received from you will help the government and other concerned non governmental organizations to improve reproductive health services for young couples in your areas. The survey usually takes between 45-60 minutes. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions, if you don't like. However, I hope that you will participate in this survey since your views are very important to us. If would like to know more information about this study please contact to Mr. Mahesh Puri At CREHPA in the telephone number 5-530344.

May I begin with the interview now?

Yes.....1 Yes, but later on.....2 (Please fix the time for next visit) No.....3 (end the interview)

Section C: Socio-demographic background

Name of the respondent.....

Cluster # (Note down from A.5).....

Household # (Note down from A.6) ...

SNo. of respondent (Note down from B.4)...

First, I would like to ask some questions about you and your household.

Q.N	Questions	Coding	Go to..
C.1	How old were you at your last birthday?	Completed years ☐☐	
C.2	Are you currently married? *(please cross check with B.3)*	Yes.....1 No..... .2	→ Terminate interview
C.3	Is your husband living with you now or is he staying elsewhere?	Living with her..... ....1 Staying elsewhere..... 2	
C.4	Have you ever attended school?	Yes.....1 No.....2	→ C6
C.5	What is the highest grade you completed?	Primary (1-5) incomplete.....1 Primary completed.....2 Secondary (6-10) incomplete...3 SLC.....4 Intermediate and above.....5	→ C.7
C.6	Have you ever participated in a literacy program or any other program that involves learning to read or write?	Yes.....1 No.....2	
C.7	Ethnicity/Caste *(Please don't ask to the respondent, note down on the basis of surname)*	Brahmin/Chhetri.....1 Tharu.....2 Rai/limbu.....3 Magar.....4 Tamang.....5 Other (Specify).....6	

C.8	What is your religion?	Hindu.....1 Buddhist.....2 Muslim.....3 Christian.....4 Other (Specify).....5	
C.9	Family structure *(In a same household)*	Nuclear.....1 Joint/Extended.....2	
C.10	Type of family	A couple only.....1 A couple and their own children.2 A couple, their children and their parents.....3 A couple and their children, brothers, sisters and parents.....4 More than one couple and their children.....5 More than one couple, their children and their parents.....6 More than one couple and their children, brothers, sisters and parents.....7	
C.11	How old were you when you (first) got married?	Completed years..... ☐☐	
C.12	How old were you when you started living with your husband? PROMPT: At gauna?	Completed years..... ☐☐	
C.13	What is your main occupation?	Agriculture.....01 Housewife.....02 Teacher.....03 Govt. Service holder.....04 Business.....05 Employee in factory.....06 Porter/Kulli.....07 Skilled labourer.....08 Unskilled labourer.....09 Retail shop/ Tea shop/.....10 Cottage/Handicraft.....11 Unemployment.....12 → C 20 Student .....13 → C.20 Other (specify).....14	→ C.15
C.14	Do you work mainly on your own land or on family land, or do you work on land that you rent from someone else, or do you work on someone else's land?	Own/family land.....1 Rented land.....2 Someone else's land.....3	
C.15	Are you self employed, employed by someone else, or do you do this work for a member of your family?	Self employed.....1 By someone else.....2 For family member.....3	
C.16	Do you usually work at home or away from home?	Home.....1 Away from home.....2	
C.17	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	Throughout the year.....1 Seasonally.....2 Once in a while.....3	

C.18	Are you paid in cash or kind for this work or are you not paid at all?	Cash only..... 1 Cash and kind.....2 In kind only..... ....3 Not paid.....4	→ C.20
C.19	Who mainly decides how the money you earn will be used?	Respondent.....1 Husband.....2 Both husband and respondent.. .3 Someone else..... 4 Respondents and someone else .5	
C.20	Do you own any land, either by yourself or jointly with someone else?	Yes, owns alone.....1 Yes, owns jointly..... .....2 No.....3	→ C.22
C.21	If you ever needed to, could you sell the land without anyone else's permission?	Yes.....1 No.....2 Not sure/don't know.....3	
C.22	What is the main occupation of your husband?	Farming.....01 Teacher.....02 Service holder.....03 Business.....04 Employee in factory.....05 Porter/Kulli.....06 Skilled labourer.....07 Unskilled labourer.....08 Retail shop/tea shop/restaurant 09 Cottage/Handicraft.....10 Unemployed..... 11 Other (specify).....12	
C.23	What is the main source of drinking water for members of your household?	**Piped Water** Piped into house/yard/plot.....1 Public/neighbour's tap.....2 **Dug Well** Well in house/yard/plot.....3 Public/neighbour's well.....4 **Tubewell/borehole** Tubewell in yard/plot.....5 Public/neighbour's tubewell.....6 **Surface water** Spring/kuwa.....7 River/stream/pond/lake.....8 Stone tap/Dhara.....9 Other (specify).....10	
C.24	What kind of toilet facilities does your household have?	Flush toilet.....1 Traditional pit toilet.....2 Ventilated improved pit latrine...3 No facility/bush/field.....4 Other (specify).....5	
C.25	Does your household have: Electricity A radio A television	<u>Yes</u> <u>No**</u> Electricity ..... 1 2 Radio.....1 2 Television.....1 2	

	Telephone A bicycle A gas stove A kerosene stove A motorbike A refrigerator	Telephone.....1 2 Bicycle.....1 2 Gas stove.....1 2 Kerosene stove.....1 2 Motorbike.....1 2 Refrigerator.....1 2	
C.26	What type of fuel does your household mainly use for cooking?	Firewood/dung.....1 Bio gas.....2 LPG gas.....3 Electricity .....4 Kerosene.....5 Other.....6	
C.27	What is the type of floor (main material) in this house? *(Please observe the structure of the house and record)*	Natural floor (mud/dung).....1 Wood .....2 Cement/ brick.....3 Tile.....4 Marble.....5 Other (specify).....6	
C.28	What is the type of roof (main material) in this house? *(Please observe the structure of the house and record)*	Mud.....1 Thatched.....2 Wood .....3 Stone.....4 Tin..... .....5 Cement/ brick.....6 Other (specify).....7	

D. Exposure to media and sources of reproductive and sexual health information

D.1	Do you usually read a newspaper or magazine at least once a week?	Yes.....1 No.....2 Not applicable.....9	
D.2	Do you usually listen to radio every day?	Yes.....1 No.....2 Do not have radio.....3	
D.3	Do you usually watch television at least once a week?	Yes.....1 No.....2 Do not have TV.....3	
D.4	Now, I would like to ask you about the sources of information on reproductive and sexual health such as sex, contraception, care during or after pregnancy, miscarriage, abortion, sexually transmitted infections etc. You may learn from partner, teacher from school or college, from friend, parents, brother and sisters, doctors, or you may learn from books, magazine, radio, television etc. Where did you get information on contraception or family planning? **Multiple response possible**	No where.....01 School/college.....02 Husband.....03 Mother.....04 Father.....05 Brother.....06 Sister.....07 Mother in law.....08 Other relatives.....09 Health professionals.....10 Friends/neighbour.....11 Television.....12 Radio..... 13 Newspapers/magazine.....14 Internet.....15 Other (Specify).....16 Don't know.....88	

D.5	Where did you get information on sex? **Multiple response possible**	***Please use the codes from D.4*** ☐☐	
D.6	Where did you get information on care during or after pregnancy? **Multiple response possible**	***Please use the codes from D.4*** ☐☐	
D.7	Where did you get information on pregnancy, miscarriage, abortion? **Multiple response possible**	***Please use the codes from D.4*** ☐☐	
D.8	Where did you get information on sexually transmitted infections? **Multiple response possible**	***Please use the codes from D.4*** ☐☐	

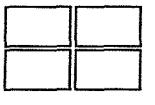
Section E: Contraceptive knowledge

Now I would like to talk about family planning– the various ways or methods that a couple can use to delay or avoid a pregnancy. Which methods have you heard of? Any other methods?*(Please get spontaneous knowledge on contraceptives first then prompt only mentioning the name of the method (not the detailed description of the method) which were not named spontaneously by the respondent)*

Q.N.	Questions	Code		Go to..
E.1	Do you know of any method or way that one can use to delay or avoid getting pregnant?	Yes.....1 No.....2	**E.2 How is (name) used)?**	→Sec F
E1.1	**PILL/GOTI/CHAKKI :**Women can take a pill every day to avoid becoming pregnant	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	Tabs to eat everyday.....1 Other.....2	
E1.2	**IUD/LOOP/COPPER-T:** Women can have a loop or coil placed inside them by a doctor or a nurse	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	Copper device to put into uterus.....1 Other.....2	
E1.3	**INJECTION/DEPO/SANGINI SUI/*TEEN MAHINE SUI* :** Women can have an injection by a health provider which stops them from becoming pregnant for three months	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	3 months injection.....1 Other.....2	
E1.4	**NORPLANT:** Women can have several small rods placed in their upper arms by a doctor or nurse which can prevent pregnancy	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	Several small rods placed in the upper arm.....1 Other.....2	
E1.5	**CONDOM / *DHAL*:** Men can put a rubber sheath on their penis before sexual intercourse	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	Latex/rubber sheath to wear.....1 Other.....2	
E.1.6	**FOAMING TABLETS:** Tablets to put in vagina before sex	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	Tabs to put in vagina before sex.....1 Other.....2	
E1.7	**FEMALE STERILIZATION:** Women can have an operation to avoid having any more children	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	Surgical operation for female.....1 Other.....2	
E1.8	**MALE STERILIZATION:** Men can have an operation to avoid having any more children	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	Surgical operation for male.....1 Other.....2	
E1.9	**RHYTHM, PERIODIC ABSTINENCE:** Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	To avoid sex at 10-20 days.....1 Other.....2	
E1.10	**WITHDRAWAL/*JHIKNE*:** Men can be careful and pull out before ejaculation	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	To ejaculate outside.....1 Other.....2	

Section F: Contraceptive use dynamics

Q.N	Questions	Coding	Go to..
F.1	Are you or your spouse currently doing something or using any method to delay or avoid getting pregnant?	Yes.....1 No.....2 →	F.8
F.2	Which method are you/your spouse using? **Multiple response possible**	Condom.....01 Pills.....02 Injection.....03 Norplant.....04 IUD.....05 Female sterilization.....06 Male sterilization.....07 Periodic abstinence.....08 Withdrawal.....09 Other (specify).....10	
F.3	For how many months have you been using this (name) method continuously?	Months..... ☐☐ 8 years or longer.....96	
F.4	Why have you/your spouse chose this method? **Multiple response possible**	Easy to obtain.....01 Convenient to use.....02 Inexpensive .....03 Can discontinue anytime.....04 Effective/reliable.....05 Recommended by health worker.....06 Other methods unsuitable....07 Has No/little side effects.....08 Only method available.....09 Other (specify).....10	
F.5	Where did you obtain this (name) method the last time?	HP/SHP staff.....1 MCHW.....2 VHW.....3 Hospital.....4 FCHV.....5 Other (specify).....6	
F.6	Are you experiencing any problem with the method that you are using?	Yes.....1 No.....2 →	F.11
F.7	What are they?	☐☐ ☐☐ →	F.11
F.8	According to you, do you think that you need to use any contraceptive method?	Yes.....1 → No.....2	F.10
F.9	Why do you think that you do not need to use any contraceptive method?	☐☐ ☐☐ →	F.11

