

UNIVERSITY OF SOUTHAMPTON

Development of a reproductive healthcare and family planning centre
in urban Sana'a, Republic of Yemen.

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Department of Social Statistics

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ABSTRACT

FACULTY OF SOCIAL SCIENCES

SOCIAL STATISTICS

Master of Philosophy

DEVELOPMENT OF A REPRODUCTIVE HEALTHCARE AND FAMILY
PLANNING CENTRE IN URBAN SANA'A, REPUBLIC OF YEMEN

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This thesis describes the establishment of a reproductive health and family planning centre in urban Sana'a, Yemen. The case study, using a mix of methodologies, examines the research and development of a reproductive healthcare and family planning centre based on Marie Stopes International's (MSI) established corporate model. The case study highlights the issues surrounding reconciling the expectations of an international organisation with local expectations in a conservative programming environment. Yemen, has some of the worst reproductive healthcare indicators in the world. High levels of fertility have also been maintained by strong traditional, religious and cultural norms. Yemen provides a hard test therefore of the MSI model and this thesis concludes by assessing; firstly, the extent to which an MSI Centre could be set up in Yemen within the framework of the MSI model and hence to provide a test of the model and; secondly, to assess the extent to which the achievements of the Centre over its initial period of development were commensurate with the expectations of MSI.

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Contents

Abstract	i
Table of Contents	ii
Acknowledgements	ix
Map of Yemen	x
1. Introduction	1
1.1 Preamble	1
1.2 Aims	3
1.3 Yemen	4
1.4 Methodology	6
1.5 Thesis Overview	7
2. Literature Review	8
2.1 Middle East	8
2.1.1 Demographic Patterns	9
2.1.2 Fertility Patterns	13
2.1.3 The Impact of Islam on Childbearing	20
2.2 Yemen	22
2.2.1 Political and Historical Context	22
2.2.2 Development of the Health Sector	25
2.2.3 Overview of reproductive health trends and policies in Yemen	28
2.2.4 Contraceptive Use	34
2.3 Existing Health Services	36
2.3.1 Public Sector	36
2.3.2 Private Sector	37
2.3.3 Non-Governmental Organisations (NGOs)	38
2.3.4 Support for Reproductive Health, Family Planning and IEC from External Donors	38
2.4 Factors which affect Reproductive Health	39
2.4.1 Cultural Factors	39
2.4.2 Qat	46
2.4.3 Fasting	48
2.4.4 Female Genital Mutilation	49
2.5 Service Delivery	49
2.6 Summary	53
3. The MSI Model of Reproductive Healthcare Delivery	55
3.1 Introduction	55

3.2	Methodology	56
3.3	Organisational Structure	57
3.3.1	Types of Services Delivered	59
3.3.2	MSI's Partnership Concept	61
3.3.3	Programme Design	63
3.3.4	Managerial Control	67
3.3.5	Case Studies of Alternative Structure of MSI Overseas Programmes	72
3.4	Overseas Staffing	74
3.5	Sustainability	77
3.5.1	Financial Sustainability	77
3.5.1.1	Method of Charging	79
3.5.1.2	Fee Setting	80
3.5.1.3	Fee Exemptions	81
3.5.1.4	Effect of cost recovery on service mix	83
3.5.1.5	Cross subsidisation	84
3.6	Institutional Sustainability	85
3.6.1	Management Information Systems	86
3.6.1.1	Monthly Reports	86
3.6.1.2	Management Indices	87
3.6.1.3	The Partnership Report	88
3.6.2	Technical Assistance Visits	88
3.6.3	Action Plans	89
3.6.4	Annual Targets	89
3.6.5	Telephone agreed Action Plan and Short Term Objectives Programmes (TAPSTOP)	89
3.6.6	Annual Financial Audit	90
3.6.7	Summary	90
3.7	Overall Summary	91
4.	The Development of an MSI Centre in Yemen	92
4.1	Preamble	92
4.2	Methodology	92
4.3	Overall Operation	93
4.3.1	Desk Research	95
4.3.2	Establishing Contacts	95
4.3.3	Donor Interest	100
4.3.4	Needs Assessment in Yemen	100
4.4	MSI Research in Yemen	113
4.4.1	Initial Contacts	113
4.4.2	Future Funding	120
4.5	The Development of MSI in Yemen	122

4.5.1	Project Location	122
4.5.2	Identifying the City	125
4.5.3	Selecting the Locality	128
4.5.4	Purchased or Rented Premises	131
4.5.5	Building	133
4.5.5.1	Size and Layout	133
4.5.5.2	Choice of Building in Sana'a	134
4.6	Centre Design	137
4.6.1	Recruitment of Centre Manager	138
4.6.2	Recruitment of the Centre Team	141
4.6.2.1	Service Delivery	142
4.5.2.2	Human Resource Requirements	146
4.7	Equipping and Furnishing the Centre	149
4.8	Layout of the Centre	150
4.9	Liaison with Local Community	152
4.10	Summary	154

5. A Survey to describe the characteristics of demand for family planning 155 and reproductive health services in urban Sana'a, Yemen

5.1	Introduction	155
5.2	Survey Overview	156
5.2.1	Survey Design	156
5.2.2	Survey Evaluation	159
5.3	Background Characteristics of Respondents	160
5.3.1	Educational Attainment	160
5.3.2	Employment Status	164
5.4	Fertility	167
5.5	Family Planning	171
5.5.1	Knowledge of Family Planning	171
5.5.2	Sources of Contraceptive Knowledge	174
5.5.2.1	Knowledge of local sources of family planning services	176
5.6	Use of Contraception	176
5.6.1	Ever Use of Contraception	176
5.6.2	Current Use of Contraception	180
5.6.3	Reasons for Never Using Contraception	187
5.6.4	Reasons for not Currently Using Contraception	188
5.7	Fertility Preferences	188
5.7.1	Timing of last birth	190
5.7.2	Timing of next baby	193
5.8	Quality of Family Planning Service Provision	196
5.8.2	Family Planning Services	196

5.8.3	Quality of Services Used	198
5.9	Mode of transport and suitability of location of family planning Facility	203
5.10	Summary	204
6. Monitoring and Evaluation		207
6.1	Methodology	207
6.2	Quantitative Analyses	208
6.2.1	Client Numbers	208
6.2.2	Family Planning Client Numbers	212
6.2.3	Income to Cost Recovery	219
6.3	Qualitative Analyses	221
6.3.1	Centre Personnel	221
6.3.1.1	Centre Manager	222
6.3.1.2	The staffing structure and its impact on quality of care	225
6.3.2	The impact of culture on quality of care	235
6.3.3	In-country Consultant	239
6.3.4	Summary	240
6.4	Clients	240
6.5	Cost Recovery	246
6.5.1	Income to Cost Recovery	246
6.5.2	Pricing	246
6.5.3	Subsidised Treatment Fund	249
6.6	External Influences	251
6.7	External Collaboration	256
6.7.1	Ministry of Health	256
6.7.2	Yemeni Family Care Association	257
6.7.3	Proctor & Gamble	258
6.8	Conclusion	260
6.8.1	Institutional Sustainability	261
6.8.2	Financial Sustainability	268
6.8.3	Summary	273
7. Conclusions		275
7.1	Overview	275
7.2	The performance of the MSI model in urban Sana'a	280
7.3	Viability of replicating the MSI model globally	286
7.4	Further areas of research	290

References	292
Appendix 1 Couple Years of Protection (CYPs) as an indicator of programme Performance.	301
Appendix 2 Questionnaire for Sana'a survey	309

Tables

Chapter 2

2.1 Recent reproductive and maternal health indicators for Yemen	29
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Chapter 5

5.1 Percentage distribution of ever married women by highest level of education attended, according to age.	162
5.2 Percentage distribution of ever married women currently employed according to age.	165
5.3 Percentage distribution of currently married women by number of children ever born (CEB) by age.	168
5.4 MSI Sana'a survey percentage distribution of currently married women by number of children ever born (CEB) and mean number of CEB and living according to age and level of education.	170
5.5 Distribution of currently married women by contraceptive knowledge.	173
5.6 MSI Sana'a survey: Percentage distribution of currently married women who have heard family planning methods from different sources according to their age and education.	175
5.7 MSI Sana'a survey: Percentage distribution of currently married women who know close by places where family planning services are offered according to their age and level of education.	177
5.8 Distribution of currently married women who have ever used any contraceptive method, by age.	179
5.9 Distribution of currently married women by contraceptive method currently used, according to place of residence.	182

5.10	Percentage distribution of currently married women by contraceptive method currently used, according to age.	184
5.11	Percentage distribution of currently married women by contraceptive method currently used, according to level of education.	186
5.12	MSI Sana'a survey: Percentage distribution of currently married women according to the reasons for never use of contraception according to their age and level of education.	189
5.13	MSI Sana'a survey: Percentage distribution of currently married women according to the reasons for not currently using any contraception according to their age and level of education.	191
5.14	Percentage distribution of currently married women by planning status at conception, according to age	192
5.15	Percentage distribution of currently married women by fertility preferences, according to age.	194
5.16	MSI Sana'a survey: percentage distribution of currently married women according to the timing of their next baby by level of education	196
5.17	MSI Sana'a survey: percentage distribution of currently married women by type of family planning facility used for the last time according to their age and level of education	197
5.18	MSI Sana'a survey: percentage distribution of currently married women by rating of care given by staff at the family planning services according to their age and level of education.	199
5.19	MSI Sana'a survey: percentage distribution of currently married women by rating of speed and efficiency of service given by staff at the family planning services according to age and level of education.	200
5.20	MSI Sana'a survey: percentage distribution of currently married women by rating of the explanation of methods by the staff at the family planning services according to their age and level of education.	201
5.21	MSI Sana'a survey: percentage distribution of currently married women by rating of confidentiality of the service maintained by staff at the family planning services according to their age and level of education.	202
5.22	MSI Sana'a survey: percentage distribution of currently married women by rating of range of methods offered by the staff at the	203

family planning services according to their age and level of education.

- 5.23 MSI Sana'a survey: percentage distribution of currently married women by mode of transportation used and suitability of the location of the family planning facility according to their age and level of education. 204

Chapter 6

- 6.1 Client numbers by reasons for attending the Centre 209
6.2 Client numbers by reproductive health related reasons for attending the Centre. 213
6.3 Percentage of family planning clients by method 215
6.4 Family planning client numbers and CYPs 216
6.5 Comparison of client numbers with STI and IUD clients 218
6.6 Income to cost recovery 220

Figure

Chapter 5

- 5.1 Age Distribution: MSI Sana'a Survey 163

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'One's ideas as to the nature of Arabia are entirely upset.'

Walter Harris, *A Journey through the Yemen*, 1893

(cited in Mackintosh-Smith, 1997)

1. Introduction

1.1 Preamble

Reproductive healthcare is universally acknowledged to be an important issue. The third decennial International Conference on Population and Development held in Cairo in 1994, served to highlight the major reproductive healthcare problems in many parts of the world. These can be summarised as low levels of reproductive health exacerbated by lack of availability of high quality, accessible and affordable reproductive healthcare services

Yemen is one of the poorest and least developed countries in the Arab World and is an example of a country at the lowest end of the reproductive health spectrum. Its reproductive health indicators are characterised by some of the highest rates of maternal and infant mortality together with one of the highest levels of fertility in the world. The contraceptive prevalence rate is low and estimated levels of unmet need for contraception are indicative of the lack of access to reproductive healthcare services. Health services in both the public and private sector are of generally limited quality, and utilisation of the public sector is extremely low. Following the election of the General People's Congress Party (GPC) in 1997, however, the Ministry of Health (MoH) has shown a strong commitment to implementation of policies designed to improve health services, including in particular those for reproductive health. These policies have included an expressed potential for partnerships with foreign NGOs.

Marie Stopes International (MSI) is a social enterprise which for over 20 years has provided, in an increasing number of countries, family planning and reproductive healthcare. Its focus is to provide family planning and reproductive healthcare programmes throughout the less developed world through the delivery of low cost, high quality, locally managed and sustainable programmes. MSI currently delivers reproductive healthcare in over 30 countries worldwide.

In recent years MSI has developed a standard operating format based on a conceptual framework which it believes can be used to provide high quality, affordable and sustainable reproductive healthcare anywhere in the world. Indeed, as MSI's Chief Executive states;

'this (the model) attempts to establish in detail the Stopes way of developing and running Marie Stopes Clinics and programmes as "fast contraceptive outlets", with the aim of become the McDonalds of family planning.' (Black, 1997).

As a result of initial research on the conceptual framework within which the MSI model lies, this thesis will adopt the following definition of the MSI model. The overall underlying feature of the model is the delivery of low cost, high quality, locally managed and sustainable family planning and reproductive healthcare programmes. High family planning activity and cost recovery are central criteria of a successful MSI programme in which success is measured by the extent of both institutional and financial sustainability. Institutional sustainability is defined as having the staffing and organisational infrastructure to support effective planning and management, to establish a sustainable and renewable client base and to deliver high quality services. Part of this will involve good relationships with both central and local government as well as with the local community. Financial sustainability is achieved through cost recovery which, in the 'classical' MSI structure is led by income generated from abortion and sterilisation together with a limited range of curative services. However where, for whatever reason, demand for abortion or sterilisation is low or where, for legal reasons, it is impossible to deliver abortion, then cost recovery needs to be achieved through some other major income generating activity such as obstetrics or (initially) a wider range of curative services.

Central to achieving these overall criterion are the following features of the MSI model:

- an appropriate range of services including a range of family planning. The services will also include high income generating services, typically abortion or sterilisation (but, where appropriate, some other service such as obstetrics) and a limited range of curative services.
- small teams, featuring multi-skilling and multi-tasking;

- liaison with government, community leaders and key stakeholders;
- paramedicalisation of delivery;
- local staff;
- autonomy;
- effective Management Information Systems to facilitate efficient monitoring and evaluation.

This thesis comprises a case study of the establishment of an MSI Centre delivering reproductive healthcare in urban Sana'a, Yemen and, therefore, provides a test of this model in an extremely difficult programming environment. This initial chapter first describes the aims of the thesis and then provides an overview of the thesis and of the research methodology used.