F.10	What are the reasons for not using a contraceptive method? **Multiple response possible**	**Fertility related reasons** Wants a (additional) child.....01 Husband away.....02 Breast-feeding.....03 Postpartum amenorrhoea.....04 **Opposition to use** Respondent opposed.....05 Husband opposed.....06 Other opposed (specify).....07 **Lack of knowledge** Knows no method.....08 Knows no source.....09 **Method-related reasons** Health concerns.....10 Fear of side effects.....11 Lack of access/too far.....12 Cost too much.....13 Inconvenient to use.....14 Interferes with body's natural process.....15 Other (specify).....16 Don't know.....88	
F.11	Do you intend to use a method in future to delay or stop (next) pregnancy?	Yes.....1 No.....2 → F.14 Using permanent method...3 → Sec.G	
F.12	Which method do you intend to use in future?	Pill.....01 Injection.....02 Norplant.....03 Condom.....04 Other (specify).....05	
F.13	Why would you choose this (Name) method? **Multiple response possible**	Easy to obtain.....01 Convenient to use.....02 Inexpensive .....03 Can discontinue anytime....04 Effective/reliable.....05 Recommended by health worker.....06 Other methods unsuitable...07 Has No/little side effects....08 Other (specify).....09	→ Sec.G
F.14	Why not?		

Section G: Pregnancy history

Q.N	Questions	Coding	Go to..
G.1	Have you ever been pregnant?	Yes.....1 No.....2 →	G.12
G.2	How many times have you become pregnant so far?	# of times...	
G.3	How many sons and daughters you have given birth to? ***(Live birth)***	# of son..... # of daughter.....	
G.4	Have you ever given birth to a boy or a girl who was born alive but later died? *If no, probe: Any baby who cried or showed signs of life but survived only a few hours or days?*	Yes.....1 No.....2 →	G.6
G.5	How many boys and girls have died?	# of boys dead..... # of girls dead... ..	
G.6	How many sons and daughters are alive and living with you?	# of Son..... # of daughter.....	
G.7	How many of your pregnancies ended in stillbirth?	# of still births.... .	
G.8	Women sometimes have pregnancies that do not result in a live born child. That is, a pregnancy can end early, in a miscarriage or the child can be born dead. Have you ever had a pregnancy that did not end in a live birth?	Yes.....1 No.....2 →	G.16
G.9	How many of your pregnancies ended in miscarriage?	# of miscarriage.....	
G.10	What do you think caused the last miscarriage to happen?	Hard work/heavy lifting..1 Accident (e.g. fall).....2 Physical violence.....3 Weakness.....4 Dietary/hot foods.....5 Other (specify).....6 Don't know/ can't say.....8	
G.11	Sometimes women have a miscarriage if they have taken some herbs or pills or done some activity/procedure that brings about a loss of pregnancy. Had you done anything like that in your last miscarriage, if yes, what?	No.....1 Took herb/home remedies.....2 Took pills/medicine.....3 Massage.....4 Other (specify).....5 Don't know.....8	→ G.16

G.12	Many couples have their own reasons for not having pregnancy, delaying pregnancy, can you tell me why until now you decided not to have any pregnancy/children?	Just got married.....1 Both trying.....2 Want to complete my education.....3 Want to get job first.....4 Husband did not want.....5 Health reasons of the respondent.....6 Health reasons of husband.....7 Don't know.....88 Other (specify).....8 Not applicable.....99	
G.13	When would you like to become pregnant/have children?	Months later ☐☐ *(if 00 then go to* → G.16 Never.....77 → G.15 Don't know.....88 → G.16	
G.14	Why do you want to wait until that time?	☐☐ → G.16	
G.15	Why would you never like to become pregnant/have children?	☐☐	
G.16	Do you desire (additional) children?	Yes.....1 No.....2 → G.18	
G.17	How many additional sons and daughters do you desire?	Son..... ☐ Daughter..... ☐ No sex preference... ☐	
G.18	Suppose you could choose your first child's sex would you choose a son or a daughter?	Son.....1 Daughter.....2 No preference.....3 Don't know.....8	
G.19	Is there pressure to have a (another) child?	Yes.....1 No.....2 → G.23	
G.20	Who is putting the pressure on you?	No one.....1 Husband.....2 Mother in law.....3 Father in law.....4 Other family members....5 Other (Specify).....6	
G.21	Is there pressure on you to have a (another) son?	Yes.....1 No.....2 → G.23	

G.22	Who is putting the pressure on you?	No one.....1 Husband.....2 Mother in law.....3 Father in law.....4 Other family members....5 Other (Specify).....6	
G.23	In your opinion, what should be the ideal number of children for a couple?	Son..... ☐ Daughter..... ☐ No sex preference.. ☐	
G.24	Thinking back at your last pregnancy, how did you feel when you learnt that you were pregnant? Were you very happy, happy, sad or very sad?	Very happy.....1 Happy.....2 Sad.....3 Very sad.....4	
G.25	When you were pregnant, the last time was it because your mother in law or father in law or other family members (in laws) wanted a child?	Yes.....1 No.....2	
G. 26	When you were pregnant, the last time was it because of the pressure from your husband?	Yes.....1 No.....2	

Section H. Current pregnancy status and fertility intention

H.1	Are you currently pregnant? *(Please cross check with G.1)*	Yes.....1 No.....2 Never been pregnant ...3 Don't know.....8	→ I.32
H.2	At the time you became pregnant (if not currently pregnant then ask about last time), did you want to become pregnant <u>then</u> or did you want to wait until <u>later</u> or did you <u>not want</u> to have any (more) children <u>at all</u>?	Then.....1 Later.....2 Not at all.....3	→ H.4 → H6
H.3	If you wanted to become pregnant at that time, then can you tell me why do you think so? **Multiple response possible**	Right time.....1 Plan to have baby.....2 Trying for baby.....3 Discussed with partner...4 Prepared for having baby5 Other (specify).....6	→ H.7
H.4	If you wanted later at the time you become pregnant, can you tell me why do you think so?	☐☐	
H.5	How much longer would you like to have waited?	Months..... ☐☐	→ H.7
H.6	If you did not want to have any (more) pregnancy at the time you become pregnant, can you tell me why do you think so?	☐☐	

H.7	At the time you became pregnant, were you or your partner using any contraceptives to avoid or delay getting pregnant?	Yes.....1 No.....2	
H.8	Before becoming pregnant the last time, did you have mutual understanding between your partners to have a (another child) child?	Yes.....1 No.....2	
H.9	When you got pregnant last time, had you discussed it before with your husband?	Yes.....1 No.....2	
H.10	Before you became pregnant the last time, did you think about having a (another) child or not?	Yes.....1 No.....2	
H.11	When you became pregnant last time, were you determined to have a (another) child?	Yes.....1 No.....2	
H.12	When you became pregnant the last time, were you trying (such as getting treatment) for a child?	Yes.....1 No.....2	
H.13	Did you stop using/doing any methods of birth control to try for getting pregnant?	Yes.....1 No.....2	
H.14	When you became pregnant last time, was it because of failure of family planning methods?	Yes.....1 No.....2	
H.15	When you became pregnant last time, did you say that it was because of galti (mistake) or suddenly or accidentally?	Yes.....1 No.....2	
H.16	When you became pregnant in the last time, were you praying with God to have a child?	Yes.....1 No.....2	
H.17	When you became pregnant last time, did you consider that was the appropriate age to become mother?	Yes.....1 No.....2	
H.18	Before getting pregnant the last time, did you think about the financial condition of your family to take care the child?	Yes.....1 No.....2	
H.19	Did you think about child's future before you became pregnant in the last time?	Yes.....1 No.....2	
H.20	When you become pregnant the last time, did you have any job on you?	Yes.....1 No.....2	
H.21	Before getting pregnant the last time, had you thought about going for antenatal check up if you get pregnant?	Yes.....1 No.....2	
H.22	Before becoming pregnant the last time, did you think about taking nutritious food?	Yes.....1 No.....2	
H.23	Did you think about the place of delivery/safe delivery of the child before you became pregnant the last time?	Yes.....1 No.....2	
H.24	Let's think back to the time of your first pregnancy, What was your age when you became pregnant for the first time?	Age..... ☐☐	
H.25	Were you in school/college when you first got pregnant?	Yes.....1 No.....2	→ H.29
H.26	Did you leave school/college because you got pregnant?	Yes.....1 No.....2	
H.27	Did you resume your education after the pregnancy?	Yes.....1 No.....2	→ H.29

H.28	Why did you not resume your education? **Multiple response possible**	Taking care of baby.....1 Not interested.....2 Husband didn't want.....3 Mother-in laws didn't want .....4 Other (specify).....5	
H.29	The first time you became pregnant, did you want to become pregnant then or did you want to wait until later or did you not want to have any (more) children at all?	Then.....1 Later.....2 Not at all.....3 Not applicable.....9	→ H.31 → H.32
H.30	If you wanted to become pregnant at that time, then can you tell me why do you think so? **Multiple response possible**	Right time.....1 Plan to have baby.....2 Trying for baby.....3 Discussed with partner...4 Prepared for having baby5 Other (specify).....6	→ H.32
H.31	If you wanted later or did not want to have any (more) pregnancy at the time you become pregnant, can you tell me why do you think so?	☐☐	
H.32	Do you think that you were physically able to get pregnant at the time of first pregnancy?	Yes.....1 No.....2 Don't know.....8	→ H.34 → H.34
H.33	Why not?	☐☐	
H.34	Do you think that you are physically able to get pregnant at the present time?	Yes.....1 No.....2 Don't know.....8	→ Sec I → Sec I
H.35	If no, why do you think you cannot get pregnant? **Multiple response possible**	Too young.....1 STIs.....2 Respondent had an medical operation.....3 Respondent is infertile.....4 Respondent had an medical operation.....5 Uses birth control.....6 Don't know.....7 Other (specify).....8	

Section I: Pregnancy planning and abortion

Q. N.	Questions	Coding	Go to..
I.1	You told me earlier that you have.....pregnancies in your life. Have you ever had a pregnancy, which according to you should not have happened at all or should have happened some time later? *(please cross check with G.1 and H.I)*	Never been pregnant.....1 Yes, should not have happened at all..... ....2 Yes, should have happened some time later.....3 No.....4	→ I.32 → I.32
I.2	Why did you want later or did not want at all?	☐ ☐	