1.2 Aims

The thesis has two aims:

- i. to assess the extent to which an MSI Centre could be set up in Yemen within the framework of the MSI model and hence to provide a test of the model; and
- ii. given that an MSI Centre has been set up in Sana'a, to assess the extent to which the achievements of the Centre over its first 17 months of opening were commensurate with what would be expected within the MSI model for a programme at this stage of its development.

In addition a brief discussion is provided in Chapter 7 as to what inferences can be made from this thesis regarding the extent to which the MSI model is transferable a) within the Arab World and b) elsewhere.

In the context of this thesis it is assumed that in no programming environment would one expect to follow a model slavishly. There would always be deviations from the model. The question being posed in the test of the model in this thesis is whether these

deviations are such that one could argue that the basic framework is being followed as opposed to a bespoke programme being developed which is largely independent of the framework.

The thesis uses a mix of methodologies including; participative research; in-depth interviews with key stakeholders both within MSI London and Yemen; quantitative research among the local community and an integrated quantitative and qualitative analysis of the initial period that the MSI Centre in Sana'a was open.

1.3 Yemen

Yemen provides a severe test of the MSI model. Over the past four decades Yemen has undergone phenomenal social, economic, political and demographic changes. Independent Yemen was established in 1990 with the merger of the Yemen Arab Republic (North Yemen) and the Marxist dominated People's Democratic Republic of Yemen (southern Yemen). With unification came the challenge of merging two very different political systems. Subsequent regional conflicts and civil wars, resulting in large numbers of return migrants and refugees, have, in addition, placed a huge burden on Yemen's ailing economy and weak infrastructure. As a result, it is estimated (The Yemen Times, 1992) that around 35% of the population are living below the poverty line.

In 1997, a landslide victory by the GPC ended the coalition government between the GPC and the Islah (Islamic) Party (which had lasted from 1994-1997). Whilst successive governments have struggled with the challenge of developing the framework of a modern state, in many parts of the country strong tribal networks have meant that traditional political structures remain.

Political instability and a weak economy have impacted significantly on Yemen's health sector and more specifically have limited the ability of the government to deliver improved reproductive healthcare to the population. Although Yemen adopted a

National Population Strategy in 1992, under the Islah led MoH reproductive healthcare, including family planning was considered as unimportant and as a result there was neither the will nor action to improve services. The election win of the GPC in 1997 was pivotal therefore in establishing a commitment to improve the reproductive health of the population.

Subsequently an updated National Action Plan for the period 1996 - 2006 has resulted in the development of quantitative targets. Whilst many commentators believe that these targets are ambitious, they do represent an expression of the political determination on the part of the Government and the MoH to address the issues raised by Yemen's high population growth and their effect on its social and economic development.

Similarly, through a recently developed Health Sector Reform Programme, the MoH has established a commitment to facilitate a significant improvement in the delivery of reproductive healthcare. It is now concentrating on ways in which it can be a 'manager' of services, rather than a 'provider' and therefore welcomes the intervention of outside agencies in reproductive healthcare and family planning. This is a major change in policy. It is important to note, however, that Yemen's poor economic situation has placed the MoH in a particularly difficult dilemma and Health Sector Reforms take place in a climate of severe financial strain.

Whilst there now exists a political will both at national and ministerial level to oversee an improvement in the delivery of reproductive healthcare services it is important also to emphasize the potential impact of Yemeni culture and of Islam on any initiatives to improve reproductive healthcare.

Throughout the Middle East, as in Yemen, demographic behaviour is inextricably linked with the culture of Islam and its dictates. Whilst Muslim religious leaders have urged Muslim countries to improve access to reproductive healthcare and family planning, Omran (1992) highlights instances of resistance to this. More recently, whilst the report

of the Regional Conference on Women, Islam and Family Planning (1995) emphasises Islam's support for contraception, it also highlights some of the barriers hindering access to family planning in Muslim countries. These include myths and misconceptions regarding modern methods of contraception and a desire to protect cultural traditions in the wake of a fear of an invasion of western cultural habits.

These issues are particularly important in Yemen, where strong cultural norms and values, together with a lack of education and autonomy of women, predicate against significant improvements in reproductive healthcare. Myntti (1983) and Radda Barnen (1994) provide numerous examples of how Yemeni women seek to safeguard their traditions in the area of reproductive health, often regardless of the medical consequences of doing so.

1.4 Methodology

This section provides an overview of the methodology used in the thesis. It is first important to describe the participative nature of a significant part of the research underpinning this thesis. The research was carried out while the author was Arab World Senior Programmes Manager at MSI, London. As such, Chapter 4 of the thesis, which describes the development of MSI's Centre in Sana'a, aims both to describe the research carried out by the author in the context of her position at MSI, as well as to provide a subsequent critical assessment of this research and development.

Elsewhere in the thesis, the empirical chapters use a mix of methodologies. Chapter 3, which describes the MSI model, uses a mix of documentary sources, together with, primarily, in-depth interviews with the senior managers of MSI both in this country and throughout the world. This approach was used so as to obtain the views of a wide range of senior MSI staff at all levels of management and in a number of countries. Chapter 5 uses a quantitative methodology, namely a structured interview survey of the population in the environs of the MSI Centre. The survey design was felt to be the most appropriate given the need to make some estimates of demand from the local

population and to work within a limited budget. Finally, Chapter 6 integrates the quantitative analysis of the monthly reports with a qualitative analysis of the text of those reports, augmented by a series of interviews with the MSI Sana'a Centre Manager and senior MSI staff in London. This integration of qualitative and quantitative information was used because the quantitative data give a number of key performance indicators but do not provide a full context the understanding of which is provided by the qualitative data which gives for example details of some of the difficulties in developing new working practices.

1.5 Thesis Overview

The thesis starts, in Chapter 2, with a literature review which aims to provide a description of the demographic situation and, in particular, the reproductive health position of the Middle East with an emphasis on Yemen. Chapter 3 provides a detailed insight into the conceptual framework within which MSI attempts to deliver sustainable reproductive healthcare programmes and in so doing provides the context in which MSI's Yemen programme was established and the organisational context within which the programme operates. Next, Chapter 4 presents a chronological description of the steps involved in the development of MSI's programme in Yemen with the overall aim of assessing the extent to which the MSI model described in Chapter 3 can be replicated in Yemen.

The thesis then turns to the demand for, and delivery of, services. Chapter 5 describes the results of a survey undertaken in a poor area of urban Sana'a and through comparisons with ancillary data, places it in a national context. It is followed by Chapter 6 which describes the development and progression of MSI's Sana'a Centre over the period from its initial opening in June 1998 until November 1999. The methodological strategy of this Chapter is to integrate a quantitative and qualitative analysis of the management information with supplementary information from interviews with key actors. Finally, Chapter 7 makes a number of conclusions and recommendations for future research.

2. Literature Review

2.1 Middle East

This chapter comprises a literature review of the demographic situation and, in particular, the reproductive health position of the Middle East with an emphasis on the Yemen. After initially describing the Middle East, the review then provides, first, a description of the cultural and political context of Yemen; and second, a review of previous research on reproductive healthcare in Yemen.

At the outset it is important to note that the literature highlights the lack of a standard definition of the Middle East and a classification of the region varies according to individual authors and organisations. This review uses that chosen by Obermeyer (1995) as it illustrates the diverse trends of a region which is so often stereotyped.

Obermeyer (1995) refers to the Middle East as '*the countries of the Arab world, in addition to Iran and Turkey*'. She thus includes the Maghrib, Nile Valley, Western Asia, the Arabian Peninsula, Iran and Turkey. In acknowledging the difficulties of developing a geopolitical classification of the Middle East, Obermeyer (1995) highlights the difficulties of trying to classify the region through political and linguistic homogeneity.

As she states:

'The one regional classification that has the merit of reflecting a large degree of linguistic and political homogeneity is that which would group all countries that use Arabic as the official language and are members of the League of Arab States. While such a strategy would have the advantage of simplicity, it would lead to the exclusion of two large countries that share a number of common traits with the Arab world, and have been closely linked to it historically.'

In including Turkey and Iran, the former based on secularism and the latter a theocracy, Obermeyer (1995) encapsulates the diverse economic bases and divergent policies that are pursued in the region.

While the Middle East is often equated only with Islam and whilst it is predominantly Muslim, it also contains millions of Christians and the world's only Jewish nation. It is often inextricably linked with the wealthy oil industrialised Gulf states, yet poverty and poor social indicators characterise many of its countries, such as Yemen. Indeed, Omran and Roudi (1993) describe the Middle East as being one of the most complex and diverse geopolitical regions in the world.

2.1.1 Demographic Patterns

The Middle East has recently been characterised by high rates of population growth. While it took until 1950 for the population of the Middle East and North Africa to reach 100 million, the second 100 million took only around 30 years (McEvedy and Jones, 1978; World Bank, 1994). These high rates have, as pointed out by Roudi (1993) placed constraints on economic and natural resources and led to many Middle Eastern countries adopting population policies.

History has, at varying times, connected the region demographically. Until the middle of the 20th century the demographic profile of the region was characterised by high levels of fertility and mortality. Obermeyer (1995) states:

'Until recently, a rather simplistic view prevailed with respect to the (demographic) situation in the Middle East and North Africa. Even comparatively well informed observers believed that the region was lagging behind the rest of the developing world, and they attributed the apparent persistence of high fertility and mortality to the influence of Islam and the low status of women.'

In recent years, however, a decline in mortality rates and a continuing drop in fertility have changed the demographic profile of the region. There has been increasing heterogeneity, highlighting the diverse policies adopted by governments throughout the region.

By the early 1990s a striking variation in most demographic indicators was partly a result of the large differences in per capita income and the extent of urbanization, reflecting the different socioeconomic conditions throughout the region. Omran and Roudi (1993) make a very useful categorisation of the nations of the Middle East into

four groups based on similarities in fertility and mortality rates and their socioeconomic settings:

In the following, the narrative given in the title of each group is as stated by Omran and Roudi (1993).

Group I. *Persistent high fertility and declining mortality in an intermediate to low socioeconomic setting.*

Jordan, Oman, Syria, Yemen and the West Bank and Gaza Strip form the first transition group and are characterised by a slow decline in fertility during the 20th century with a crude birth rate not expected to fall below 40 per thousand before the year 2000 (UN, 1992 – as cited by Omran and Roudi, 1993).

Mortality rates have declined sharply in all these countries, with the exception of Yemen. These declines reflect a significant reduction in the infant mortality rates (IMR) to 65 per 1,000 live births in 1990. Yemen has not witnessed such a reduction in its IMR and if it is excluded from this group the average was below 40 in 1990.

Group II. *Declining fertility and mortality in an intermediate level of socioeconomic development.*

Egypt, Lebanon, Turkey and Iran comprise the second transition group. In recent decades, traditional high fertility has declined, primarily in response to increases in female education and the availability and knowledge of family planning. Infant mortality has also improved significantly for this group of countries to 51 per 1,000 by 1990.

Group III. The Gulf Transition: high fertility amid rapidly declining mortality in a high socioeconomic setting.

The oil industrialised Gulf states of Bahrain, Iraq, Kuwait, Qatar, Saudi Arabia and the United Arab Emirates (UAE) form a third group. Oman, included in Group I, is the only Gulf state not included in this group. The influx of large numbers of foreign workers to these countries after 1970 accounted for between a quarter and three quarters of the population in the smaller Gulf States, prompting the governments of these countries to encourage high fertility among their national populations in the hope that larger populations would reduce their dependency on foreign workers.

The Iraqi government has provided many economic incentives to couples after the birth of a fourth child including for example interest-free housing loans. During the Iran-Iraq war posters were displayed throughout Iraq which read '*Bear a child and you pierce an arrow in the enemy's eyes*,' leaving little scope for misinterpretation regarding the government's stance on fertility (Economist, 1990)

The Gulf countries have made significant gains in reducing mortality levels in recent decades. Oil revenues have bought these countries a high standard of healthcare. Ease of access to healthcare is further facilitated by the fact that the majority of the population of these countries are urban dwellers. As a result life expectancy in the Gulf countries has risen close to European levels.

In contrast, population growth in the Gulf countries is one of the highest in the world at 5% per annum and reflects the widening gap between fertility and mortality, in addition to high levels of immigration.

Group IV. The European Style Transition: low fertility and mortality in an above average socioeconomic setting.

Israel is the only country in the Middle East whose demographic transition reflects that of Europe. Fertility levels are the lowest in the region. Fluctuating levels of immigration have produced variable levels of population growth.

It should, however, be noted that the Palestinian population living in Israel is predominantly Muslim and is marked by high fertility rates similar to those of Jordan and Syria. The balance between the Jewish and Arab populations has nonetheless been fairly constant. (Israel Central Statistical Bureau, 1992). However as Omran and Roudi (1993) point out:

'the source of population growth has been very different for the two groups. The Jewish population has increased mainly by immigration, while the Arab population has grown through natural increase.'

The next section will concentrate on trends in fertility and contraceptive use. However, any overview of the population of the Middle East would not be complete without examining the impact of the many wars and political upheaval witnessed in the region. In fact, conflicts in the Middle East have, since World War II, produced the largest number of refugee flows anywhere in the world. The World Refugee Survey (1992) revealed that the Middle East was the source of 11 million refugees worldwide. It should be noted that this figure does not include those refugees who did not cross national borders, for example during the Iran-Iraq war (1980-88) it is estimated that 2.5 million Iranians were displaced within Iran (Aghajanian, 1992). The best known refugee group in the region are the Palestinians of whom, by 1991, 2.5 million were registered as refugees (UNRWA, 1991). Said (1986) writing on the Palestinians describes the refugee situation evocatively:

'the paradox of mobility and insecurity.....exiles at home as well as abroad....'

2.1.2 Fertility Patterns

Although the region's growth rate remains between two and three percent per annum, fertility rates have dropped substantially in a number of countries. While Middle Eastern women still give birth to an average of five children in over half the countries of the region, (one more than the average for women in all developing countries (Omran and Roudi, 1993)), in eight countries of the region, total fertility rates (TFRs) have dropped to under four. When the trend and magnitude of the fall is observed over a period of more than ten years to 1996, with the exception of one country, Iraq, whose decline was around one birth per woman, all the Arab countries reduced their TFR markedly. There are three countries which remain with high fertility levels: Yemen, Oman and Palestine.

A comparison of demographic trends with economic indicators highlights that while the poorer countries such as Yemen maintain high TFRs, high fertility is also found in some of the oil rich states. Some of the most rapid fertility decline has taken place in Egypt, Turkey, Tunisia and Morocco.

FPN (1993) notes wide differentials in contraceptive prevalence across the region using Gulf Child Health Survey data. FPN (1993) note that some of the fertility differentials can be attributed to the relative incidence of modern methods of contraception. This point is highlighted by a comparison between Morocco and Jordan, where the contraceptive prevalence rates (CPR) are similar, yet the fertility rate is 30% higher in Jordan which is attributed to a 24% lower use of modern methods in Jordan.

Rashad (1997) provides a picture of fertility patterns and trends in the Middle East and notes that it is a region which has been characterised by high fertility which has been resistant to change. Indeed in recent years, although there have been some spectacular declines, many of the highest TFRs in the world have occurred in the region. Fertility transition in the Arab World started later and slower than in other regions of the world. Among other commentators, Caldwell (1986), Lutz (1987) and Nagi (1984) argued that the major reasons for this were the impact of religion and low status of women. Mroueh

(1987) agrees stating that improving women's access to education is: '*the most dependable measure*' that will raise age at marriage, reduce fertility and lead to improved health and economic returns. However, Courbage (1996) does not agree that education alone would lead to a decline in childbearing stating that: '*Educating women without integrating them into the job market has little effect on fertility*'.

Within the Middle East the timing of the fertility transition has been different in different countries for a multitude of reasons, but one important one is the extent to which governments have identified a need for a population strategy as, for example, in Egypt, which was one of the first Middle Eastern countries to do so. However, there is some debate as to the extent to which the desire for population strategies have been supported by the donor community. For example, FPN (1993) describe the family planning situation in the Middle East as characterised by an openness to the acceptance of external assistance but point out that many would contend that the scale of international resources directed to the Arab World is inadequate. Donor agencies justify their levels of aid (in recent years UNFPA provides around 10% of its funding to only six Arab states) with the justification that the population of the Middle East 'is a fraction of sub-Saharan Africa' despite the region boasting some of the highest fertility rates in the world. It has also been argued that aid has sometimes been allocated according to political affiliation. Other commentators have argued that until recently, the Middle Eastern countries were reluctant to court the population donor community.

As well as population policy playing a role in reducing fertility in some countries, worsening economic conditions have played a role elsewhere. For example, Courbage (1994) notes that: '*It took serious economic recession for fertility to decrease in Syria*'.

Put in a global context, in recent years, the fertility levels of the countries of the Middle East have, as a whole, moved away from earlier comparisons with other regions in Africa although fertility levels remain higher than in many regions in Asia, Latin America and the Caribbean. Rashad (1997) argues that the indications suggest that, in the early 21st century, fertility levels between the Middle East and other regions will narrow.

With the exception of Egypt, where increases in contraceptive use are leading the decline in fertility, marriage has also played a key role in bringing down fertility in many Arab countries. This pattern is similar to that which has been observed elsewhere for example in much of the West and in some countries of East Asia such as South Korea where at the initial stages of the fertility transition, rising age at marriage played a key role. However, FPN (1993) make the interesting point that educated urban dwellers are using family planning for both spacing and limiting births and that in so doing they: *'lead the transition to a new reproductive pattern'*.

An interesting comparison is provided by Yemen and Sudan, which have equal levels of contraceptive prevalence but large differences in TFR (7.7 and 4.6 respectively). Rashad (1997) suggests that marriage has an important explanatory role in the differences in TFR between these countries. In addition, while age specific marital fertility rates appear to be relatively close at young age groups the difference from age 35 onwards is extremely large. A further issue is marriage dissolution which is more frequent in Sudan than Yemen. In both of these countries it is likely that economic hardship has driven the change in fertility levels while there remain high family size ideals. This is similar to the arguments made by Rutenberg and Diamond (1993) with respect to Botswana. As they argue, the key issue is what happens to fertility when good economic times return.

Obermeyer (1995) provides one of the most comprehensive overviews of the factors influencing childbearing in the Middle East and the following paragraphs review this edited work as well as other literature on childbearing in the Middle East.

Obermeyer (1995) notes that the link between government policy on population and fertility trends is also far from uniform. A number of countries have pronatalist policies, but do not have the highest fertility levels. Kuwait for example has one of the lowest fertility rates despite government policy aimed at high fertility as a means of reducing the country's dependence on expatriate labour. While many countries in the region still

do not have an explicit population policy, most support the provision of family planning services but within the context of integrated reproductive health service provision. For example, World Bank (1994) note that:

' "Look Around You: We Have a Population Problem" was the theme of Egypt's first IEC campaign in the early 1980s. As a result....., family planning became a socially acceptable issue.'

Ibrahim (1995) and Courbage (1995) provide case studies of Egypt and Morocco. In Egypt, Ibrahim (1995) describes how the population policy received increasing support over time from the country's political leadership, but failed to realise many of its goals. Ibrahim (1995) associates the limited impact of Egypt's population policy with the varying degrees of support which it received from different echelons of Egyptian society. In particular, Ibrahim (1995) highlights the less than enthusiastic support which the policy received from some middle level government officials and physicians. Whilst progress was made, further improvements remained potentially threatened by Egypt's political climate. The President's renewed commitment to a three pronged population policy (reduction of growth rate, spatial redistribution, and upgrading population characteristics) did not enjoy the support of many cabinet members or middle and senior state executives. In addition, the pronatalist attitudes of Islamic activists, which caught the imagination, in particular, of many young doctors also reflect the deep rooted traditional values and reproductive practices in rural and poor urban areas. Ibrahim (1995) concluded, however, by noting that the counter forces to Egypt's successful realisation of its population policy 'are not in full monopoly of Egypt's public space.' Ibrahim (1995) also noted that support was forthcoming from part of the state bureaucracy, many of the country's civil societies and women, of whom nearly 50% are now current users of family planning. Indeed, Nawar, Lloyd and Ibrahim (1995) emphasise that alongside the focus on family planning services, the importance to population planners of investing in female education, employment and strategies to reduce underage marriage has resulted in improved autonomy and empowerment and that this in the long term should have an impact on improved reproductive health for women.

In discussing Ibrahim (1995), Obermeyer (1995) highlights the issue of whether widespread societal support is a pre-requisite for the success of family planning programmes. The experience of Morocco described by Courbage (1995) would imply a negative response to this question. Courbage (1995) described Morocco's success in achieving a reduction in fertility despite Egypt having the more favourable indicators and attributed this success to the interaction of a number of socioeconomic factors, namely; greater participation of women in the labour force, fiscal policies, and migration of Moroccans to the West. These changes have contributed to an increase in the autonomy of women, an increase in the cost of raising children and a challenge to traditional views and values. In comparison to Egypt therefore, a combination of ideological and economic factors were responsible for precipitating a decline in fertility.

Despite Courbage's (1995) description of Morocco's success in achieving a reduction in fertility levels, it appears that this reduction was limited to women residing in socioeconomically advantaged urban areas. Bourquia (1995) points out that fertility rates amongst Morocco's urban poor and rural dwellers remain high. Bourquia (1995) argues that whilst women are aware of the economic costs of raising children, they are similarly conscious of the social cost that has to be borne in exchange for an uptake of family planning.

A large number of studies have been undertaken in developing countries which have examined the value of children as a determinant of fertility decision making (for example, Arnold and Fawcett, 1975). Many have emphasised the importance of children as an economic investment for certain social groups, namely the urban poor and rural dwellers (Caldwell, 1977; Nag, White and Peet, 1978). In addition, children are also seen as an investment for old age (Caldwell, 1983).

On the other hand, a similarly extensive number of studies highlight that decision-making in relation to children is not driven solely by economic considerations (Lorimer, 1954; LeVine and Scrimshaw, 1983; Caldwell, 1983).

Education, both of the woman and the man has implications for change in desired (and achieved) family size. Jejeebhoy (1995) provides a thorough review of the relationship between women's education and fertility and demonstrates that as education increases, in the vast majority of cases, there is a reduction in childbearing. Diamond, Newby and Varle (1998) provide a number of explanations for this, among the most prominent being that education widens a woman's horizons beyond the home, and gives her an increased chance subsequently of working and of playing a role in household decision making. In the Middle East, where there are societies, such as Jordan where women have a greater chance of playing a role in the cash economy, education has played an important role. However Misch (1990), in Jordan, highlights the complementary importance of education for men. She notes that:

'in Jordan 60% of illiterate males "did not believe in" contraception while only 15% of men educated past the secondary level felt the same way.'

She concluded by saying that if women as a result of increased Islamic fundamentalism were forced out of the labour force and back into the home, fertility rates will increase. A further influence on fertility is provided by Cleland and Wilson (1987) who argue that ideational change has a crucial role in determining fertility decisions and, while most commentators would argue that there is a role for economic influences on childbearing they would also argue that social norms and values, and government policy also play a direct role (for example Ahlburg and Diamond, 1996).

Bourquia (1995) highlights a number of contradictions, which while in his paper are specific to Morocco, are also prevalent in many countries in the Arab world – typically the poorer ones e.g. Yemen, and which are common to a society in transition. On the one hand an awareness amongst women of the advantages of reducing the number of children they have and on the other the belief that, as Bourquia (1995) states:

'this strategy is a risky one especially for those who belong to low social categories.'

This apparent ambivalence amongst women is summed up by the following quote from Bourquia (1995):

'a woman commenting on the fact that she had seven children: "I have no education," meaning that she invested in her children instead.'

Whilst women realize, therefore, the direct link between a reduction in the number of children and a reduction in costs, they are also aware that this comes at a price. For an uneducated or economically dependent woman, children continue to represent social capital.

There are examples, however, of where fertility reduction policies have had an important impact. Obermeyer (1995) describes how, in Turkey and Tunisia for example, such policies are given the credit for a fairly rapid decline in fertility. Other countries have only in more recent years embraced such policies, such as Yemen in 1992. It is interesting to note that the most dramatic reversal in population policy is that which has taken place in post-revolutionary Iran. On assuming power, the Islamic leadership initially reversed the policy implemented by the Shah in favour of a highly publicised pronatalist policy. The results of the 1986 census however convinced Iran's Islamic leaders that continued population growth would have serious implications for the country's development (World Bank, 1994). This, and subsequent national surveys, prompted a reversal of the government's views and led to it embarking proactively on the implementation of a national family planning programme. In 1993, the Iranian parliament approved a bill to encourage couples to cease child bearing after three children by refusing privileges to fourth or higher order children born after May 1994 (UN ESCAP, 1993). It should also be noted that this change in policy was made in a context where, at least in urban areas, there was a culture of birth control (Raftery, Lewis, and Aghajanian, 1996).

Zurayk (1994) describes how the majority of women in the Middle East marry young and experience high levels of fertility. She points out that a large number of women in the region also live in poor socioeconomic conditions and do not have easy access to quality reproductive healthcare services. In this context, Dixon-Mueller and Wasserheit

(1991) and Khattab (1992) identify that ill health amongst Arab women is also made harder by the existence of a '*culture of silence*'. Many women in the Arab world consider ill health something which they simply have to endure.

There are limited data on the reproductive health status of women in the Middle East and contraceptive use for those countries promoting pronatalist policies. Ozbay (1992) notes that whether women in these countries choose to have large families or whether they are conforming to societal expectations regarding fertility is a difficult question to answer with limited data, and it raises the issue of to what extent women derive respect or social well being from reproduction, as also highlighted above by Bourquia (1995). Omran and Roudi (1993) state that high fertility rates throughout the Middle East are a reflection of the economic and social value of children in Islamic culture. Omran and Roudi (1993) provide Yemen as an example in which women '*conform to the pattern of childbearing encouraged in traditional Arab culture.*'

2.1.3 The Impact of Islam on childbearing

Throughout the Middle East, demographic behaviour is inextricably linked with the culture of Islam and its dictates. At times these can offer the opportunity for local interpretation. The International Congress on Islam and Population Policy (1990) urged Muslim countries to formulate population policies and to improve standards of living. On the subject of reproductive healthcare, recommendations were also made to ensure access to maternal and child health and family planning (MCH/FP) services without coercion and to provide safe contraceptive methods which are not antagonistic to Islam.

However, at the same time, Misch (1990) points out that the recent rise of Islamic fundamentalism does not acknowledge the problem of over population. Misch (1990) added that the revision of family law by Islamic fundamentalists had damaged improvements in the status of women in the Islamic world. Misch (1990) cited the revival of Purdah as an example and made the point that by returning women to the home their only source of value is derived from reproduction.

An examination of more recent literature on family planning and Islam reveals that the majority of Muslim theologians agree that Islamic law permits birth spacing. Omran (1992) described the sanctioning of modern methods of contraception by Muslim theologians. He also highlighted opposition to the 'family planning movement' by some Muslim religious leaders fearing it to be a western conspiracy to limit the Muslim population or that it may encourage promiscuity amongst the younger generation of Muslims. However, Omran (1992) added, though, that opposition was being attenuated by forums of discussion and publications regarding Islam and family planning. Indeed the report of the Regional Conference on Women, Islam and Family Planning (1995) emphasises Islam's support for contraception. The report also highlighted some of the barriers hindering access to family planning in Muslim countries, including; myths and misconceptions regarding modern methods of contraception; a desire to protect cultural traditions and a fear of an invasion of western cultural habits. The report also adds that the low status of women in some Muslim societies leads to economic dependence and lack of power. World Bank (1994) emphasises that whilst support for family planning is strong in the Middle East, programmes must be grounded in a respect for cultural values.