I.3	How many times did such pregnancies happen to you?	# of times..... ☐	
I.4	When did it happen for the first time to you?	0-3 months ago.....01 3-6 months.....02 6-9 months ago.....03 9-12 months ago.....04 1-2 years .ago.....05 2-3 years ago.....06 3-4 years ago.....07 4-6 years ago.....08 6-8 years ago.....09 8 years and above.....10	
I.5	How old were you when it first happened to you?	Age in years..... ☐☐	
I.6	When did it happen the last time?	0-3 months ago.....01 3-6 months.....02 6-9 months ago.....03 9-12 months ago.....04 1-2 years ago.....05 2-3 years ago.....06 3-4 years ago.....07 4-6 years ago.....08 6-8 years ago.....09 8 years and above.....10	
I.7	What could be the reasons for becoming pregnant at that (last) time?	Not using FP method.....1 Method failed..... 2 Other (specify) 3	
I.8	At the time, did you want to use anything to delay or prevent pregnancy?	Yes..... .....1 No..... .....2 Unsure..... .....3 Didn't know about contraception.....4	
I.9	So at the time, were you using/doing anything to prevent pregnancy? *(Probe: did you use a contraceptive?)*	Yes..... .1 No.....2	I.11→
I.10	Why did you not take any action to delay or prevent pregnancy? *(Probe: any other reason?)* **Multiple response possible**	Breast feeding..... 01 Didn't know about contraception..... 02 Didn't know how to get..03 Contraception not available.....04 Side effects/health concerns.....05 Felt shy obtaining them. 06 Provider turned her away07 Husband opposed..... .08 Family members opposed.....09 Other (Specify)... .....10 Not applicable... 99	
I.11	Did you think/have you thought at any time that you did not want to continue this (that) pregnancy?	Yes.....1 No.....2	→I.14
I.12	Did you make any attempt to terminate the pregnancy?	Yes.....1 No.....2	→I.21

I.13	Who mainly wanted abortion? Was it your own desire or both desire or that of other family members?	Own desire..... ....1 Husband's desire.....2 Both desire.....3 Mother-in-law desire.....4 Mother's desire.....5 Others (specify).....6	
I.14	Did you consult/discuss with any one when you experienced such pregnancy?	Yes..... .....1 No..... 2	
I.15	Did you first try something on your own or did you first talk to someone or get advice on how to terminate the pregnancy?	Went for advice.....1 Tried to terminate.....2 → I.21 Nothing done.....3 → I.21	
I.16	With whom/where did you consult/talked? **Multiple response possible**	**Family/friends** Husband.....01 Mother in law.....02 Sister/sister in law.....03 Other relatives.....04 Friends/neighbour..... 05 **Medical personnel:** Government hospital.....06 PHC... .....07 Health/sub health post ...08 Private Doctor/ Clinic/Nursing home.....09 ANM/VHW.....10 TBA.....11 Pharmacy.....12 Traditional healers.....13 Others (Specify)... 14	
I.17	What suggestions he/she (name above sources) gave you?	☐☐	
I.18	Did you follow his/her (name above sources) suggestions?	Yes.....1 No.....2 → I.20	
I.19	Why did you follow his/her (name above sources) advice?	☐☐ →	I.21
I.20	Why did you not follow his/her (name above sources) advice?	☐☐	
I.21	What happened finally- Did you complete the pregnancy and had child or did you stop the pregnancy early, or did something else happen?	Nothing, continued with pregnancy.....1 → I.31 Attempted to remove the pregnancy but did not succeed.....2 Aborted.....3 Miscarried.....4 Still birth..... .....5 Other (specify).....6	I.32

I.22	If aborted, where did you /your partner get this service?	Government hospital.....1 PHC.....2 Health/sub health post ....3 Private Doctor/ Nursing home.....4 ANM/VHW.....5 TBA.....6 Pharmacy.....7 Traditional healers.....8 Others (Specify).....9	
I.23	Why did you go (name above place/person) there?	Cheap.....1 Confidential.....2 Accessible.....3 Female service provider....4 Friendly.....5 Only place available.....6 Good service.....7 Others (specify).....8	
I.24	How much did you/your partner pay for it?	Rs. ☐☐☐☐	
I.25	Did you have any health complications after an abortion?	Yes.....1 No.....2 →	I.27
I.26	What complications did you face?	☐ ☐	
I.27	Did you/your partner face any social or family problems after abortion?	Yes.....1 No.....2 →	I.29
I.28	Can you tell me what problems did you face?	☐ ☐	
I.29	Did you/your partner experience any psychological effects (feeling) after abortion?	Yes.....1 No.....2 →	I.32
I.30	Can you tell me what those effects (feeling) were?	☐ ☐	
I.31	What were the reasons that you didn't make at any attempt to terminate the pregnancy? **Multiple response possible**	Wanted child.....1 Fear of laws.....2 It is a sin.....3 Husband opposed.....4 Mother in law opposed.....5 Self opposed.....6 Didn't know where to go..7 Cost too much.....8 Other (Specify).....9	
I.32	Of the women you know-in your family, or among your friends, relatives and neighbours- how many do you know (have heard) that they have a pregnancy which should not happened at all or should have happened to some time later?	None.....1 Few.....2 Several.....3 Most.....4 Don't know.....5	

I.33	Of the women you know-in your family, or among your friends, relatives and neighbours-how many do you know (have heard) that they have terminated a pregnancy at some time or the other?	None.....1 Few.....2 Several.....3 Most.....4 Don't know.....5	
I.34	In this village/area, if a woman wants to terminate a pregnancy, how easy would it be for her to do it?	Very easy.....1 Easy.....2 Difficult.....3 Very difficult.....4 Don't know.....8	
I.35	Is abortion legal or illegal in Nepal?	Legal.....1 Illegal.....2 → I.37 Conditional legal.....3 Don't know/no response...4 → I.37	
I.36	Under what conditional is it legal? **Multiple response possible**	12 weeks of pregnancy of any woman.....1 Up to 18 weeks of pregnancy if the pregnancy results from rape or incest.....2 Any time during pregnancy if the life of mother is at risk or if the foetus is deformed.....3 12 weeks of pregnancy of married women.....4 Other (Specify).....5	
I.37	Do you think that it is okay or not to have abortion for a couple if they have unintended pregnancy?	Okay.....1 No.....2	
I.38	Do you approve or disapprove of having abortion in the following situation 1. Married women who got pregnant when she did not want to be pregnant 2. An unmarried girl who got pregnant 3. A pregnant married women who is told by a doctor that childbirth will be physically harmful for her 4. A pregnant married women who is told by a doctor that her baby is likely to be deformed	**Approve Disapprove DK** 1 2 8 1 2 8 1 2 8 1 2 8	
I.39	Do you think that your husband approves or disapproves of couples terminating their unintended pregnancy?	Approves.....1 Disapproves.....2 Don't know.....8	

Section J: Inter-spousal communication and consequences of unintended pregnancy

Q. N.	Questions	Coding	Go to..
J.1	How often have you talked to your husband about family planning methods in the past year?	Never.....1 Rare.....2 Frequent.....3 Sometimes.....4 Very frequent.....5	

J.2	How often have you talked to your husband about having or not having the children (additional) in the past year?	Never.....1 Rare.....2 Frequent.....3 Sometimes.....4 Very frequent.....5	
J.3	How often have you talked to your husband about abortion?	Never.....1 Rare.....2 Frequent.....3 Sometimes.....4 Very frequent.....5	
J.4	Do you think your husband/partner wants the same number of children that you want or does he want more or fewer than you want?	Same number.....1 More number.....2 Fewer number.....3 Don't know.....8	
J.5	Who do you think should decide how many children a woman should have?	Husband.....1 Wife.....2 Both, husband and wife.....3 Husband's parents.....4 Wife's parent.....5 Don't know.....8 Other (specify).....6	
J.6	Do you think that there would be any negative health consequences on women from unintended pregnancy?	Yes.....1 No.....2	→J.8
J.7	What are they?		
J.8	Do you think that there would be any negative social consequences of unintended pregnancy?	Yes.....1 No.....2	→J.10
J.9	What are they?		
J.10	Do you think that there would be any psychological consequences on women from unintended pregnancy?	Yes.....1 No.....2	→ Sec. K
J.11	What are they?		

K. Decision making on pregnancy and abortion

K.1	Now I would like to ask about the decision makers in your house. Who in your family usually has the final say on the following matters?	Respondent=1 Husband=2 Mother in law=3 Father in law=4 Respondent and husband joint=5 Someone else=6 Respondents and someone else=7 Don't know = 8	
K.1.1	Making large household purchases	1 2 3 4 5 6 7 8	
K.1.2	Making household purchase for daily needs	1 2 3 4 5 6 7 8	
K.1.3	Visits to family friend or relatives	1 2 3 4 5 6 7 8	
K.1.4	Your own health care	1 2 3 4 5 6 7 8	
K.1.5	Whether or not to have children	1 2 3 4 5 6 7 8	
K.1.6	How many children (son or daughter) should you have?	1 2 3 4 5 6 7 8	
K.1.7	Whether or not to use contraception	1 2 3 4 5 6 7 8	
K.2	Can you go out as to visit friends or relatives alone without taking permission from your husband or other family members?	Yes..... ...1 No..... .2	
K.3	Can you go out alone to the health centres/hospital for your own health care without taking permission from your husband or other family members?	Yes..... 1 No..... .2	
K.4	*Please ask only those who had terminated pregnancy* As you said earlier, you had terminated your last unintended pregnancy *(Please use local terms for unintended pregnancy)*. Who initiated the idea of terminating the pregnancy?	Not terminated the pregnancy.....1 → K.9 Respondent.....2 Husband.....3 Mother in law.....4 Other family members.....5 Friend/neighbour.....6 Health personnel.....7 Never been pregnant ...8 → K.9 Other (specify).....9	
K.5	Why he/she initiated?		
K.6	Would you say that terminating pregnancy is mainly your decision, mainly husband's decision, did you decide together or other family member's decision?	Mainly respondent's decision..... 1 Mainly husband's decision..... .....2 Decided together.....3 Other family member's decision.....4 Other (specify).....5	
K.7	Who has the final say in this matter?	Husband.....1 Mother in laws.....2 Other family member.....3 Health personal..... ..... 4 Both husband and wife.....5 Other (specify).....6	
K.8	If the decision was not made by you then what were the reasons to agree with him/her?		

K.9	In your opinion, if a woman wants an abortion, who do you think takes the decision?	Wife.....1 Husband.....2 Mother in law.....3 Other family members.....4 Friend/neighbour.....5 Health personnel.....6 Other (specify).....7	
K.10	In your opinion, in what situations a couple would like to go for abortion? **Multiple response possible**	Failure of FP methods.....1 Poverty.....2 Many children.....3 Others (specify)..... 4	
K.11	Imagine that you are compelled to go for an abortion, where do you like to go?	Private clinic/doctor.....1 Hospital.....2 PHC.....3 TBA.....4 Traditional faith healer.....5 Self try.....6 Never do abortion.....8 → L.1 Others (Specify).....7	
K.12	Why do you prefer to go there (name above place)?	Good facility..... 1 Reliable.....2 Confidentiality.....3 Fear of legal procedure.....4 Others (Specify).....5	

Section L: Self-Esteem

Q. N.	Questions	Coding				Go to..
L.1	Now I am going to read a list of statements dealing with your general feelings about yourself. You may agree, strongly agree, disagree or strongly disagree with these statements.	Strongly Agree	Agree	Disagree	Strongly Disagree	
L.1.1	One the whole, I am satisfied with myself.	1	2	3	4	
L.1.2	At times I think I am no good at all.	1	2	3	4	
L.1.3	I feel that I have a number of good qualities.	1	2	3	4	
L.1.4	I am able to do things as well as most other people.	1	2	3	4	
L.1.5	I feel I do not have much to be proud of.	1	2	3	4	
L.1.6	I certainly feel useless at times.	1	2	3	4	
L.1.7	I feel that I am a person of worth, at least on an equal plane with others.	1	2	3	4	
L.1.8	I wish I could have more respect for myself.	1	2	3	4	
L.1.9	All in all, I am inclined to feel that I am a failure.	1	2	3	4	
L.1.10	I take a positive attitude towards myself.	1	2	3	4	

This is the end of interview. Thank you very much for giving me your valuable time and answering our questions. Is there anything, would you like to ask me?

Annex X. Questionnaire for individual interviews with men: Young person's pregnancy study in Nepal

कपा
CREHPA

ID# ☐☐☐☐

DETERMINANTS AND CONSEQUENCES OF UNINTENDED PREGNANCIES AMONG YOUNG COUPLES IN NEPAL

MAY-JUNE 2003

Section A: Identification

A.1	District Name: 1. Ilam 2. Morang 3. Chitwan 4. Kaski 5. Lalitpur ☐
A.2	Name of VDC/municipality:_____ ☐☐
A.3	Ward No.: _____ ☐ Name of Tole _____
A.4	1. Urban 2. Rural ☐
A.5	Cluster No. _____ ☐☐☐
A.6	Household No. ☐☐☐☐
A.7	Name of household head_____
A.8	Sex of the head of the household 1. Male 2. Female
A.9	Name of the interviewer_____ Date_____
A.10	Name of field supervisor_____ Date_____

A.11 Household visit of respondent

Visited result	Visited Date Date	Month	Year	Result of visit
First Time	☐☐	☐☐	☐☐	☐
Second Time	☐☐	☐☐	☐☐	☐
Third Time	☐☐	☐☐	☐☐	☐

Visited result codes (code for A.11)

1. Interview Completed
2. Interview Incomplete
3. Respondent not at home
4. Respondent refused
5. Others (specify).....

ID# ☐☐☐☐

Section B: Eligible respondents for individual interview

(This section is to be administered to the household head or most knowledgeable person in the household)

S.N	B.1 Name of ever married women aged 15-49 years and their husband	B.2 Completed age in years	B.3 Marital status 1. Married 2. Widow/widower 3. Divorce/separated	B.4 Eligible respondent (Currently married women aged 15-24 and men 15-27)
1		☐☐	☐	1
2		☐☐	☐	2
3		☐☐	☐	3
4		☐☐	☐	4
5		☐☐	☐	5
6		☐☐	☐	6
7		☐☐	☐	7
8		☐☐	☐	8
9		☐☐	☐	9
10		☐☐	☐	10

B.5 Number of married women aged 15-24 years in the household... .... ☐

B.6 Number of married men aged 15-27 years in the household..... ..... ☐

B.7 Number of persons usually living in the household..... ☐

MEN QUESTIONNAIRE

(To be administered to the married men aged 15-27 years)

Informed Consent

Namaste! My name is..... and I am working with CREHPA, not for profit research organization based in Kathmandu. We are conducting a study about reproductive health of young married couples of five districts of our country. We would very much appreciate your participation in this study. We will be asking same questions to 1000 married women and 500 men. The information received from you will help the government and other concerned non governmental organizations to improve reproductive health services for young couples in your areas. The survey usually takes between 45-60 minutes. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions, if you don't like. However, I hope that you will participate in this survey since your views are very important to us. . If would like to know more information about this study please contact to Mr. Mahesh Puri at CREHPA in the telephone number 5-530344.

May I begin with the interview now?

Yes.....1 Yes, but later on.....2 (Please fix the time for next visit) No.....3 (end the interview)

Section C: Socio-demographic background

Name of the respondent..... Cluster # (Note down from A.5)... ☐☐

Household # (Note down from A.6) ... ☐☐

S No. of respondent (Note down from B.4).... ☐☐

First, I would like to ask some questions about you and your household.

Q.N	Questions	Coding	Go to..
C.1	How old were you at your last birthday?	Completed years..... ☐☐	
C.2	Are you currently married? *(please cross check with B.3)*	Yes..... ... 1 No..... . 2 →	Terminate interview
C.3	Is your wife living with you now or is she staying elsewhere?	Living with him.....1 Staying elsewhere..... .2	
C.4	Have you ever attended school?	Yes..... 1 No..... . .2 →	C6
C.5	What is the highest grade you have completed?	Primary (1-5) incomplete..... ..1 Primary completed..... .2 Secondary (6-10) incomplete... .3 SLC.....4 Intermediate and above.....5	
C.6	Have you ever participated in a literacy program or any other program that involves learning to read or write?	Yes.....1 No.....2	
C.7	Ethnicity/Caste *(Please don't ask to the respondent, note down on the basis of surname)*	Brahmin/Chhetri.....1 Tharu.....2 Rai/limbu.....3 Magar.....4 Tamang.....5 Other (Specify).....6	

C.8	What is your religion?	Hindu.....1 Buddhist.....2 Muslim.....3 Christian.....4 Other (Specify).....5	
C.9	Family structure *(In a same household)*	Nuclear.....1 Joint/Extended.....2	
C.10	Type of family	A couple only.....1 A couple and their own children.2 A couple, their children and their parents.....3 A couple and their children, brothers, sisters and parents.....4 More than one couple and their children.....5 More than one couple, their children and their parents.....6 More than one couple and their children, brothers, sisters and parents.....7	
C.11	How old were you when you (first) got married?	Completed years..... ☐☐	
C.12	How old were you when you started living with your wife? PROMPT: At gauna?	Completed years..... ☐☐	
C.13	What is your main occupation?	Agriculture.....01 Housewife.....02 Teacher.....03 Govt. Service holder.....04 Business.....05 Employee in factory.....06 Porter/Kulli.....07 Skilled labourer.....08 Unskilled labourer.....09 Retail shop/ Tea shop/.....10 Cottage/Handicraft.....11 Unemployment.....12 → C 20 Student .....13 → C.20 Other (specify).....14	→ C.15
C.14	Do you work mainly on your own land or on family land, or do you work on land that you rent from someone else, or do you work on someone else's land?	Own/family land.....1 Rented land.....2 Someone else's land.....3	
C.15	Are you self employed, employed by someone else, or do you do this work for a member of your family?	Self employed.....1 By someone else.....2 For family member.....3	
C.16	Do you usually work at home or away from home?	Home.....1 Away from home.....2	
C.17	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	Throughout the year.....1 Seasonally.....2 Once in a while.....3	

C.18	Are you paid in cash or kind for this work or are you not paid at all?	Cash only..... 1 Cash and kind.....2 In kind only..... ....3 Not paid.....4	→ C.20
C.19	Who mainly decides how the money you earn will be used?	Respondent.....1 Husband.....2 Both husband and respondent.. .3 Someone else..... 4 Respondents and someone else .5	
C.20	Do you own any land, either by yourself or jointly with someone else?	Yes, owns alone.....1 Yes, owns jointly..... .....2 No.....3	→ C.22
C.21	If you ever needed to, could you sell the land without anyone else's permission?	Yes.....1 No.....2 Not sure/don't know.....3	
C.22	What is the main occupation of your wife?	Farming.....01 Teacher.....02 Service holder.....03 Business.....04 Employee in factory.....05 Porter/Kulli.....06 Skilled labourer.....07 Unskilled labourer.....08 Retail shop/tea shop/restaurant 09 Cottage/Handicraft.....10 Unemployed..... 11 Student .....14 Other (specify).....12	
C.23	What is the main source of drinking water for members of your household?	**Piped Water** Piped into house/yard/plot.....1 Public/neighbour's tap.....2 **Dug Well** Well in house/yard/plot.....3 Public/neighbour's well.....4 **Tubewell/borehole** Tubewell in yard/plot.....5 Public/neighbour's tubewell.....6 **Surface water** Spring/kuwa.....7 River/stream/pond/lake.....8 Stone tap/Dhara.....9 Other (specify).....10	
C.24	What kind of toilet facilities does your household have?	Flush toilet.....1 Traditional pit toilet.....2 Ventilated improved pit latrine...3 No facility/bush/field.....4 Other (specify).....5	
C.25	Does your household have: Electricity A radio	<u>Yes</u> <u>No</u> Electricity ..... 1 2 Radio.....1 2	

	A television Telephone A bicycle A gas stove A kerosene stove A motorbike A refrigerator	Television.....1 2 Telephone.....1 2 Bicycle.....1 2 Gas stove.....1 2 Kerosene stove.....1 2 Motorbike.....1 2 Refrigerator.....1 2	
C.26	What type of fuel does your household mainly use for cooking?	Firewood/dung.....1 Bio gas.....2 LPG gas.....3 Electricity .....4 Kerosene.....5 Other.....6	
C.27	What is the type of floor (main material) in this house? *(Please observe the structure of the house and record)*	Natural floor (mud/dung).....1 Wood .....2 Cement/ brick.....3 Tile.....4 Marble.....5 Other (specify).....6	
C.28	What is the type of roof (main material) in this house? *(Please observe the structure of the house and record)*	Mud.....1 Thatched.....2 Wood .....3 Stone.....4 Tin..... .....5 Cement/ brick.....6 Other (specify).....7	