The issues highlighted above are particularly important in the Arab World where culture, together with the low education and limited autonomy of women, predicate against significant improvements in reproductive health.

2.2 Yemen

2.2.1 Political and Historical Context

Within the Middle East, Yemen is at the lowest end of the spectrum with regard to reproductive health, a function of the country's political and cultural situation. In order to understand fully the context in which the empirical work in this thesis takes place it is important to understand something of the political and social history of Yemen.

To many people, in recent years, knowledge of Yemen is limited to media accounts of the kidnapping of foreign tourists by either local tribesmen keen to trade in a foreign tourist for an asphalted road to their village or so called Islamic militants hoping to obtain the release of fellow extremists from Yemen's jails. This is because, as stated by Weir (1985):

'Until recently Yemen was a relatively isolated country, rarely visited by foreign travellers and of peripheral importance on the world stage. It was a minor and intermittent outpost of the Ottoman Empire and, in contrast to most countries of the Middle East and North Africa, was never colonised by a European power.'

However within specialist circles Yemen has attracted much interest not least because of the people who were described by the Prophet Muhammad thus:

'They have the kindest and gentlest hearts of all. Faith is Yemeni, wisdom is Yemeni.' (The Quran, cited in Mackintosh-Smith, 1997).

Over the past four decades Yemen (both the North and the South) has undergone phenomenal social, economic, political and demographic changes. Some of the important changes which may have impacted on reproductive health care are now described.

During the 1970s the migration of Yemeni men to work in Saudi Arabia and other Gulf states reached huge proportions. In discussing the migration of Yemeni men to Saudi Arabia, Weir (1985) states that 'By 1975 around one-third of Yemen's male labour force were temporarily working abroad.' The impact on Yemen's economy of this mass

migration was significant. An influx of remittances meant that during the 1970s Yemen's economy changed from one primarily dependent on agricultural subsistence towards a predominantly cash economy.

The political and economic changes which Yemen was witnessing also affected Yemeni society and culture. In particular, as Weir (1985) states:

'It was apparent by the late 1970s that there was some erosion of the traditional Yemeni system of social status based on birth into ranked social and occupational categories.'

In this Weir (1985) is referring to Yemen's traditional hierarchy based on birth, occupation and landownership. She explains that although wealth was always an important indicator of social rank and power, its importance relative to birth and occupation was greatly enhanced by the new economic conditions.

Independent Yemen was established on 22 May 1990 with the merger of the Yemen Arab Republic (North Yemen) and the Marxist dominated People's Democratic Republic of Yemen (PDRY, southern Yemen). Previously North Yemen had achieved independence in November 1918 from the Ottoman Empire and PDRY had become independent from Britain in November 1967. The unification of the country in 1990 presented additional challenges because two entirely different political systems were merged into a new unified system.

The Gulf War in 1991 had a major effect on Yemen as it prompted an enormous return migration from Saudi Arabia and other Gulf countries. Indeed Hoskins (1994) notes that the population increased by 5-10% in one month. This led in turn to unemployment and inflation which, in the increasingly cash economy, led for the first time to major food shortages among some groups of the population. Indeed poverty surveys in Hodeidah City (Qassim, 1993; Jongstra, 1994), on the west coast of the country, estimated that 30% of the population were living in absolute poverty. The influx of refugees from neighbouring Somalia also exacerbated the situation as there has been minimal government or international assistance with services for this group (Bin Daair Samira, 1994). Yemen's National Population Strategy document (1990-2000) also highlights the

problems facing urban areas which have become overburdened with growing demands for housing, jobs and healthcare, as they have been the main recipients of return-migrants particularly following the Gulf War.

Migration into the urban areas has been, since the early 1970s, a feature of Yemen's demography. In 1970 the percentage of the population in the urban areas was 13% compared with approximately 30% in 1994. The growth rate in the urban areas is estimated at 10% per annum (CSO, 1996) which includes natural increase within the urban areas and migrants from rural areas. The brisk urban growth has led to the new phenomena of under-served squatter and urban poor areas. A World Bank Poverty Assessment in Yemen, World Bank (1996) highlighted that over half of these poor live in four governorates, Taiz, Ibb, Dhamar and the capital city Sana'a.

The demographic dependency ratio in Yemen is around 117%, double that of developed countries and one of the highest in the world. The economic dependency ratio is 435%, which means that each individual within the labour force feeds approaching 4.4 people, in addition to themselves. (Wahl, 1997)

The economic situation reached major crisis levels in the early 1990s, due to a series of internal and external events in addition to the Gulf War. As a result Yemen's economy at that time was characterised by declining productivity, spiraling inflation, devaluation of the Yemeni rial, a large and inefficient public sector, increasing poverty, high unemployment, and a large foreign debt. Carapico (1998) cites a Yemeni economist writing in The Yemen Times (1992) as commenting that the proportion of the population living below the poverty line had risen from 15 to 35% since the end of the Gulf War.

In 1994 (April 12-July 7) Yemen was plunged into civil war. The civil war had far reaching consequences for the country, economically, politically and socially. Before the war, the Socialist and the General Peoples' Congress (GPC) parties were the ruling parties and the Islah Party (the Muslim traditionalist party) was the opposition. The equilibrium between the Socialist party and the GPC was, as a result of the war,

disturbed. The Socialist Party was weak after its defeat in the war while the Islah Party emerged much stronger. Between 1994 and 1997, Yemen was governed by a coalition government of the GPC and the Islah Party, with the GPC being the major party. This was not to last however. At Yemen's last general election in April 1997, the GPC won a landslide victory and now no longer govern with the Islah Party.

Since the civil war, successive governments have struggled with the challenge of developing the framework of a modern state, but in many parts of the country traditional political structures remain. In many ways, change in Yemen has been more economic than political. In 1995, Yemen launched an economic reform programme which resulted in significant economic improvement at the macro-economic level. However, at the same time poverty continued to rise. In 1998, the fall in petrol prices, with consequent severe budget cuts in government programmes, served as a reminder that the crisis was far from over, and that both citizens and the government sector would be constrained in their spending ability for some years to come.

In the absence of significant investment to modernise or diversify the economy, continued high population growth is likely to lead more households into poverty, as described in more general terms by Ahlburg (1996).

2.2.2 Development of the health sector

The development of Yemen's public health system occurred, in the main, after 1970 (World Bank, 1996). In the last decade, the state of Yemen's government health sector worsened due to increased population pressures, low public sector spending levels, poor sectoral planning and management and the existence of a large health sector infrastructure to support. As MoH (1998) states:

'The consequences of the economic crisis for the government health sector combined with the effects of rapid population growth, have been dramatic. The per capita budget for the sector dropped by 37% between 1990-1993 and 1994-1996, crippling an already underfunded system.'

World Bank (1996) had argued that, despite this, a redistribution of the government's health budget could lead to improved services. In 1996, for example, 66% of the government's health budget was allocated to salaries. The situation is particularly serious in ten governorates where over 90% of the budget is spent on salaries, which implies that minimal resources are available for supplies such as drugs.

Regional differences also exist. In general, the southern governorates record higher expenditures on health, reflecting the emphasis placed on social development in the former PDRY. Reproductive health and contraception are also better known and practised in the southern governorates. However, whilst the health sector in the southern governorates is more developed and efficient in providing essential services to a significant proportion of the local population, recent difficulties, such as lack of funding and poor quality of human resources in the health system, have resulted in a deterioration of these services although the physical infrastructure remains intact for service delivery (World Bank, 1996).

During the period 1990-1995, donor funding accounted for approximately one quarter of the total funding of the healthcare system, leading to serious concerns about its sustainability. The situation for subsectoral programmes, such as reproductive health was even more serious. In 1996, donor funds accounted for well over 50% of the operational costs of core programmes, including reproductive health and family planning (World Bank, 1996; Radda Barnen, 1994; UNICEF, 1998).

Problems with funding and infrastructure have led to poor utilisation of health services by much of the population. The primary reasons for this were cited by World Bank (1996) and are:

- (i) Limited availability of services (especially in rural areas);
- (ii) Limited access to available services, especially in terms of financial affordability;
- (iii) Low quality of services;
- (iv) Limited availability of drugs.

World Bank (1996) revealed that the lack of services is greatest among people living in the rural sector and urban slums, both with a high incidence of poverty.

The poor quality of services is also a barrier to the uptake of services. When people do get ill, they frequently by-pass services and travel to a town where there is a greater choice of services. The poor, on the other hand, do not have such options available to them as they are less likely to be able to afford the cost of transport and alternative, often private sector services. They are, therefore, likely to experience greater mortality and morbidity rates than the non poor.

These economic pressures led the MoH seriously to question the potential and sustainability of its three tier health delivery system of health units, health centres and hospitals. In 1998, the MoH began to put in place a series of programmes designed to improve the quality, efficiency and accessibility of healthcare for the population. These programmes formed the core of the MoH's Health Sector Reform Programme (MoH, 1998)

The primary thrust of the reform programme is to put into place efficient, effective and responsive systems, based on an analysis of the system's weaknesses. Reproductive health was highlighted as an area in urgent need of reform. There are 12 key elements to the reform programme:

- decentralization of planning, decision making and financial management;
- redefinition of the role of the public sector with a stronger emphasis on policy, regulation and public health and establishment of limitations on the MoH's role as a service provider;
- district health system approach;
- community co-management of health systems;
- cost sharing;
- essential drugs policy and realignment of logistic system for drugs and medical supplies;

- decentralized, outcome-based management system from the central to the community levels, with an integrated focus on gender;
- hospital autonomy and eventual basic health facility autonomy;
- intersectoral cooperation;
- encouragement of responsible participation by the private sector and NGOs through appropriate policies and regulation;
- encouragement of innovation;
- sector wide approach to donor funding and programming, with a stronger role for the MoH in coordinating donor assistance.

(MoH, 1998)

The next section will describe the demographic and reproductive health context in which these health sector reforms are taking place. Later, Section 2.3.1 will discuss in detail the impact of the reforms on Yemen's three tier system of healthcare delivery.

2.2.3 Overview of reproductive health trends and policies in Yemen

As stated in Section 2.1, Yemen remains a country at the beginning of the demographic transition. As well as having one of the world's fastest growing populations, (the growth rate in 1997 was estimated at 2.9%, Population Reference Bureau, 1999), it is also one of the least healthy. With respect to fertility Yemen's TFR at 7.4 (CSO, 1996) is the highest in the Middle East and North Africa. High levels of fertility have also been maintained by strong traditional religious and cultural norms such as the powerful influence of men and the extended family on women's lives. All these factors have meant that the delivery of reproductive health services has been extremely problematic. In short, there have been neither cultural, governmental nor institutional factors supporting a reduction in fertility.

Yemen's overall health situation is one of the least favourable in the world. Reproductive healthcare indicators are particularly poor and, as already described in

more detail in Section 2.1, compare unfavourably with those of other countries in the Middle East and North Africa. Some of these indicators are illustrated in Table 2.1.

Table 2.1 : Recent Reproductive and Maternal Health Indicators for Yemen

Maternal mortality rate* **	1,000-1,400/100,000 live births
Infant mortality rate***	75/1,000 live births
% of births attended by trained personnel***	22%
% of pregnant women immunized against tetanus ***	17%
Total fertility rate****	6.7
Antenatal care*** (broadly defined)	34%
Postnatal care***** (broadly defined)	5%
Contraceptive prevalence rate**** (modern methods)	9.8%

(Key: *MoH 1995, **UNICEF, 1997, ***YDMCHS, 1997, **** Population Reference Bureau, 1999, *****CSO, 1994)

With the election of the GPC government in 1997 and the adoption by the National Population Council of a policy that a reduction in rates of population growth was highly desirable, a number of initiatives were started. In particular, the government pledged to deliver improved reproductive health and to strengthen social programmes to complement this strategy. The following paragraphs describe some of the main trends in reproductive health and highlights some recent policy initiatives.

First, the position with regard to infant mortality is considered. A combination of poverty, closely spaced pregnancies, and low health awareness have resulted in 19% of Yemeni children being born with a low birthweight (UNICEF, 1997). Low birthweight in turn is one of the main contributors to Yemen's very high infant mortality rates of 75 per 1,000 live births (YDMCHS, 1997). Other reasons are inaccessible and

unaffordable healthcare, low educational levels of parents and low access to clean water and sanitation.

Women of childbearing age in Yemen comprise 20% of the population. One of the most serious health risks for Yemeni women is their extremely high fertility. High fertility levels are a health concern because of the added stress they place on women's bodies, and the higher mortality risk these women incur. Children born after short birth intervals also suffer higher levels of morbidity and mortality (Hobcraft, McDonald and Rutstein, 1984; Curtis, Diamond and McDonald, 1993).

Second, high fertility also contributes to Yemen having one of the world's highest maternal mortality rates, at around 1,000-1,400 per 100,000 live births (MoH, 1995; UNICEF, 1997). Maternal mortality and morbidity reflect a chronic cycle of underlying causes that also include, most notably, lack of education, marriage and childbearing at a young age, malnutrition, short birth intervals, childbearing after the age of 35, anemia, a heavy daily workload, the impact of qat chewing on body and family budget, unsanitary conditions of the birthing environment, lack of trained assistance during labour and delivery, poor access to hospital emergency facilities and untreated pelvic/vaginal infections. Delivery practices are generally poor, with only 16% of births taking place in a health facility (YDMCHS 1997).

Only a small proportion of Yemeni women receive any antenatal care, and postnatal care is extremely low.

It should also be noted that high fertility levels are of major concern for the development of the country, because Yemen's resources, especially its water resources, cannot support a rapidly expanding population. In addition the health and education infrastructure cannot keep up. Population growth is faster than the expansion rate of health facilities, while the expansion rate of education facilities only just keeps up with population growth (MoH 1998). All this makes Yemen one of the poor countries which Ahlburg et al (1996) categorise as being where a reduction in population growth rates could impact positively on economic development.

Third, the CPR is low at 9.8% (YDMCHS, 1997) for modern methods (modern methods used in Yemen include pills, IUD, injectables, diaphragm/foam tablets, condoms) and partly as a result of this between 40 and 45% of all births are to women with a birth interval of less than two years or with more than five previous pregnancies. Early childbearing is also common and YDMCHS (1997) reported a fertility rate of 105 per 1000 women in the age groups 15-19. Yemeni women are thus widely exposed to the four common indicators of a high risk pregnancy: having too many children; having them when they are either too young or too old; and having children too close together. Furthermore there is a gap between the proportion of users and the proportion who would potentially like to use contraception. In an examination of women's fertility preferences and contraceptive use in five Middle Eastern countries, Galway and Pope, (1995) report that contraceptive use in Yemen would increase by 20% if women's unmet need for family planning were met.

Levels of awareness of the benefits of family planning and reproductive healthcare can be presumed to be low, especially in rural areas. YDMCHS (1997) showed a tendency for large families with, for example, between 40% and 50% of women with four children, in both rural and urban areas wanting more children. In rural areas less than 75% of women knew of a modern method of contraception (YDMCHS, 1997), although this represents a substantial increase over a 1991/92 demographic and maternal health survey (CSO, 1994). Only 43% of rural women knew where to access a modern method (YDMCHS, 1997).

Prior to 1991, as with many developing countries, Yemen had no explicit population policy. Interest in population was sparked by the results of censuses in 1986 and 1988 which demonstrated that population growth was rapid. In addition, Yemeni politicians became persuaded that rapid population growth could have a negative impact on economic development and, along with many other countries in the late 1980s and early 1990s they worked to adopt a policy which would aim to reduce levels of population growth. Bouhafa and Pine (1990), in presenting the findings of a population needs

assessment to North Yemen, describe how population growth was a priority issue for the government who were aware of its potential impact on development. The findings of Bouhafa and Pine (1990) are consistent with those of Baron, Bennour and Harris (1990) who highlight that serious economic, cultural, manpower and institutional barriers combined with low female illiteracy rates and lack of reproductive health knowledge need to be overcome in order to facilitate an improvement and expansion of reproductive health and family planning services.

A National Population Strategy was endorsed by the Government of Yemen in 1992, following Yemen's first National Population Conference in 1991. The National Population Strategy called for a broad intersectoral approach to the population issue (Government of Yemen, 1990). The strategy envisaged interventions for reproductive health and the Government took a clear decision to develop programmes to implement this policy. The National Population Strategy focused explicitly on: reducing child and maternal mortality and morbidity rates by 50%; increasing CPRs to 36% and reducing the TFR to 5.0 by the year 2002. It also envisaged strategic interventions for reproductive health and family planning, women in development, information and education for population issues, population security and protection, population-related planning and institutional arrangements and legislative reform. The National Population Strategy recognised the importance of family planning from the perspective both of the health of women and children and of the need to curtail population expansion. The importance of this document should not be underestimated, as it was the first time in Yemen that ministries were willing to take such a comprehensive approach to the problems in the country. A number of papers (CSO, 1991; Nageia Bahobeshi et al, 1993; CSO, 1992) either contributed to, or have since endorsed the Strategy.

This policy was overseen by a National Population Council (NPC) which was established in 1991 to implement the National Population Policy and was established under the jurisdiction of the Ministry of Planning and Development (MoPD). The NPC have since received a high level of support from the Government and was responsible for the National Population Conferences of 1992 and 1996.

Yemen was a signatory to the ICPD Plan of Action in Cairo in 1994, which confirmed the linkages between population and development and emphasised the need for reproductive healthcare for all within a framework which recognised the need to provide people with choice through access to education and health services. In this, and in its affirmation that reproductive health services should include the treatment of infertility, Yemen's National Population Policy is in line with the Plan of Action.

In 1996, Yemen held its second national population conference, at which an updated National Plan of Action (1996-2006) was drafted. This National Plan of Action recognised population growth as one of the most formidable and intractable problems facing Yemen and is based on a number of premises which include the recognition of the need to provide positive incentives to individuals, communities, NGOs and the private sector to participate in the solution of population related problems. The Plan also includes a safe motherhood strategy.

Out of Yemen's population strategy, the National Mother and Child Health Care and Family Planning Programme, which was a major component of Yemen's Plan of Action was formulated. This Programme sets out a number of goals for the years 2001 and 2006. Prior to this, Farah, Belhadj and El Ghouayel (1994) had discussed the need for improved reproductive health services within the national context and the obstacles that had to be overcome in this area in order to achieve the Plan of Action's quantitative targets for the year 2000. The key obstacles cited by Farah, Belhadj and El Ghouayel (1994) as impeding improvements in reproductive health were lack of qualified health personnel, particularly females, lack of qualified health personnel in rural areas and lack of reproductive health services and poor integration of reproductive health services at each tier of service delivery. The authors also pointed out the negative effects of high fertility, lack of education and early marriage and childbearing, malnutrition and lack of knowledge regarding MCH services on a woman's health, in addition to poor socioeconomic and environmental conditions which impact negatively on women's reproductive health in Yemen. Farah, Belhadj and El Ghouayel (1994) also agree with El Ghouayel (1993) who argued for the MoH to promote greater inter-sectoral

coordination in order to ensure effective implementation of the safe motherhood strategy.

The quantitative targets of the National Action Plan were challenged, however, by Bahobeshi and Zohry (1995), who stated that they believed the national goal of achieving a CPR of 36% and a TFR of 5.0 by the year 2002 to be overambitious. It should be noted however that Yemen's population programme remains a very high priority for the Government and whilst the Programme's targets are very ambitious, they do represent an expression of the political determination on the part of the Government to address the issues raised by Yemen's high population growth and their effects on social and economic development at the family and state levels.

The National Plan of Action also made a number of recommendations. These recommendations reflected national reproductive health trends and informed the development of the reproductive health recommendations set out in the Health Sector Reform Programme introduced in Section 2.2.2.

Through the Health Sector Reform Programme, the MoH intends to facilitate a significant improvement in services through a number of highly focused and targeted actions (MoH, 1998). As part of these reforms, the MoH began to concentrate on ways in which it could be a '*manager*' of services, rather than a '*provider*' and therefore welcomed the intervention of outside agencies in the delivery of reproductive health, seeing this as an area where NGOs could make a positive and much needed contribution to augmenting the health and welfare of Yemeni families. (MoH, 1997)

2.2.4 Contraceptive Use

Historically there has not been much use of contraception in Yemen. The 1979 World Fertility Survey reported a CPR of 1.1% for any method and YDMCHS(1997) reported an overall CPR of 21% and a CPR of 9.8% for modern methods (United Nations, 1999). The modern methods most commonly used are the pill (4%) and the IUD (3%).

YDMCHS (1997) also highlights that the CPR for modern methods in urban areas is more than three times that in rural areas (21% and 6% respectively). The results of the YDMCHS (1997) will be discussed fully in Chapter 5.

There is little literature on the social and cultural aspects of contraceptive use, other than Wafai (1991) who studied perceptions, beliefs and practices towards family planning in three northern areas of Yemen including Sana'a, and who provides a useful comparison for YDMCHS (1997). Wafai's (1991) findings highlight the conservative nature of the northern areas of Yemen. The key findings from Wafai (1991) are:

- family care and contraception are better known and practised in the southern region than in the north;
- family planning for spacing births is acceptable, but birth control, as in limiting family size, is viewed negatively;
- pills are the least favoured method of family planning, suspected of causing health problems for both women and children;
- abstinence is the most popular family planning method;
- 'western' contraceptives are generally unacceptable, with many people believing family planning to be a western plot against Arabs and Muslims;
- most men and women are unaware of male contraceptive methods;
- many non-users claim to have the intention to use contraceptives;
- most women in Sana'a rely primarily on breastfeeding as a contraceptive method;
- all women users had obtained their husband's consent;
- non-users blame their husbands;
- word-of-mouth is the most important means of learning about family planning, with little or nothing learned from the media;
- family care centres are perceived as being for pregnancy and child care and are thought to be too far away from home and lacking in facilities, with doctors who are unhelpful and negligent.

2.3 Existing Health Services

The previous section highlights the paucity of research on contraceptive use dynamics in Yemen. It has also noted the very low levels of contraceptive use reported in recent national surveys. One factor in this has been the low level of services. Earlier in this chapter the recent reforms in the Health Sector were described. These aim to improve the existing health services and which are now discussed.

2.3.1 Public Sector

At the national level the MoH is responsible for policy development, together with the administration and management of all health services in the country. Administratively, Yemen is divided into 17 Governorates, each with a varying number of Provinces and Districts. A Governorate Health Office has been established in each of the 17 Governorates. In each Province there is a Directorate General of Health Services, which is administratively and financially autonomous.

As introduced in Section 2.2, the primary health care (PHC) infrastructure consists of facilities at three levels: the hospital; the health Centre (HC); and the health Unit (HU). It was estimated in 1994 that the Government system probably reached less than half the population (Hoskins, 1994) and even then the quality of care was inconsistent. Whilst MCH has been integrated into the PHC system, only 15% of the population has access to MCH services (World Bank, 1997). Sadly, a number of factors contribute to the health system being somewhat inefficient. These include, in particular, poor quality and a lack of integrated services, severe lack of trained personnel, particularly females and an erratic supply of drugs. As a result, despite there being a sizeable number of public health facilities and manpower, patients are forced to bypass the system for more expensive private health facilities, because of lack of services in the public sector. A recent study found that the bypass rate (the percent of people seeking care who chose not to go to their nearest health facility) was between 42% and 73% per area studied

(World Bank, 1998). As a result, the public health service sector has become grossly underutilized and health staff are idle.

It should also be noted that traditional medicine still plays an important role in Yemen. In many rural areas it is often the only 'medical assistance' available to communities.

2.3.2 Private Sector

The private sector plays an increasingly important role in health delivery, especially in the large towns and cities. It is growing quickly, partly due to lack of confidence in the public sector, but there are few controls over cost or quality. The sector comprises a range of qualified and unqualified personnel, including doctors, nurses, PHC workers, pharmacists and untrained drug sellers and 'injectionists', along with many different kinds of traditional healers.

There are several private clinics in Yemen which have been opened in the last few years mainly in urban centres. Doctors operate these private clinics which cater primarily to middle and upper income Yemenis who can afford their services. Private pharmacies are more widespread. The private pharmacies often play the role of 'poor man's doctor', diagnosing ailments and prescribing medicine for families that either lack access or cannot afford private or government services (where they may have to pay 'under the counter' for services).

While studies of the private sector are nearly nonexistent, anecdotal evidence indicates that issues of safety and quality of care in the private sector are a major issue, and that effective regulation is imperative. One of the very few studies which looked at the private sector was a 1997 WHO study of laboratories in Yemen. It found that the overall quality and reliability of services was poor, and that lack of acceptable quality Yemeni laboratories seriously jeopardized the ability of physicians to make accurate diagnoses. The report concluded that not a single public laboratory in Yemen meets international standards (Browning, 1997).

Another problem with the present role of the private sector is that it appears to be geographically competitive and overlapping with, rather than complementary to, the public sector. Private practices tend to be set up on the doorsteps of public services, rather than in areas where public services are lacking. A 1996/1997 study of four governorates found that those districts with the highest number of government facilities also contained the highest number of private facilities, while the trend was reversed in those districts with fewer government facilities (Beatty et al, 1997).

2.3.3 Non-Government Organisations (NGOs)

As indicated in Section 2.2.3, by endorsing the recent Health Sector Reform Programme, the Government welcomed the intervention of outside agencies in reproductive health service delivery, and has seen this as an area where NGOs in particular can make a positive and much needed contribution to augmenting the health and welfare of Yemeni families. There are a number of NGOs, both domestic and international, operating some components of the health system, mainly through PHC programmes, including MCH health clinics. The most prominent national NGO dealing with family planning is the Yemen Family Care Association (YFCA) which is supported by UNFPA and other donors. In general, however, national NGOs tend to be new, small, politically aligned, based in urban areas and under-resourced.

2.3.3 Support for Reproductive Health, Family Planning and Information, Education and Communication (IEC) from External Donors

External assistance plays an important and increasingly significant role in the development of health services in Yemen. It is estimated (MoH, 1997) that about 20% of all health expenditures are financed by over 20 different foreign agencies. The principal sources of external assistance for family planning, population activities and IEC are from EU, UNICEF, WHO, UNFPA, UNESCO, the World Bank, the Dutch

Government, the German Government, Association for Voluntary Surgical Contraception, IPPF, DANIDA (Danish Government Aid), and Pathfinder.

2.4 Factors which affect reproductive health

The poor reproductive health indicators described in the previous section are exacerbated, within Yemen, by high inequalities in reproductive health between women with different socioeconomic and demographic characteristics. In addition these are sometimes exacerbated by cultural factors. The aim of this section is to review the literature on the socioeconomic, demographic and cultural factors influencing reproductive health in Yemen. The section first considers some general cultural and demographic factors and then looks at a number of specific issues relevant to Yemen, namely qat, fasting and female genital mutilation.

2.4.1 Cultural Factors

Culture plays a major role in the reproductive health of Yemen in a number of ways. First, through norms regarding marriage. This is because, as described previously, age at marriage is very young in Yemen and hence there is a large amount of childbearing to very young women. YDMCHS (1997) estimate that by age 13, 8% of Yemeni women are married, increasing to 25% by age 15 and 78% by age 20. This is commented on by Acsadi and Johnson Acsadi (1990), writing on Sub-Saharan Africa, who describe how age at first marriage determines age at first birth, noting that:

'women in Sub-Saharan Africa marry earlier than their counterparts in other regions (with the exception of Afghanistan.....Yemen) and enter reproductive life and pregnancy risks while still very young and physiologically immature.'

YDMCHS (1997) data support this by highlighting that 12% of women aged 15-19 had given birth to at least one child and that by age 19, almost 40% of women had started childbearing. Only one-third of ever married women consider age 20 or over as the ideal age of marriage, while 25% consider age 15 to be the ideal age at marriage and a further 25% age 15-19.