D. Exposure to media and sources of reproductive and sexual health information

D.1	Do you usually read a newspaper or magazine at least once a week?	Yes.....1 No.....2 Not applicable.....9	
D.2	Do you usually listen to radio every day?	Yes.....1 No.....2 Do not have radio.....3	
D.3	Do you usually watch television at least once a week?	Yes.....1 No.....2 Do not have TV.....3	
D.4	Now, I would like to ask you about the sources of information on reproductive and sexual health such as sex, contraception, care during or after pregnancy, miscarriage, abortion, sexually transmitted infections etc. You may learn from partner, teacher from school or college, from friend, parents, brother and sisters, doctors, or you may learn from books, magazine, radio, television etc. Where did you get information on contraception or family planning? **Multiple response possible**	No where.....01 School/college.....02 Wife.....03 Mother.....04 Father.....05 Brother.....06 Sister.....07 Mother in law.....08 Other relatives.....09 Health professionals.....10 Friends/neighbour.....11 Television.....12 Radio..... 13 Newspapers/magazine.....14 Internet.....15 Other (Specify).....16 Don't know.....88	

D.5	Where did you get information on sex? **Multiple response possible**	***Please use the codes from D.4*** ☐☐	
D.6	Where did you get information on care during or after pregnancy? **Multiple response possible**	***Please use the codes from D.4*** ☐☐	
D.7	Where did you get information on pregnancy, miscarriage, abortion? **Multiple response possible**	***Please use the codes from D.4*** ☐☐	
D.8	Where did you get information on sexually transmitted infections? **Multiple response possible**	***Please use the codes from D.4*** ☐☐	

Section E: Contraceptive knowledge

Now I would like to talk about family planning– the various ways or methods that a couple can use to delay or avoid a pregnancy. Which methods have you heard of? Any other methods?*(Please get spontaneous knowledge on contraceptives first then prompt only mentioning the name of the method (not the detailed description of the method) which were not named spontaneously by the respondent)*

Q.N.	Questions	Code		Go to..
E.1	Do you know of any method or way that one can use to delay or avoid getting pregnant?	Yes.....1 No.....2	**E.2 How is (name) used?**	▶Sec F
E1.1	**PILL/GOTI/CHAKKI :**Women can take a pill every day to avoid becoming pregnant	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	Tabs to eat everyday.....1 Other.....2	
E1.2	**IUD/LOOP/COPPER-T:** Women can have a loop or coil placed inside them by a doctor or a nurse	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	Copper device to put into uterus.....1 Other.....2	
E1.3	**INJECTION/DEPO/SANGINI SUI/*TEEN MAHINE SUI* :** Women can have an injection by a health provider which stops them from becoming pregnant for three months	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	3 months injection.....1 Other.....2	
E1.4	**NORPLANT:** Women can have several small rods placed in their upper arms by a doctor or nurse which can prevent pregnancy	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	Several small rods placed in the upper arm.....1 Other.....2	
E1.5	**CONDOM / *DHAL*:** Men can put a rubber sheath on their penis before sexual intercourse	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	Latex/rubber sheath to wear.....1 Other.....2	
E.1.6	**FOAMING TABLETS:** Tablets to put in vagina before sex	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	Tabs to put in vagina before sex.....1 Other.....2	
E1.7	**FEMALE STERILIZATION:** Women can have an operation to avoid having any more children	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	Surgical operation for female.....1 Other.....2	
E1.8	**MALE STERILIZATION:** Men can have an operation to avoid having any more children	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	Surgical operation for male.....1 Other.....2	
E1.9	**RHYTHM, PERIODIC ABSTINENCE:** Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	To avoid sex at 10-20 days.....1 Other.....2	
E1.10	**WITHDRAWAL/*JHIKNE*:** Men can be careful and pull out before ejaculation	Yes (spontaneous)...1 Yes (prompted).....2 No.....3	To ejaculate outside.....1 Other.....2	

Section F: Contraceptive use dynamics

Q.N	Questions	Coding	Go to..
F.1	Are you or your spouse currently doing something or using any method to delay or avoid getting pregnant?	Yes.....1 No.....2 →	F.8
F.2	Which method are you/your spouse using? **Multiple response possible**	Condom.....01 Pills.....02 Injection.....03 Norplant.....04 IUD.....05 Female sterilization.....06 Male sterilization.....07 Periodic abstinence.....08 Withdrawal.....09 Other (specify).....10	
F.3	For how many months have you/your wife been using this (name) method continuously?	Months..... ☐☐ 8 years or longer.....96	
F.4	Why have you/your spouse chose this method? **Multiple response possible**	Easy to obtain.....01 Convenient to use.....02 Inexpensive .....03 Can discontinue anytime.....04 Effective/reliable.....05 Recommended by health worker.....06 Other methods unsuitable....07 Has No/little side effects.....08 Only method available.....09 Other (specify).....10	
F.5	Where did you/your wife obtain this (name) method the last time?	HP/SHP staff.....1 MCHW.....2 VHW.....3 Hospital.....4 FCHV.....5 Other (specify).....6	
F.6	Are you/your spouse experiencing any problem with the method that you are using?	Yes.....1 No.....2 →	F.11
F.7	What are they?	☐☐ ☐☐ →	F.11
F.8	According to you, do you think that you/your wife need to use any contraceptive method?	Yes.....1 → No.....2	F.10
F.9	Why do you think that you/your wife do not need to use any contraceptive method?	☐☐ ☐☐ →	F.11

F.10	What are the reasons for not using a contraceptive method? **Multiple response possible**	**Fertility related reasons** Wants a (additional) child.....01 Wife away.....02 Breast-feeding.....03 Postpartum amenorrhoea.....04 **Opposition to use** Respondent opposed.....05 Wife opposed.....06 Other opposed (specify).....07 **Lack of knowledge** Knows no method.....08 Knows no source.....09 **Method-related reasons** Health concerns.....10 Fear of side effects.....11 Lack of access/too far.....12 Cost too much.....13 Inconvenient to use.....14 Interferes with body's natural process.....15 Other (specify).....16 Don't know.....88	
F.11	Do you intend to use a method in future to delay or stop (next) pregnancy?	Yes.....1 No.....2 → F.14 Using permanent method...3 → Sec.G	
F.12	Which method do you intend to use in future?	Pill.....01 Injection.....02 Norplant.....03 Condom.....04 Other (specify).....05	
F.13	Why would you choose this (Name) method? **Multiple response possible**	Easy to obtain.....01 Convenient to use.....02 Inexpensive .....03 Can discontinue anytime....04 Effective/reliable.....05 Recommended by health worker.....06 Other methods unsuitable...07 Has No/little side effects....08 Other (specify).....09	→ Sec.G
F.14	Why not?		

Section G: Pregnancy history

Q.N	Questions	Coding	Go to..
G.1	Has your wife ever been pregnant?	Yes.....1 No.....2 →	G.12
G.2	How many times has she become pregnant so far?	# of times... ☐☐	
G.3	How many sons and daughters she has given birth to? ***(Live birth)***	# of son..... ☐ # of daughter..... ☐	
G.4	Has she ever given birth to a boy or a girl who was born alive but later died? *If no, probe: Any baby who cried or showed signs of life but survived only a few hours or days?*	Yes.....1 No.....2 →	G.6
G.5	How many boys and girls have died?	# of boys dead..... ☐ # of girls dead... .. ☐	
G.6	How many sons and daughters are alive and living with you?	# of Son..... ☐ # of daughter..... ☐	
G.7	How many of your pregnancies of your wife ended in stillbirth?	# of still births.... . ☐	
G.8	Women sometimes have pregnancies that do not result in a live born child. That is, a pregnancy can end early, in a miscarriage or the child can be born dead. Have your wife ever had a pregnancy that did not end in a live birth?	Yes.....1 No.....2 →	G.16
G.9	How many pregnancies of your wife ended in miscarriage?	# of miscarriage..... ☐	
G.10	What do you think caused the last miscarriage to happen?	Hard work/heavy lifting..1 Accident (e.g. fall).....2 Physical violence.....3 Weakness.....4 Dietary/hot foods.....5 Other (specify).....6 Don't know/ can't say.....8	
G.11	Sometimes women have a miscarriage if they have taken some herbs or pills or done some activity/procedure that brings about a loss of pregnancy. Had your wife done anything like that in her last miscarriage, if yes, what?	No.....1 Took herb/home remedies.....2 Took pills/medicine.....3 Massage.....4 Other (specify).....5 Don't know.....8	→ G.16

G.12	Many couples have their own reasons for not having pregnancy, delaying pregnancy, can you tell me why until now you decided not to have any pregnancy/children?	Just got married.....1 Both trying.....2 Want to complete my education.....3 Want to get job first.....4 Wife did not want.....5 Health reasons of the respondent.....6 Health reasons of wife....7 Don't know.....88 Other (specify).....8 Not applicable.....99	
G.13	When would you like your wife to become pregnant/have children?	Months later ☐☐ *(if 00 then go to* → G.16 Never.....77 → G.15 Don't know.....88 → G.16	
G.14	Why do you want to wait until that time?	☐☐ → G.16	
G.15	Why would you never like your wife to become pregnant/have children?	☐☐	
G.16	Do you desire (additional) children?	Yes.....1 No.....2 → G.18	
G.17	How many additional sons and daughters do you desire?	Son..... ☐ Daughter..... ☐ No sex preference... ☐	
G.18	Suppose you could choose your first child's sex would you choose a son or a daughter?	Son.....1 Daughter.....2 No preference.....3 Don't know.....8	
G.19	Is there pressure to have a (another) child?	Yes.....1 No.....2 → G.23	
G.20	Who is putting the pressure on you?	No one.....1 Wife.....2 Mother.....3 Father.....4 Other family members....5 Other (Specify).....6	
G.21	Is there pressure on you to have a (another) son?	Yes.....1 No.....2 → G.23	
G.22	Who is putting the pressure on you?	No one.....1 Wife.....2 Mother .....3 Father .....4 Other family members....5 Other (Specify).....6	

G.23	In your opinion, what should be the ideal number of children for a couple?	Son..... ☐ Daughter..... ☐ No sex preference.. ☐	
G.24	Thinking back at your wife's last pregnancy, how did you feel when you learnt that your wife was pregnant? Were you very happy, happy, sad or very sad?	Very happy.....1 Happy.....2 Sad.....3 Very sad.....4	
G.25	When your wife was pregnant, the last time was it because your mother in law or father in law or other family members (in laws) wanted a child?	Yes.....1 No.....2	
G. 26	When your wife was pregnant, the last time, did you want her to become pregnant at that time?	Yes.....1 No.....2	