YDMCHS (1997) also reveal that consanguineous marriages are becoming more common in Yemen. 30% of women aged 40-45 had married a blood relative compared with 44% aged 20-24, an increase of almost 50%. It is interesting to note that women who marry at a younger age were more likely to have married a blood relative (YDMCHS, 1997). Consanguineous marriages occur roughly equally among women residing in urban and rural areas. YDMCHS (1997) also note that there is no relationship between the likelihood of consanguineous marriage and level of education.

Other than the information coming from YDMCHS (1997) which has limited cultural information, there have been very few studies concerning the socioeconomic and cultural factors influencing reproductive health in Yemen. The major work is a two part study conducted by Radda Barnen, which is the Swedish Save the Children NGO. Radda Barnen conducted a pilot study in 1990 and a larger study in 1994 and these are now discussed.

Radda Barnen (1994) aimed to obtain the views, feelings and behaviour of childbearing women in Yemen towards MCH programmes. In so doing, the study provides an understanding of how cultural values and social factors influence a woman's health seeking behaviour and thus elicits her reaction to any MCH services she encounters. This work followed on from a pilot study (Radda Barnen, 1990) conducted between 1980 and 1990 which interviewed 15 former expatriate employees of Radda Barnen administered MCH projects. The aim of the pilot was to describe and analyze MCH work from the point of view of personnel at five MCH projects administered by Radda Barnen. The pilot study used structured, closed and open-ended questionnaires as well as individual follow-up discussions through personal meetings and/or by telephone.

Radda Barnen (1990) sought the views of former employees in relation to breastfeeding and the integration of traditional knowledge with modern MCH practices. In addition the survey sought the views of respondents as to the changes needed in order to meet the needs of the most vulnerable group of women better. The results showed that cultural, psychosocial and medical factors which had, to date, been insufficiently addressed,

appeared to influence the effectiveness of MCH care as well as affecting the health and wellbeing of the child.

Following on from this a further study (Radda Barnen 1994) was conducted. Five districts, where Radda Barnen had been involved in collaborative MCH projects, were identified as target districts for this study (Aden, Lahej, Seiyoun, Taiz and Zabid). The five districts selected were felt to represent the widest possible range of geographical, cultural, ethnic and infrastructural characteristics in Yemen. The study used a number of empirical approaches notably existing MoH documents and interviews with a total of 217 women.

The researchers believe that their study design ensured that their findings would be generalisable to the majority of rural and urban based Yemeni women. They also appeared to believe that the study provides an accurate account of knowledge, attitudes, beliefs and practices in relation to pregnancy, childbirth and delivery assistance in the modern and traditional sectors and between selected groups of rural and urban Yemeni women with childbirth experience.

A number of problems were encountered in undertaking the study. In the Taiz region for example, it was initially more difficult to carry out interviews than in other areas as some of the women's husbands initially thought that the study was political and they would therefore be present during the initial phase of the interview. This led to a reluctance on the part of the women being interviewed to speak freely. A further problem highlighted was that of a Sudanese researcher who experienced problems of a specific nature, again, in the city of Taiz. Sudanese midwives have been closely involved in the training of Yemeni health personnel, particularly midwives. In some places, this has created resentment. In a small number of households the male members of the household did not agree to the wife being interviewed, although in only one of these cases did the interview not take place. It is the opinion of the researchers however, that overall interviewer bias was kept to a minimum.

In addition, the relatively small sample sizes do mean that the level of generalisability ascribed to the study by the researchers is perhaps a little high. There are likely to be some healthcare norms and experiences which are not explained by this study. Despite these problems, many of which would occur in any field study, this research remains an important work.

The report emphasises that:

'The study should be viewed as an attempt by the researchers to give voice to rural and urban women with childbirth experience from the modern and traditional health care sector in Yemen. They are otherwise rarely heard in the discussion on the planning of future MCH services.' (Radda Barnen, 1994).

An important finding for the report revealed that women in both rural and urban areas of Yemen use MCH services to fulfill social and emotional needs primarily and medical needs secondarily. For example, the report states:

'That MCH has been chosen as a platform for the fulfillment of needs outside the strictly medical realm is due to the fact that women have very few possibilities to execute authority in their life, and MCH is perceived by many as a legitimate cause for women to leave the house and establish contacts in the outer world.' (Radda Barnen, 1994)

The findings were consistent with those of the pilot conducted among ex-Radda Barnen employees (Radda Barnen, 1990). The study found that those women who regularly used modern MCH services resided in urban areas and were comparatively well educated and socially privileged and reported receiving good MCH care. The report noted that women from poor socioeconomic positions felt less comfortable in seeking modern MCH care. Women from lower socioeconomic groups felt that health personnel did not receive them in the same way as women from a more educated and higher income group and as a result they reported feeling alienated and disadvantaged in terms of being attended to.

In rural areas, women primarily seek healthcare from traditional health workers. Of those who reported having sought healthcare in a modern MCH setting. Their reactions

to the healthcare they received resembled those of the less privileged women in the urban areas, as described above. According to the study, women in Yemen do not primarily reject modern MCH services because of geographic or economic inaccessibility. Rather, cultural and social factors and a perceived lack of empathy are identified as decisive factors in the low utilisation of modern MCH care. These findings are consistent with Abdullah et al (1992).

The findings of the Radda Barnen (1994) study highlight that the attitude of health personnel towards women seeking healthcare is important. Women reported that during childbirth, for example, the traditional midwife is appreciated for her willingness and ability to relate to women. On the other hand, women who had been assisted by modern care providers during childbirth reported that they had felt alienated and afraid. It is interesting, therefore, to note that women's evaluation of the childbirth event is related to the attitude of the care provider, rather than necessarily a preference for a certain birth setting.

In discussing the postpartum period, significant differences were reported in the postpartum experiences of women who had delivered in an institutional setting as opposed to at home. Rural women who had delivered in a health facility found the practice of separating a woman from her baby 'confusing and harmful'. It was the consensus of both urban and rural women that the rules and regulations in this respect were not consistent with their own needs, as well as the needs of their baby. The study also found that breastfeeding was less common and bottle feeding more frequent among that group of mothers who had delivered in an institutional setting.

A discussion of the findings of Radda Barnen (1994) shows that women's expectations of what MCH care should entail extend far beyond the purely medical needs laid down by policymakers for MCH care in both urban and rural settings. Women state that seeking MCH care has been chosen as a platform from which to fulfill non medical needs. Women report that they have very limited opportunities to execute authority in their life and MCH is perceived by many as a legitimate cause for women to leave the

house and establish contacts in the outer world. Therefore, a discussion of the study's findings must be made against the background of how Yemeni women experience their situation in the society as a whole.

Yemeni women feel they are in a socially vulnerable position and must therefore create what they perceive as safety zones (these are physical spaces) for themselves. As reported by Radda Barnen (1994) the strength of these safety zones must be viewed in relation to the threats women perceive to the areas of feminine authority. Radda Barnen (1994) shows that particularly for women who reside in rural areas of Yemen, the need for authority and control is strong among childbearing women and that resistance towards handing over authority, as women define it, is strong.

Overall women feel that they have very little influence and decision making power in their lives. Although women emphasize the difficulty of being able to achieve more independence, the majority stress that they would like to improve their relationship with their husband, family and friends. The restrictions women feel in their daily lives and their subsequent need to interact with other women in so called 'safety zones' play a basic role in how well MCH services are utilized and by whom.

For Yemeni women, multiple pregnancies earn a woman status and appreciation from her husband. Utilization of MCH services is seen as a legitimate cause for contacts with other women and the outside world. Seeking MCH services has therefore been chosen as a platform by women to fulfill some of their social and emotional needs.

On a broader level, the findings highlight the determination of women to safeguard their traditions in the area of reproductive health, often regardless of the medical consequences of doing so. Indeed, as Kitzinger (1987) highlights, certain aspects of pregnancy and childbirth are important to women as women wherever they are. Yemeni women feel they are in a vulnerable position both personally and socioeconomically. Participation in the MCH system in the modern sector means that they will be leaving the traditional area of control and familiarity. A final point from Radda Barnen (1994)

was that it highlighted the reluctance of many women to seek MCH services due to a lack of female health personnel.

As well as the large Radda Barnen (1994) study there have been a few small scale studies which have documented the position of women in Yemeni society from a medical perspective (Myntti, 1988; Abdulghani, 1988; Beatty, 1988). These studies highlight the risks that Yemeni women face as a result of beginning childbearing at a young age, small birth intervals and multiple pregnancies.

Myntti (1988) studied women residing in a village in northern Yemen and described how the economic success of a household was dependent upon a woman's ability to produce and reproduce. Women perceive that their ability to be fertile and productive are inextricably linked. In striving, therefore, to achieve a balance between health and production on the one hand and fertility and reproduction on the other women seek to ensure the well being of their reproductive system.

Myntti (1988) provides numerous examples of how the reproductive health of Yemeni women is safeguarded by traditional and accepted practices undertaken by women both as a group and on a personal level. For example female masseuses specialise in manipulating a woman's uterus following childbirth in order to ensure that a woman will continue to conceive successfully and bear children. Myntti (1988) cites other writers such as Adra (1983) and Ansell (1981) as acknowledging this practice.

Women also take an active role in ensuring their own health and well being, for example, they believe that they will be assured of a safe delivery if the foetus is small. Women usually restrict their dietary intake during pregnancy. This practise was also revealed by Dorsky (1981) in the Yemeni town of Amran.

Childbirth usually takes place in secrecy in the presence of only the senior women of the house. It is they who look after the woman during her 40 day postnatal confinement. Myntti (1988) gives also the example of attempts by modern practitioners

to encourage women residing in rural areas to take an injection to stop bleeding in the postpartum period. This, she says, women are vehemently against, for they feel that it would be harmful to prevent impurities from being expelled, a practice which is inextricably part of Yemeni culture.

What Myntti (1988) highlights very clearly is that any attempt to introduce modern MCH practices must be undertaken with a sensitivity to the concerns women display for preserving their reproductive health within a cultural and traditional context. However, Myntti (1988) also reveals that women acknowledge the harmful effects on their health of too many pregnancies, too closely spaced thus demonstrating a potential need for family planning.

Myntti (1988) together with the findings of Radda Barnen (1994) indicate that modern MCH care, including family planning, will only be accepted if it does not threaten the traditional practices of reproductive healthcare undertaken by women in what they perceive to be a safe and appropriate setting.

2.4.2. Qat

Any study which discusses Yemeni culture must address the subject of qat. Qat is an evergreen shrub with amphetamine like qualities which is chewed by the majority of the adult population of Yemen. The qat leaves are stored in the cheek and the juices swallowed to gain their effect. Most qat is chewed communally at qat chewing gatherings which take place in the afternoons usually over a period of between three to five hours and which are a dominant feature of Yemeni social life. Qat is also chewed by manual workers and farmers in the belief that it will promote energy and by students in the belief that it will promote mental concentration. The frequency of qat chewing varies from once a week to up to twice a day. Weir, (1985) describes in detail the culture surrounding the chewing of qat, however there is rather less literature on the impact of qat on reproductive health.

Considered to be a mild drug from the point of view of its general effect on health and issues of addiction and mental distortion, the impact of qat chewing in relation to the economy, social, environmental and specific health aspects is providing increasing cause for concern within the Government. Until the 1970s qat consumption, because of its expense was confined to a small, rich, mainly urban elite. During the 1970s its consumption spread throughout Yemen embracing all classes, generations and both sexes. As Weir (1985) states:

'a traditional social ritual which had formerly helped sustain the high social position of a privileged minority had become a major forum for the negotiation by the majority of a new social order based on achievement and the deployment and display of monetary wealth.'

Weir (1985) adds:

'Qat consumption is a complex social and cultural phenomenon which is primarily sustained by social not biological factors.'

In more recent years the link between qat consumption and population dynamics has begun to be recognised. Qat chewing has been seen to have three implications for reproductive health. The first is due to a relationship between qat chewing and low birth weight (LBW). Abdul Ghani et al (1987) showed that there was a 20% increase in LBW among qat chewers compared with their contemporaries who did not chew qat during pregnancy. Abdul Ghani et al (1987) attributed this to the constriction of blood vessels to the placenta as a result of qat chewing. While important, it should be remembered that Myntti (1988) and Dorsky (1981) noted that regardless of qat consumption, Yemeni women prefer to restrict their dietary intake, as one of the primary concerns of women is to ensure a safe delivery by keeping the foetus small. Therefore a specific link between qat consumption and LBW may be difficult to prove.

Second, it has been speculated (World Bank, 1987) that household expenditure on qat may have a negative impact on expenditure on other reproductive health seeking behaviours with a consequent impact on reproductive health. While an attractive hypothesis to many commentators, there is little concrete evidence for this.

Third, it has also been suggested (Kristiansson, 1987) that qat consumption during lactation may suppress not only the appetite of the mother but also that of the child, hence resulting in malnutrition. Again, while an attractive hypothesis there is no concrete evidence to support this speculation.

2.4.3 Fasting

The Muslim practice of fasting during the holy month of Ramadan and its effect on pregnant women has been addressed by a number of authors. Rashed (1992) highlights that:

'dispensation from fasting is allowed during sickness, menstruation, pregnancy, breast-feeding and travel.'

Commenting on Rashed (1992) regarding the exemption of pregnant women from fasting, Reeves (1992) describes the results of a study which highlights that a substantial number of pregnant women choose to fast with their families during Ramadan rather than make up the time later on their own. Commenting on both Rashed (1992) and Reeves (1992), Hoskins (1992), drawing on her experience of having worked in the health sector in Yemen for over 10 years in both rural and urban slum areas, states that pregnant women often fasted during Ramadan even though they were undertaking strenuous physical activity. Hoskins (1992) writes that, in her opinion, lack of knowledge about the exemption from fasting during Ramadan whilst pregnant, was not the most important issue. Hoskins (1992) comments that women fast during Ramadan because they do not want to make up the time later on their own and that by fasting for the month of Ramadan they feel able to participate fully in the religious festivities.