Section H. Current pregnancy status and fertility intention

H.1	Is your wife currently pregnant? *(Please cross check with G.1)*	Yes.....1 No.....2 Never been pregnant ...3 Don't know.....8	→ I.32
H.2	At the time she became pregnant (if not currently pregnant then ask about last time), did you want your wife to become pregnant then or did you want to wait until later or did you not want to have any (more) children at all?	Then.....1 Later.....2 Not at all.....3	→H.4 →H6
H.3	If you wanted your wife to become pregnant at that time, then can you tell me why do you think so? **Multiple response possible**	Right time.....1 Plan to have baby.....2 Trying for baby.....3 Discussed with partner...4 Prepared for having baby5 Other (specify).....6	→ H.7
H.4	If you wanted later at the time she became pregnant, can you tell me why do you think so?	☐☐	
H.5	How much longer would you like to have waited?	Months..... ☐☐	→H.7
H.6	If you did not want to have any (more) pregnancy at the time she became pregnant, can you tell me why do you think so?	☐☐	
H.7	At the time she became pregnant, were you/your spouse using any contraceptives to avoid or delay getting pregnant?	Yes.....1 No.....2	
H.8	Before your wife becoming pregnant the last time, did you have mutual understanding between your partners to have a (another child) child?	Yes.....1 No.....2	
H.9	When your wife got pregnant last time, had you discussed it before with her?	Yes.....1 No.....2	
H.10	Before your wife became pregnant the last time, did you think about having a (another) child or not?	Yes.....1 No.....2	
H.11	When your wife became pregnant last time, were you determined to have a (another) child?	Yes.....1 No.....2	

H.12	When your wife became pregnant the last time, were you trying (such as getting treatment) for a child?	Yes.....1 No.....2	
H.13	Did you or your wife stop using/doing any methods of birth control to try for getting pregnant?	Yes.....1 No.....2	
H.14	When your wife became pregnant last time, was it because of failure of family planning methods?	Yes.....1 No.....2	
H.15	When your wife became pregnant last time, did you say that it was because of galti (mistake) or suddenly or accidentally?	Yes.....1 No.....2	
H.16	When your wife became pregnant in the last time, were you praying with God to have a child?	Yes.....1 No.....2	
H.17	When your wife became pregnant last time, did you consider that was the appropriate age to become mother?	Yes.....1 No.....2	
H.18	Before your wife got pregnant the last time, did you think about the financial condition of your family to take care the child?	Yes.....1 No.....2	
H.19	Did you think about child's future before your wife became pregnant in the last time?	Yes.....1 No.....2	
H.20	When your wife become pregnant the last time, did you have any job for pay?	Yes.....1 No.....2	
H.21	Before your wife became pregnant the last time, had you thought about going for antenatal check up if she get pregnant?	Yes.....1 No.....2	
H.22	Before your wife became pregnant the last time, did you think about giving her nutritious food?	Yes.....1 No.....2	
H.23	Did you think about the place of delivery/safe delivery of the child before your wife became pregnant the last time?	Yes.....1 No.....2	
H.24	Let's think back to the time of first pregnancy of your wife. What was your age when she became pregnant for the first time?	Age..... ☐☐	
H.25	Were you in school/college when she first got pregnant?	Yes.....1 No.....2	→ H.29
H.26	Did you leave school/college because she got pregnant?	Yes.....1 No.....2	
H.27	Did you resume your education after the pregnancy?	Yes.....1 No.....2	→ H.29
H.28	Why did you not resume your education? **Multiple response possible**	Taking care of baby.....1 Not interested.....2 Wife didn't want..... ..3 Mother didn't want ....4 Other (specify).....5	
H.29	The first time she became pregnant, did you want your wife to become pregnant then or did you want to wait until later or did you not want to have any (more) children at all?	Then.....1 Later.....2 Not at all.....3 Not applicable.....9	→ H.31 → H.32
H.30	If you wanted your wife to become pregnant at that time, then can you tell me why do you think so? **Multiple response possible**	Right time.....1 Plan to have baby.....2 Trying for baby.....3 Discussed with partner...4 Prepared for having baby5 Other (specify).....6	→ H.32

H.31	If you wanted later or did not want to have any (more) pregnancy at the time she become pregnant, can you tell me why do you think so?	☐☐	
H.32	Do you think that you were physically able to make your wife pregnant at the time of her first pregnancy?	Yes.....1 No.....2 Don't know.....8	→ H.34 → H.34
H.33	Why not?	☐☐	
H.34	Do you think that you are physically able to make your wife pregnant at the present time?	Yes.....1 No.....2 Don't know.....8	→ Sec I → Sec I
H.35	If no, why do you think you cannot get pregnant? **Multiple response possible**	Too young.....1 STIs.....2 Respondent had an medical operation.....3 Respondent is infertile.....4 Respondent had an medical operation.....5 Uses birth control.....6 Don't know.....7 Other (specify).....8	

Section I: Pregnancy planning and abortion

Q. N.	Questions	Coding	Go to..
I.1	You told me earlier that your wife had ..... pregnancies in her life. Has she ever had a pregnancy, which according to you should not have happened at all or should have happened some time later? *(please cross check with G.1 and H.I)*	Never been pregnant.....1 Yes, should not have happened at all..... ....2 Yes, should have happened some time later.....3 No.....4	→ I.32 → I.32
I.2	Why did you want later or did not want at all?	☐ ☐	
I.3	How many times did such pregnancies happen to your wife?	# of times..... ☐	
I.4	When did it happen for the first time to your wife?	0-3 months ago.....01 3-6 months.....02 6-9 months ago.....03 9-12 months ago.....04 1-2 years .ago.....05 2-3 years ago.....06 3-4 years ago.....07 4-6 years ago.....08 6-8 years ago.....09 8 years and above.....10	
I.5	How old were you when it first happened to your wife?	Age in years..... ☐☐	

I.6	When did it happen the last time to your wife?	0-3 months ago.....01 3-6 months.....02 6-9 months ago.....03 9-12 months ago.....04 1-2 years ago.....05 2-3 years ago.....06 3-4 years ago.....07 4-6 years ago.....08 6-8 years ago.....09 8 years and above.....10	
I.7	What could be the reasons for your wife becoming pregnant at that (last) time?	Not using FP method.....1 Method failed..... 2 Other (specify) 3	
I.8	At the time, did you want to use anything to delay or prevent pregnancy?	Yes..... .....1 No..... .....2 Unsure..... .....3 Didn't know about contraception.....4	
I.9	So at the time, were you or your wife using/doing anything to prevent pregnancy? *(Probe: did you use a contraceptive?)*	Yes..... .1 No.....2	I.11→
I.10	Why did you not take any action to delay or prevent pregnancy? *(Probe: any other reason?)* **Multiple response possible**	Breast feeding..... 01 Didn't know about contraception..... 02 Didn't know how to get..03 Contraception not available.....04 Side effects/health concerns.....05 Felt shy obtaining them. 06 Provider turned her away07 Wife opposed..... .08 Family members opposed.....09 Other (Specify)... .....10 Not applicable... 99	
I.11	Did you think/have you thought at any time that you did not want to continue this (that) pregnancy?	Yes.....1 No.....2	→I.14
I.12	Did you make any attempt to terminate the pregnancy?	Yes.....1 No.....2	→I.21
I.13	Who mainly wanted abortion? Was it your own desire or both desire or that of other family members?	Own desire..... ....1 Wife's desire.....2 Both desire.....3 Mother-in-law desire..... 4 Mother's desire..... 5 Others (specify).....6	
I.14	Did you consult/discuss with any one when your wife experienced such pregnancy?	Yes..... .....1 No..... 2	
I.15	Did you first try something on your own or did you first talk to someone or get advice on how to terminate the pregnancy?	Went for advice.....1 Tried to terminate.....2 → I.21 Nothing done.....3 → I.21	

I.16	With whom/where did you consult/talked? **Multiple response possible**	**Family/friends** Husband.....01 Mother in law.....02 Sister/sister in law.....03 Other relatives.....04 Friends/neighbour..... 05 **Medical personnel:** Government hospital.....06 PHC... .....07 Health/sub health post ...08 Private Doctor/ Clinic/Nursing home.....09 ANM/VHW.....10 TBA.....11 Pharmacy.....12 Traditional healers.....13 Others (Specify)... 14	
I.17	What suggestions he/she (name above sources) gave you?	☐ ☐	
I.18	Did you follow his/her (name above sources) suggestions?	Yes.....1 No.....2 →	I.20
I.19	Why did you follow his/her (name above sources) advice?	☐ ☐ →	I.21
I.20	Why did you not follow his/her (name above sources) advice?	☐ ☐	
I.21	What happened finally- Did your wife complete the pregnancy and had child or did she stop the pregnancy early, or did something else happen?	Nothing, continued with pregnancy.....1 → Attempted to remove the pregnancy but did not succeed.....2 Aborted.....3 Miscarried.....4 Still birth..... .....5 Other (specify).....6	I.31 → I.32
I.22	If aborted, where did you /your partner get this service?	Government hospital.....1 PHC.....2 Health/sub health post ....3 Private Doctor/ Nursing home..... ..4 ANM/VHW..... 5 TBA..... .6 Pharmacy..... 7 Traditional healers..... 8 Others (Specify)..... 9	

I.23	Why did you go (name above place/person) there?	Cheap.....1 Confidential.....2 Accessible.....3 Female service provider....4 Friendly.....5 Only place available.....6 Good service.....7 Others (specify).....8	
I.24	How much did you/your wife pay for it?	Rs. ☐☐☐☐	
I.25	Did she have any health complications after an abortion?	Yes.....1 No.....2 → I.27	
I.26	What complications did she face?	☐ ☐	
I.27	Did you/your wife face any social or family problems after abortion?	Yes.....1 No.....2 → I.29	
I.28	Can you tell me what problems did you/she face?	☐ ☐	
I.29	Did you/your wife experience any psychological effects (feeling) after abortion?	Yes.....1 No.....2 → I.32	
I.30	Can you tell me what those effects (feeling) were?	☐ ☐	
I.31	What were the reasons that you/your wife didn't make at any attempt to terminate the pregnancy? **Multiple response possible**	Wanted child.....1 Fear of laws.....2 It is a sin.....3 Husband opposed.....4 Mother in law opposed.....5 Self opposed.....6 Didn't know where to go..7 Cost too much.....8 Other (Specify).....9	
I.32	Of the women you know-in your family, or among your friends, relatives and neighbours-how many do you know (have heard) that they have a pregnancy which should not happened at all or should have happened to some time later?	None.....1 Few.....2 Several.....3 Most.....4 Don't know.....5	
I.33	Of the women you know-in your family, or among your friends, relatives and neighbours-how many do you know (have heard) that they have terminated a pregnancy at some time or the other?	None.....1 Few.....2 Several.....3 Most.....4 Don't know.....5	
I.34	In this village/area, if a woman wants to terminate a pregnancy, how easy would it be for her to do it?	Very easy.....1 Easy.....2 Difficult.....3 Very difficult.....4 Don't know.....8	
I.35	Is abortion legal or illegal in Nepal?	Legal.....1 Illegal.....2 → I.37 Conditional legal.....3 Don't know/no response...4 → I.37	