Hoskins (1992) goes on to state that she has also known of nonpregnant women taking the combined oral contraceptive continuously during the month of Ramadan (without the prescribed seven day break) so that they would not have to stop fasting whilst menstruating. She also remains unconvinced that the current teachings to Muslim women on fasting in pregnancy would have any effect on their practice.

It is clear that greater research on the relationship between fasting in Ramadan and reproductive health is needed to ensure that appropriate and effective information is disseminated to Muslim women in accordance with their religion.

2.4.4 Female Genital Mutilation

The practice of female genital mutilation (FGM) or, as it is also known, female circumcision, although not as widely practised as in parts of Africa and the Near East, is understood to be performed in certain areas of Yemen. There is an extremely small literature on this subject with regard to Yemen. YDMCHS (1997) shows that 23% of Yemeni women have been circumcised. Rushwan (1980) and Jawad (1998) highlight the negative impact on a woman's reproductive health as a result of FGM. In addition, Olenick (1998) revealed that 60% of Yemeni women were opposed to FGM. FGM is not discussed further here because it does not feature as an important issue in the case study which comprises the major part of this thesis.

2.5 Service Delivery

This section aims to describe current reproductive health service delivery in Yemen and the little operations research that has surrounded it. In Yemen, service delivery in this area cannot be divorced from the Islamic context. A description of service delivery in Yemen in the context of Islam is provided by SOUL (1997). They argue that the low CPR in Yemen is due to a combination of prevailing myths about family planning; lack of awareness amongst women as to the availability of family planning services and a low level of health education. To these should also be added prevailing high family norms and low female autonomy. SOUL (1997) state that the provision of family planning services has not incorporated the needs of women and believe that in order for family planning services to be more effective, family planning should be integrated with MCH services, complemented by health education programmes and that services

should be delivered by local women. SOUL (1997) add that Islam's position vis-à-vis family planning should be incorporated into health education campaigns.

To turn to the research, El-Ghouayel (1993) described the great need for a more efficient and effective delivery of reproductive health services in the public sector, and improved inter-sectoral coordination and integration, including the local community, and for improved health sector management and higher status and awareness of the importance of reproductive health within the MoH.

In Yemen, health services are under a severe financial strain which cannot be alleviated by current budgetary allocations. Funds spent on healthcare are insufficient and the task of obtaining good healthcare is left to the individual patient, often at considerable expense. Budgetary allocations and donor subsidies do not circulate back into the health system to maintain even basic and essential services. Whilst, up until recently, public health services were 'officially' provided free of charge, it is not a secret that there are hardly any health facilities where the staff, due to their low salaries, do not solicit 'under the table' contributions from patients.

Qassim (1996) stated that the current trend of the government was to encourage as many people as possible to run their own private hospitals, clinics and drug stores, thus alleviating the pressure on the government to provide health services to the public.

Qassim (1996) adds that:

'there is an illusion among some people that public health services are free. The reality today is that the rural population are paying up to 100 times (if not more) the cost of the urban population. Most of the cost goes to transport, accommodation, food and the search for the drugs recommended by the prescriber.'

The economic situation placed the MoH in a particularly difficult dilemma. In order to meet the needs of the people, and especially the poor, it must provide services at low cost. At the same time, to provide these services it must increase its resource base, which inevitably means levying fees for services (MoH 1998). However, World Bank (1998) estimated that citizens already pay up to 75% of total healthcare costs out of

their own pockets, with the government contributing only 25%. Within this environment, the introduction of cost sharing initiatives would require skilful management.

Cost recovery in Yemen is being initiated in order to create the possibility to deliver essential healthcare services to the people at an affordable cost, with a fee system which is both transparent and public. Its introduction has been facilitated by the publishing of the official document 'Forward Looking Policies and Strategies for Health Development in the Republic of Yemen, produced after the First National Conference for Health Development in February, 1994. Following its publication, an appropriate cost sharing system was developed by the MoH, through a task force of the Donors' Coordination Committee within the MoH. MoH (1998) states:

'The objective of the cost sharing strategy in Yemen is to secure sufficient funds through revenues from fees and charges for services in order to improve maintenance of facilities, and supply of drugs, as well as the motivation and performance of health personnel.'

Unlike the private sector, the government does not expect the levying of user charges to facilitate full cost recovery.

Yemen's strategy for cost sharing is dependent on two types of fee structures: The first being user fees for curative services which the World Bank expect to contribute 10-15% towards the running costs of public health facilities (World Bank, 1998). A World Bank Public Expenditure Review in 1998 estimated that revenue generated by NGOs and community owned facilities may cover up to 70% of running costs (World Bank, 1998). The second type of charge is for essential drugs where, through the importation of generic drugs the government aims to recover 100% of the costs through patients' payment into a revolving drug fund.

It should be noted that as outlined in the Health Sector Reform Document (MoH, 1998), cost sharing is only one component of financing and that its role is to complement other financing initiatives and mechanisms, such as government financing.

Experience with cost sharing has shown that while cost sharing is potentially a very useful strategy for Yemen, the overall management structure of the MoH must be revised before it can manage such a scheme well. As it is currently practised in many facilities, patients now pay for services which were previously free, with no apparent improvement in quality. There is no management system in place which helps managers of health services see the effects of their fees on quality of care (Tibouti, 1995). Second, there is evidence that, as currently practised, the use of fees for services may be seriously compromising the accessibility of health services (World Bank, 1994; Radda Barnen, 1994; UNICEF, 1998).

A World Bank Discussion Paper, World Bank (1998) revealed that people are being forced to use private facilities, despite their unaffordability. Similarly UNICEF (1998) showed that despite high private sector fees, use of private sector facilities appears not to be limited to the wealthy, neither to people with more serious illnesses. World Bank (1998) also highlighted the lack of financial access of the poor to healthcare, with the poorest quartile of the population using health facilities 35-65% less often than the most well off quartile.

A survey, undertaken in Yemen in 1992, into the willingness of people to pay for medical services (Assa'edi, Haithami and Abdullah, 1992) confers with Tibouti (1995) that people are willing to pay for services if they can see an obvious improvement in these services. The survey was undertaken in four governorates (two southern and two northern) with a sample size of 3885. The survey revealed that 93% of interviewees

had paid for one or more medical services in either the private/public sector in the month preceding the survey and that overall 60% of all interviewees were willing to pay for health services. It revealed that the main reason that people paid for private sector health services is lack of proper laboratory services in the public sector followed by the better attitude of doctors. This last point is interesting as these doctors also operate the public health sector. Other reasons for using the private sector were prolonged waiting times, poor standard of cleanliness and poor attitude of health personnel. Assa'edi, Haithami and Abdullah (1992) revealed that people were most willing to pay for drugs followed by laboratory services.

2.6 Summary

This chapter has described, first, the recent levels and trends of fertility and reproductive health in the Middle East and has demonstrated that Yemen is at the poorest end of the reproductive health spectrum on all indicators and that fertility remains high. The chapter has then set the political and social context in which this thesis takes place and finally has described the literature which reports on reproductive health in Yemen.

In summary, it is clear that the level of reproductive health in Yemen is extremely poor and that it is exacerbated by many socioeconomic and cultural factors. Indeed, women in North Yemen were among those worst discriminated against in a study which classified discrimination against women in the late 1980s (Profamilia, 1988). The study highlighted the negative impact of early marriage and early and frequent childbearing on the health and socioeconomic condition of women. Similarly, a decade of research findings from the DHS programme (Carr, Way, Neitzel, Blanc, Jamison, Kishor and Stewart, 1994) highlighted that whilst in many countries women's lives had improved, in countries such as Yemen poor conditions related to lack of education and access to reproductive healthcare still existed. These issues, exacerbated by the economic and political upheavals of the 1990s mean that, in Yemen, women are at the very beginning of any continuum of reproductive health.

The chapter has demonstrated that in the mid to late 1990s there was an immense need for improved reproductive healthcare in Yemen and the next chapters present a case study of an attempt to deliver a cost recovery based reproductive healthcentre in Yemen.

3. The MSI Model of Reproductive Healthcare Delivery

3.1 Introduction

The aim of this Chapter is to provide a detailed insight into the conceptual framework within which MSI attempts to deliver sustainable reproductive health and family planning programmes and in so doing to provide the context in which MSI's Yemen programme was established and the organisational context within which the programme operates.

The overall goal of the MSI model is to deliver low cost, high quality, locally managed and sustainable family planning and reproductive health programmes throughout the developing world. In order to do this the programme's sustainability is obviously crucial. There are two aspects to sustainability in the MSI model: institutional sustainability and financial sustainability. Institutional sustainability is defined as having the staffing and organisational infrastructure to support effective planning and management, to establish a sustainable and renewable client base, and to deliver high quality services. Part of this involves good relationships with both central and local government and with the local community. Financial sustainability is defined by achieving cost recovery although it is important to note that this is not at the expense of achieving high family planning numbers.

In addition MSI also stresses the importance of managing relations with other sectoral agencies and funding bodies as part of a sustainable strategy.

This chapter will comprise an overview of the MSI model. The chapter will consider the features which are important in ensuring that the MSI model is successful, particularly through ensuring institutional and financial sustainability. The following broad areas will be considered: structure; staffing; sustainability; monitoring and evaluation. Finally the Chapter will identify those features which are central to the model.

3.2 Methodology

The methodology of this chapter is a mix of literature review and indepth interviews with key MSI staff both in London and internationally. The London staff were interviewed using individual question routes to reflect their individual expertises. Interviews with MSI London personnel were conducted face to face, by telephone and email. Interviews internationally were conducted face to face, by telephone and email. The following people were interviewed:

MSI London

Dr Tim Black, Chief Executive.	Interview, telephone, email
Helen Axby, Deputy Chief Executive.	Interview
Nikki Charman, ex O'seas Programmes Mgr., Asia.	Telephone, email
Sue Holland, ex O'seas Programme Mgr., Asia.	Telephone, email, post
Gordon Mortimore, Director, Latin America Programmes.	Interview, email
Alison Fourie, Africa Intern.	email
Kate Larrison, Michigan Fellow, Asia Team.	email
Nutan Wozencroft, Financial Controller	Interview, email
Douglas Whitewright, Director of Finance.	Interview, telephone, email
Dr Tim Rutter, MSI Consultant.	Interview

Other

Getachew Bekele, Country Director, MSI Ethiopia.	Email
Atula Nanalyakkara, Country Director, MSI Sri Lanka	Email
Cyprian Awiti, Country Director, MSI Kenya	Email
Dr Hind Khaled, Country Director, MSI Yemen.	Interview, email, telephone, fax
Sharon Beatty, ex MSI Consulant, Yemen.	Interview, email

In this chapter where a specific interview is referred to then the name, year and means of communication is put in the text.

3.3 Organisational Structure

The aim of this section is to describe critically the organisational structure within which MSI aims to make programmes sustainable. MSI is a non governmental organisation which aims to deliver low cost, high quality, locally managed and sustainable family planning and reproductive healthcare programmes throughout the developing world. In addition, the MSI partnership includes a nationwide programme of family planning in the UK and a wholly owned consultancy subsidiary. In 1999, MSI's overseas programmes served 2,344,282 million clients.

MSI believes that its strength lies in its social entrepreneurial approach, which utilises modern management, business, financial and marketing techniques to achieve a social, rather than a commercial objective. By adopting this approach MSI claims to optimise funding in that the greatest leverage can be attained for a given quantity of funding¹. This also maximises the potential for programmes to achieve long-term financial and organisational sustainability².

When establishing a new country programme, MSI tries to ensure that the registration of MSI in a country, whether as a local entity or directly as an international NGO is undertaken on a sound legal footing. It has, with few exceptions, funded and worked overseas with local entities called Partners. By establishing the Partner organisations and, as the principal funding source, MSI has a degree of legal control over each organisation through the membership composition of the local Board. In a few cases the local partner is a branch of MSI.

The Partners, as local non-profit making legal entities may be: a company limited by guarantee; a society; a foundation; or a company limited by shares that are owned by MSI through a local trust. Their structure is essentially similar to that of MSI, in that

¹ Total donor income for the International Division for the period 1990-1999 was £86M (whilst this includes the non-donor element such as bank interest, rental income, etc this is considered to be minimal).

² Total amount generated from cost recovery in 1999 £7,826,325. Total amount generated from local fund raising in 1999 £1,638,823

they will have a small number of company members responsible for electing a small five to seven person Board, which sets policy and goals.

On a few occasions in the past there have been problems in retaining control of local boards because ill informed advice during the set up of the programme has left the programme vulnerable to attempts to take control of the programme. In some countries the legal process in establishing a programme can be time consuming due to lengthy bureaucratic procedures as can the need to overcome hostility from private doctors and organisations already present in the country who may perceive the presence of MSI as a competitive threat to their existing activities/business.

In some countries, particularly the Arab World, MSI has had to identify and establish relations with key individuals in order to ensure programmes are less vulnerable to political interference. In Yemen for example, it is widely known that MSI has the support of the Presidential office and in the initial stages of the establishment of the programme, this discouraged numerous attempts to dictate to MSI the nature of its activities in Yemen. MSI whilst aware of potential disadvantages in such situations would believe that in certain environments this is necessary. However, MSI would also believe that, in doing so, it is essential to ensure that the organisation is established completely independently in order to retain a high degree of operational autonomy.

Overseas programmes are managed by locally appointed Country Directors. Country Directors are recruited either directly by MSI London or by MSI London with in-country assistance. The Country Director in turn recruits the project team although the appointment of key project personnel may be undertaken by the Country Director in conjunction with MSI, London.

Local Country Directors are responsible for the implementation and day to day management of the programme (and the local programming team). Country Directors are intended to be someone with an extremely high level of communication skills and are normally recruited from the private sector. The Country Director is accountable to

the local board and to MSI London. This partnership relationship will be discussed in detail in Section 3.3.3 below.

3.3.1 Types of Services Delivered

The services delivered through the MSI model comprise three elements; **clinic-based delivery**, which includes satellite and mobile units; **community-based delivery**, which includes community-based distribution, contraceptive social marketing and training; and **Information, Education and Communication (IEC)** such as family life education and male awareness, STD/HIV/AIDS prevention and refugee services. In refugee settings MSI focuses on protection against gender violence and associated counselling and education. Through special emergency programmes MSI provides basic healthcare, reproductive healthcare, counselling and support for traumatised and displaced women in areas of conflict. The following paragraphs describe these elements.