I.36	Under what conditional is it legal? **Multiple response possible**	12 weeks of pregnancy of any woman.....1 Up to 18 weeks of pregnancy if the pregnancy results from rape or incest.....2 Any time during pregnancy if the life of mother is at risk or if the foetus is deformed.....3 12 weeks of pregnancy of married women.....4 Other (Specify).....5	
I.37	Do you think that it is okay or not to have abortion for a couple if they have unintended pregnancy?	Okay.....1 No.....2	
I.38	Do you approve or disapprove of having abortion in the following situation 1. Married women who got pregnant when she did not want to be pregnant 2. An unmarried girl who got pregnant 3. A pregnant married women who is told by a doctor that childbirth will be physically harmful for her 4. A pregnant married women who is told by a doctor that her baby is likely to be deformed	**Approve Disapprove DK** 1 2 8 1 2 8 1 2 8 1 2 8	
I.39	Do you think that your wife approves or disapproves of couples terminating their unintended pregnancy?	Approves.....1 Disapproves.....2 Don't know.....8	

Section J: Inter-spousal communication and consequences of unintended pregnancy

Q. N.	Questions	Coding	Go to..
J.1	How often have you talked to your wife about family planning methods in the past year?	Never.....1 Rare.....2 Frequent.....3 Sometimes.....4 Very frequent.....5	
J.2	How often have you talked to your wife about having or not having the children (additional) in the past year?	Never.....1 Rare.....2 Frequent.....3 Sometimes.....4 Very frequent.....5	
J.3	How often have you talked to your wife about abortion?	Never.....1 Rare.....2 Frequent.....3 Sometimes.....4 Very frequent.....5	
J.4	Do you think your wife wants the same number of children that you want or does she want more or fewer than you want?	Same number.....1 More number.....2 Fewer number.....3 Don't know.....8	

J.5	Who do you think should decide how many children a woman should have?	Husband.....1 Wife.....2 Both, husband and wife.....3 Husband's parents.. .....4 Wife's parent.....5 Don't know..... .....8 Other (specify).....6	
J.6	Do you think that there would be any negative health consequences on women from unintended pregnancy?	Yes.....1 No.....2	→J.8
J.7	What are they?	☐ ☐	
J.8	Do you think that there would be any negative social consequences of unintended pregnancy?	Yes.....1 No.....2	→J.10
J.9	What are they?	☐ ☐	
J.10	Do you think that there would be any psychological consequences on women from unintended pregnancy?	Yes.....1 No.....2	→ Sec. K
J.11	What are they?	☐ ☐	

K. Decision making on pregnancy and abortion

K.1	Now I would like to ask about the decision makers in your house. Who in your family usually has the final say on the following matters?	Respondent=1 Wife=2 Mother=3 Father=4 Respondent and wife joint = 5 Someone else=6 Respondents and someone else=7 Don't know = 8	
K.1.1	Making large household purchases	1 2 3 4 5 6 7 8	
K.1.2	Making household purchase for daily needs	1 2 3 4 5 6 7 8	
K.1.3	Visits to family friend or relatives	1 2 3 4 5 6 7 8	
K.1.4	Your own health care	1 2 3 4 5 6 7 8	
K.1.5	Whether or not to have children	1 2 3 4 5 6 7 8	
K.1.6	How many children (son or daughter) should you have?	1 2 3 4 5 6 7 8	
K.1.7	Whether or not to use contraception	1 2 3 4 5 6 7 8	
K.2	Can your wife go out alone to visit friends or relatives without taking permission from you or other family members?	Yes..... ...1 No..... .2	
K.3	Can your wife go out alone to the health centres/hospital for her own health care without taking permission from you or other family members?	Yes..... 1 No..... .2	
K.4	*Please ask only those who had terminated pregnancy* As you said earlier, your wife had terminated her last	Not terminated the pregnancy.....1 Me.....2	→K.9

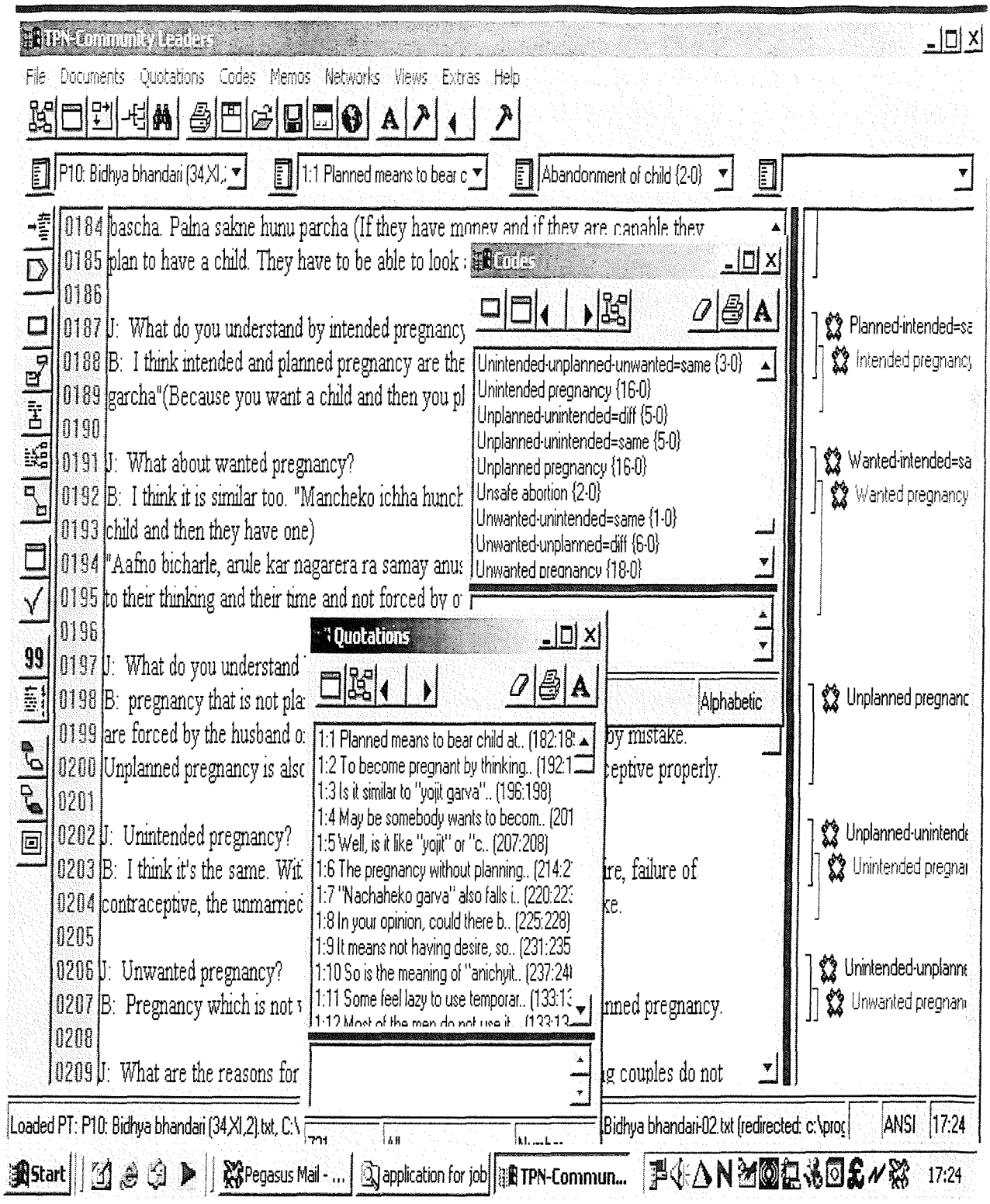
	unintended pregnancy *(Please use local terms for unintended pregnancy)*. Who initiated the idea of terminating the pregnancy?	Wife.....3 Mother .....4 Other family members.....5 Friend/neighbour.....6 Health personnel.....7 Never been pregnant ...8 → K.9 Other (specify).....9	
K.5	Why he/she initiated?	☐ ☐	
K.6	Would you say that terminating pregnancy is mainly your decision, mainly wife's decision, did you decide together or other family member's decision?	Mainly respondent's decision..... 1 Mainly husband's decision..... .....2 Decided together.....3 Other family member's decision.....4 Other (specify).....5	
K.7	Who has the final say in this matter?	Wife.....1 Mother.....2 Other family member.....3 Health personal..... ..... 4 Both husband and wife.....5 Other (specify).....6	
K.8	If the decision was not made by you then what were the reasons to agree with him/her?	☐ ☐	
K.9	In your opinion, if a woman wants an abortion, who do you think takes the final decision?	Husband.....1 Wife.....2 Mother in law.....3 Other family members.....4 Friend/neighbour.....5 Health personnel.....6 Other (specify).....7	
K.10	In your opinion, in what situations a couple would like to go for abortion? **Multiple response possible**	Failure of FP methods.....1 Poverty.....2 Many children.....3 Others (specify)..... 4	
K.11	Imagine that you/ your wife are compelled to go for an abortion, where do you like to go?	Private clinic/doctor.....1 Hospital.....2 PHC.....3 TBA.....4 Traditional faith healer.....5 Self try.....6 Never do abortion.....8 → L.1 Others (Specify).....7	
K.12	Why do you prefer to go there (name above place)?	Good facility..... 1 Reliable.....2 Confidentiality.....3 Fear of legal procedure.....4 Others (Specify).....5	

Section L: Self-Esteem

Q. N.	Questions	Coding				Go to..
L.1	Now I am going to read a list of statements dealing with your general feelings about yourself. You may agree, strongly agree, disagree or strongly disagree with these statements.	Strongly Agree	Agree	Disagree	Strongly Disagree	
L.1.1	One the whole, I am satisfied with myself.	1	2	3	4	
L.1.2	At times I think I am no good at all.	1	2	3	4	
L.1.3	I feel that I have a number of good qualities.	1	2	3	4	
L.1.4	I am able to do things as well as most other people.	1	2	3	4	
L.1.5	I feel I do not have much to be proud of.	1	2	3	4	
L.1.6	I certainly feel useless at times.	1	2	3	4	
L.1.7	I feel that I am a person of worth, at least on an equal plane with others.	1	2	3	4	
L.1.8	I wish I could have more respect for myself.	1	2	3	4	
L.1.9	All in all, I am inclined to feel that I am a failure.	1	2	3	4	
L.1.10	I take a positive attitude towards myself.	1	2	3	4	

This is the end of interview. Thank you very much for giving me your valuable time and answering our questions. Is there anything, would you like to ask me?

Annex XI. An example of coding and extracting quotations using Atlas/ti computer application: Young person's pregnancy study in Nepal, 2003



Annex XII: Selected characteristics of young women and men covered in in-depth interviews: Young person's pregnancy in Nepal, 2003

No	Pseudonym	Age	Occupation	Years of Schooling	Ethnicity	Number of living children
Women						
1	Anu	20	Teacher	10	Tharu	One
2	Avha	23	Nurse	Nursing	Tharu	One
3	Bishnu	24	House maker	10	Newar	None
4	Chandani	24	Shopkeeper	10	Gurung	One
5	Jamuna	23	Staff nurse	Nursing	Brahmin	None
6	Komal	21	House maker	10	Brahmin	None
7	Mala	24	Agriculture	8	Tharu	Two
8	Meena	23	Agriculture	10	Newar	One
9	Malina	22	House maker	12	Brahmin	One
10	Mona	20	House maker	7	Tharu	One
11	Naramaya	22	House maker	9	Newar	One
12	Sumnima	21	Shopkeeper	9	Limbu	Two
13	Sonali	22	House maker	10	Rai	None
14	Sonia	21	Shopkeeper	10	Newar	One
15	Sivekchaya	23	House maker	10	Chhetri	One
16	Teena	23	Student	12	Newar	One
17	Yasmine	23	Hotel business	9	Tamang	None
Men						
1	Jai	27	Shopkeeper	12	Tharu	One
2	Keshav	24	Shopkeeper	10	Limbu	One
3	Khem	26	Shopkeeper	3	Tamang	None
4	Koshore	26	Teacher	14	Brahmin	One
5	Lokesh	27	Furniture factory	8	Newar	One
6	Mukesh	21	Sales assistant	9	Chhetri	One
7	Mesh man	26	Sculpture	3	Newar	One
8	Madhav	24	Business	12	Low caste	One
9	Manoj	23	Factory worker	10	Brahmin	Two
10	Rajeev	26	Agriculture	10	Brahmin	One
11	Raju	26	Computer assistant	12	Newar	None
12	Ramu	22	Student	12	Chhetri	None
13	Suraj	22	Business	5	Newar	One
14	Suman	23	Agriculture	12	Brahmin	One
15	Sudheer	26	Carpenter	12	Newar	None
16	Sabashis	26	Unemployed	12	Chhetri	Two
17	Yam	24	Shop keeper	10	Rai	Two

Annex XIII. Selected characteristics of the community level health service providers covered in the study: Young person's pregnancy in Nepal, 2003

SN	Pseudonym	Age	Sex	Occupation/designation	Place of work	Ethnicity
1	Devi	58	Female	Staff nurse	Health post	Newar
2	Eshwor	38	Male	Health assistant, in-charge	Health post	Brahmin
3	Gyaneshowri	28	Female	Staff nurse	Primary health centre	Brahmin
4	Jeevan	52	Male	AHW, in-charge	Sub health post	Brahmin
5	Manita	44	Female	Village health worker	Health post	Brahmin
6	Meera	24	Female	ANM	Primary health centre	Limbu
7	Maiya	38	Female	AHW, in-charge	Sub health posts	Brahmin
8	Meeta	40	Female	ANM	Health post	Chhetri
9	Nirmal	43	Male	Health assistant, in-charge	Primary health centre	Chhettri
10	Pushkar	34	Male	AHW	Health post	Chhetri
11	Rama	37	Female	ANM	Primary health centre	Chhetri
12	Sabita	29	Female	MCHW	Health post	Brahmin
13	Shekhar	30	Male	AHW	Sub health post	Brahmin
14	Seema	29	Female	AHW, in-charge	Health post	Brahmin
15	Sophia	20	Female	AHW	Health post	Lama
16	Shreyam	38	Male	ANM	Health post	Brahmin

Annex XIV. Selected characteristics of the community leaders covered in the study: Young person's pregnancy in Nepal, 2003

	Pseudonym	Age	Sex	Years of schooling	Occupation	Ethnicity
1	Anita	35	Female	10	Ex-ward member of VDC	Chhetri
2	Banika	34	Female	9	Social worker	Newar
3	Chandra lal	35	Male	10	School teacher	Brahmin
4	Deeva	41	Female	12	Ward chairperson of VDC	Brahmin
5	Gopal Dhar	54	Male	12	Retired school teacher and social worker	Brhamin
6	Gokul	23	Male	12	Youth educator	Newar
7	Lok mani	39	Male	14	VDC chairmen	Tharu
8	Mati	28	Male	8	Ex-VDC chairperson/businessperson	Newar
9	Man babu	38	Female	14	Ward member of municipality	Newar
10	Megh	44	Male	10	VDC chairmen	Tharu
11	Pema	30	Male	12	School teacher	Chhetri
12	Prabhat	35	Male	10	Social worker	Chhetri
13	Pranav	38	Male	14	VDC chairperson	Newar
14	Ripesh	27	Male	14	School teacher	Chhetri
15	Sabrina	34	Female	10	Ward member of sub metro municipality	Newar
16	Yogesh	50	Male	10	School teacher	Tharu

Annex XV: List of assets and factors scores using principal component analysis: Young person's pregnancy study in Nepal, 2003

Asset variable	Mean	Std. Dev.	Asset factor score	Household score if	
				Has asset	Does not have asset
Has electricity	.772	.419	1.52953	0.829226	-2.819371
Has radio	.756	.429	0.12121	0.068834	-0.213293
Has television	.634	.481	0.22495	0.170726	-0.296196
Has a telephone	.147	.354	0.15879	0.382289	-0.065911
Has a cycle	.522	.499	0.02497	0.023883	-0.026088
If uses biogas for cooking	.057	.232	0.17538	0.709896	-0.043298
If uses electricity for cooking	.004	.063	0.05096	0.802789	-0.003232
If uses kerosene for cooking	.104	.306	0.24164	0.704921	-0.082653
If uses LPG gas for cooking	.219	.413	0.40468	0.763398	-0.214378
If uses wood/plank principal floor in dwelling	.032	.178	0.08264	0.448932	-0.015202
If has cement principal floor	.426	.494	0.50527	0.585749	-0.435557
If has tile flooring	.002	.051	0.04586	0.8854.76	-0.002373
If has marble flooring	.004	.063	0.06024	0.948980	-0.003821
If has soil principal roof in dwelling	.010	.102	-0.03740	-0.359581	0.003887
If has thatched roof	.160	.367	-0.20295	-0.464123	0.088685
If has wooden roof	.004	.068	-0.00492	-0.071732	0.000337
If has stone roof	.017	.130	0.00328	0.024654	-0.004361
If has tin roof	.475	.499	-0.02970	-0.031155	0.028293
If has cement/brick roof	.270	.444	0.21682	0.356348	-0.131835
If uses flush toilet	.037	.189	0.02375	0.120394	-0.004682
If uses pit toilet	.390	.487	-0.09156	-0.114380	0.073243
If uses bush or filed as latrine	.280	.449	-0.32945	-0.528013	0.205420
If piped drinking water in public tap	.183	.386	-0.11509	-0.242970	0.054479
If has well	.048	.214	-0.03487	-0.155022	0.007838
If has tube well at house	. 319	.466	-0.01656	-0.241711	0.113498
If uses tube well of public	.129	.335	-0.25491	-0.662117	0.098072
If use other sources of water	.042	.200	-0.09852	-0.469712	0.020650

Annex XVI: Selected characteristics of the respondents covered in the case histories: Young person's pregnancy study in Nepal, 2003

Pseudonym	Age	Occupation	Years of Schooling	Ethnicity	Reproductive history
Women					
Nima	22	House maker	2	Tamang	Three pregnancies, all unintended, two daughters tried abortion but not successful
Binita	24	House maker	9	Brhamin	Three pregnancies, a son, two abortions
Hema	22	House maker	12	Chhetri	Pregnant once but unintended, tried for abortion but not successful, had a son
Kumari	23	House maker	9	Dalit	One unintended pregnancy, no child, aborted after several attempt
Menu	23	School teacher	12	Brahmin	Pregnant twice, one child, unintended pregnancy once, tried for abortion but not successful
Monika	19	Teacher and also run a restaurant	12	Newar	Pregnant once but unintended, aborted
Poonam	22	House maker	10	Chhetri	Pregnant twice, two children, tried to abort second pregnancy but not successful
Suchitra	22	Shopkeeper	9	Chhetri	Pregnant twice, a daughter, second pregnancy was unintended, tried abortion but not successful
Sarada	24	Agriculture	6	Tharu	Pregnant three times, all were unintended, tried abortion for third pregnancy but ended in still birth (possibly abortion)
Saileja	24	Agriculture	8	Chhetri	Three times pregnant, two children, aborted second pregnancy
Sita	22	School teacher	10	Brahmin	Pregnant twice, two children, first pregnancy was unintended but never tried for an

					abortion
Tamana	19	Agriculture	10	Rai	Pregnant twice, one child, both pregnancies were unintended, attempted for an abortion but not successful
Basanti	24	Carpet weaver	7	Brahmin	Pregnant twice, two children, first pregnancy was unintended, thought about abortion but never tried
Geeta	24	Agriculture	6	Brahmin	Three children, all pregnancies were unintended, tried abortion for first pregnancy but not successful
Yani	24	Agriculture	10	Brahmin	Four pregnancy, three children, first and last pregnancy were unintended, tried abortion for first pregnancy but not successful, aborted the last pregnancy
Sumana	20	House maker	6	Low caste (damai)	Pregnant once, unintended, a child, tried abortion but not successful
Geena	24	House maker	Illiterate		Three times pregnant, three children, first and last pregnancies were unintended, did not try for an abortion
Sujana	16	House maker	8	Tharu	Pregnant twice, one unintended, one child, aborted one pregnancy
Sanu	22		Illiterate	Tharu	Three pregnancy, two pregnancy were unintended, aborted one pregnancy
Men					
Ramesh	26	Bus ticket seller	10	Brahmin	Wife pregnant twice, one child, last pregnancy was unintended, consulted doctor for abortion but later decided to continue

Subash	20	Agriculture	5	Tharu	Wife pregnant once, unintended, did not try for abortion
Saroj	27	Unemployed	16	Tharu	Wife pregnant once, unintended, aborted
Devendra	26	Carpenter	7	Dalit	Three pregnancy, three children, first and last pregnancy were unintended, tried for abortion but not successful
Gopal	26	Agriculture	10	Brahmin	Two pregnancy, one unintended, attempted for abortion for second pregnancy but not successful
Kumar	23	Agriculture	8	Newar	Wife conceived twice, no child, one unintended, aborted first pregnancy
Mani	27	Office assistant	12	Brahmin	Wife conceived twice, first pregnancy miscarried, second pregnancy was unintended, not tried abortion
Shakti	26	Agriculture	12	Brahmin	Wife had pregnancies, two were unintended, two children, aborted the third pregnancy
Bikash	27	Field motivator	12	Tharu	Wife conceived twice, both were unintended, aborted both pregnancies
Saurav	20	Agriculture	10	Tharu	Wife conceived twice, both unintended, aborted second pregnancy
Sher	24	Agriculture	9	Limbu	No any pregnancy after 5 years of marriage