Clinic-based services are central to the MSI model. MSI's programmes are built around a core of free standing clinics which provide comprehensive family planning and reproductive health services, together with, on some occasions, obstetrics, maternal and child healthcare, STI and HIV/AIDS prevention and treatment, general gynaecological check-ups and basic essential curative services. These service outlets are sited in strategic urban centres. They are sometimes supplemented by satellite units, providing routine reproductive healthcare and clinic referrals, typically sited in low income and slum areas. A number of MSI programmes include mobile units which provide outreach services to rural communities. Information, education and communication activities are integral to all programmes.

Community-based delivery systems involve the distribution of contraceptives through members of the community. Locally trained personnel are involved in informing and educating clients and offer a range of appropriate reproductive healthcare services, for example, employment based family planning.

An important component of community-based delivery systems is contraceptive social marketing (CSM) which uses local retail outlets to distribute family planning methods at affordable prices. This large-scale delivery system uses a combination of modern marketing techniques and extensive commercial distribution networks. Commodities are subsidised for a social rather than a commercial goal. For example, MSI has launched a major CSM programme with the MoH in Uganda to address the incidence of STIs, as well as HIV and AIDS in Uganda. Following extensive research, a team of in-country marketing professionals developed a complete product brief, identifying suitable names, packaging, design, sales points and retail price. The brand 'LifeGuard' was launched with an advertising campaign and distributed for sale through pharmacies, supermarkets, grocery stores and other retail outlets.

MSI London and its affiliates appear to be conscience of the need to ensure that overseas programmes are providing a range of reproductive health elements in line with the ICPD Programme of Action. Statements emphasising MSI's adherence to the Programme of Action are frequently found in MSI publications (Statement of Capacity, 1997; Request to Packard Foundation, 1997; First People, 1998). MSI participated in the preparation of the UK and EU contribution to ICPD and was an NGO member of the UK delegation at Preparatory Committees and in the NGO Forum in Cairo, at which 12 MSI affiliates provided input to various sessions.

Local partner organisations are encouraged from their inception to adhere to the MSI mission, goal and service delivery model. In previous years the emphasis on this was to adapt the MSI model to their own context and thus the range of reproductive healthcare services offered varies across countries and regions. Whilst this approach is still applicable today, MSI's Chief Executive has very recently initiated the development of a standardised approach. These initiatives have led to the development of a Partner Operations Manual which is discussed in more detail below.

This initiative emphasises the importance of global branding and standardised practice (in, for example, quality of care, clinical procedures, clinical layout) whilst still emphasising self reliance through generation of user fees.

3.3.3 MSI's Partnership Concept

This section aims to describe the manner in which MSI works with its partner organisations. It will throughout, aim to focus on those elements of relevance to the case study of Yemen which forms the core of this research, but it will, in addition, highlight the other major areas.

The section starts with a broad overview of the programming environment. Douglas Whitewright, MSI's Director of Finance, believes the structure of MSI's overseas programmes was born out of a chaotic and dynamic programming environment:

'Often under pressure by a donor to establish a programme, MSI took the line of least resistance. By structuring the programmes that way they enabled MSI to start operating in a country in the quickest time possible and as a result, to satisfy the demands of the donor.' (Whitewright, telephone interview, 1998)

Whitewright believes that as a result, alternative structures were not, until more recently, given much consideration or investigation.

Dr Tim Black, MSI's Chief Executive, was influenced by a number of factors including criticisms of the inefficiency of the International Planned Parenthood Federation (IPPF) whose structure, involving a delicate interplay between volunteers, the IPPF and a local Family Planning Association could mitigate in favour of continuity rather than change.

Black took the decision right from the start that MSI would build financially sustainable programmes, which either achieved total or partial cost recovery, plus a capacity to generate or raise their own funds. This approach was developed, to avoid what Black calls '*card house projects*' – projects which are built up and which collapse when the funding ends (Black, telephone interview, 1999). Helen Axby, Deputy Chief Executive, argues that in order for this to happen there is a need for control from London because MSI is responsible for donor funds which will be used to start projects and therefore must retain a degree of control in order to ensure the programme stays focused on its goal (Axby, interview, 2000).

However, as Black (telephone interview, 1999) points out in comparison to programmes offering free services, if programmes can generate income, the entire management strategy in the charity field changes. If local entities begin to generate income in order to cover their costs, they can deviate from the goal and use the organisation to pursue their own interests. MSI therefore took the decision to establish local legal entities where it has majority control on the Board as opposed to working either with existing local entities or entities in which MSI did not have majority membership on a Board.

For example in MSI's programme in Nicaragua, the President of the local organisation, who was also a lawyer, wrote a constitution which meant that the local Board was able to take over. They did and took six clinics with them.

Through this membership a high degree of control is established by MSI . It is important, however, to distinguish between local and MSI board members. The former are not encouraged by MSI to be involved in policy setting. They are there because legally they have to be and MSI discourages any active control from them. Board composition varies from country to country within the guidelines of local legal requirements.

The legal entity by which the programmes are established means that Board members are not liable for any debts. In practice this has meant that the Trustees, not feeling under threat financially, have left the management of the country programme to the Country Director. Not constrained by the threat of financial commitment has enabled a management culture to develop which encourages innovation and, to a certain degree, 'risk taking' in attempting to develop financially sustainable programmes.

Whilst managerial and operational policy is driven from MSI London, implementation of the programme is undertaken by the Country Director, who is given a large degree of autonomy to undertake this. The Country Director is responsible for the day to day management of field operations and is the main liaison between the Overseas Programme Manager in London, in-country donors, clients, local staff and other key relationships, which would normally include MoH officials, local community leaders, representatives of local and international NGOs and other relevant organisations.

3.3.4 Programme Design

The design of local programmes is undertaken by MSI London in conjunction with key stakeholders, potential beneficiaries and key project personnel from each country. In the majority of countries in which MSI works, programmes are designed with the objective of generating as many Couple Years of Protection³ (CYPs) as possible and in a way which will lead to a reasonable level of financial sustainability within the donor funded period. Each programme has the same core values and operating principles as the MSI global partnership although the implementation of each programme is moulded to a country's local situation. In very recent years this has been developed into a comprehensive business format which is explained in more detail below.

Although several of the overseas programmes are, or could, be, financially sustainable in their own right, donor funding is essential for the maintenance of the strategic expansion of MSI's overseas programmes and accounted for 50% of MSI's income in 1999, when total donor income came to £17, 341,000 (draft unaudited figure). In many respects MSI London continually subsidises the overseas programmes due to its key role in fundraising and other inputs, such as Black's time and other hidden costs which are not passed on to programmes.

The role of the Overseas Programme Manager at MSI, London is to provide support and technical backstopping to the Country Director. The Overseas Programme Manager in conjunction with the Country Director is also responsible for the on-going monitoring and evaluation of programme performance and for the strategic development of the country programme. Whilst there is a relationship where MSI is trying to manage the results of each programme, MSI tries to avoid the development of a dictatorial relationship. By attempting to facilitate the transfer of sustainable knowledge and skills through on-going training, MSI aims to equip its local partners with the ability to perform in the most efficient and effective way. Training of local personnel

³ Couple Years of Protection are an indicator of the amount of contraception delivered by a programme and are a function of both the number and type of method delivered. They are a very important management indicator for MSI and are described fully in Appendix 1.

is undertaken in a variety of ways; at MSI London; by MSI London staff visiting the field and within the MSI global partnership.

Overseas Programmes are expected to achieve individual targets. These are set by MSI London and the Country Director in conjunction with the programme team. Black (telephone interview, 1999) views the relationship between MSI London and the field as a '*licensed dealership*' or similar to some of the large accountancy partnerships. Black (1998) states:

'We have senior partners, associate partners, and partners. Senior partners tend to be programmes like Kenya, that are self-reliant or sustainable and that are achieving 100,000 CYPs annually. CYPs are our bottom line measure of performance'.

It should be noted that in 1999 MSI's overseas programmes generated 3,371,463 CYPs. For Black's above statement to be true, one would expect MSI London to provide the appropriate technical assistance, support and technical backstopping in order to enable local partners to provide services in line with MSI's commitment to quality, affordability and accessibility and regular monitoring and evaluation of programme performance. One might expect this support to include:

- guidelines for operating, administrative and financial procedures;
- development of MIS in order to ensure efficient recording and reporting of programme activities;
- establishment of quality assurance procedures;
- assistance in the development of marketing strategies and adoption of MSI branding;
- procurement of supplies and commodities where these are not available locally;
- development of effective monitoring and evaluation procedures.

In practice what has tended to happen is that each overseas partner has developed its own set of protocols, operating and administrative procedures. Whilst these are reviewed by MSI London and have some similarity globally, this has meant that across the MSI global partnership there have not really existed any standardised procedures or

protocols. The development of a set of procedures by each individual programme has also inevitably led to a duplication of effort within the MSI partnership.

Whilst MSI has always measured the success of a programme by its CYP output, the fact that no global standardised operating procedures and protocols have existed has meant that any monitoring and evaluation of partner organisations and their subsequent comparison with other programmes must be viewed within their unique programming environment rather than from the existence of a standardised operating baseline.

Black has felt that this heterogeneity could negatively impact on the potential for future expansion arguing that the future growth, sustainability and strength of the organisation: '*lies not with strategies that continue to dissipate our resources on a broad range of clinic programmes, but one that focuses them on what we know works – in other words, only funding standard Stopes clinic formats, or effectively a franchise approach.*' (Black, 1998).

As a result in 1998, MSI London, in conjunction with its overseas partners, began the development of a standard operating format, known as the Partner Operations Manual. The document attempts to provide 'toolkits' relating to the establishment of most aspects of a reproductive healthcare programme. Although still in draft form (as at December 1999) the final version of the manual will consist of two volumes – the first containing sections relating to history, philosophy, clinics and procedures, and the second containing administrative issues.

Black views the development of MSI's Partner Operations Manual as:

'the first step to (MSI's) next and potentially biggest evolutionary change – our transformation into a social business, or organisation using modern business management, marketing and financial techniques to deliver affordable CYPs through appropriately profitable programmes.' (Black, 1998).

By 'appropriately profitable' Black means generating sufficient surplus to maintain and sustain a partner organisation's asset base while at the same time meeting some of its growth capital needs. Black adds:

'but it also means becoming much more businesslike in our management, our operations and in the employment, deployment and development of our resources.' (Black, 1998).

'but it also means becoming much more businesslike in our management, our operations and in the employment, deployment and development of our resources.' (Black, 1998).

Once finalised, acceptance of the Partner Operations Manual will in effect form the basis for a contract between MSI (in effect the franchiser) and overseas partners (the franchisees). Although still in draft form, the Agreement between the two parties is expected to include a commitment to the following:

As a franchiser, MSI will be committed to:

- work to facilitate and raise international donor funding for the Franchisee where possible, as well as making funds available from MSI's own resources as appropriate, on the basis of an assessment of the social returns on investment;
- provide technical assistance and training to facilitate and institutionalise the MSI programming concepts, procedures and services required, as far as available resources allow;
- provide support in ensuring the delivery of high quality services;
- as necessary, arrange the shipment of supplies and commodities to overseas programmes;
- establish, develop and monitor across the MSI partnership a consistent and uniform high standard of MSI branded family planning service delivery and programming;
- monitor and audit the maintenance of MSI service delivery, client care and programming standards within the franchisee organisation;
- where appropriate, applying legal and other sanctions to enforce franchisee compliance with the MSI concepts, programming philosophy and operating standards

In return, MSI would expect the 'franchisee' to agree to:

- adopt and observe the concepts, programming philosophy, operating procedures and standards developed by MSI London in conjunction with its overseas partners;

- provide MSI London with a copy of its audited financial accounts and audit management letter;
- to conform to MSI programme reporting requirements;
- not to do anything which conflicts with the objectives or policies of MSI or which might prejudice its reputation or goodwill.

The challenge however for MSI will be in ensuring compliance to the Operations Manual. To assist with monitoring and evaluation of its implementation, audit tools are being developed for each section of the Operations Manual. Overseas Programme Managers, when undertaking regular technical assistance visits to overseas programmes will record whether each section of the Manual has been implemented. Recording of compliance will be under two headings – observed or questioned. There is also the possibility of partners monitoring quality through association with international standards registrations. This has been piloted in Pakistan.

This adoption of a rigid business format has advantages and disadvantages. On the plus side there are guidelines which enable quality to be monitored both by the parent organisation and within the partner organisation. However, against this is the implicit standardisation and rigidity of both service portfolio and staffing. In addition, Gordon Mortimore, Latin America Director, feels that it is a negative factor that countries believe that through a baseline evaluation prior to the implementation of the business format a number of overseas programmes feel they are being monitored (Mortimore, interview, 2000). This impinges on the potential for management flexibility which many commentators would argue is important for successful company development. For example, this reduces the potential for flexibility in delivering a culturally appropriate range of services in a manner which takes proper account of the culture in which the services are being delivered.

3.3.5 Managerial Control

An important facet of the MSI model is the management of the partner organisation from London and this section discusses this.

An important feature of the right structure is that, on the whole, those employed in the field particularly in establishing programmes tend to be well qualified and experienced. In contrast the overseas programming team at MSI, London tend to be younger and less experienced. (There are very few professional managers for example in MSI, London). The more senior programme managers at MSI London tend to be primarily involved in the development of new country programmes, whilst the management of the more mature and well established programmes tends to be undertaken in-country by experienced and well qualified Country Directors, with the (often relatively poorly qualified) Overseas Programme Manager in London providing information and technical backstopping. The management of established overseas programmes is not necessarily, therefore, direct line management from London.

In contrast, new country programmes are managed directly by the relevant Overseas Programme Manager based in London. It is envisaged that high levels of support, and direct contact between the Overseas Programme Manager and the Country Director will be necessary over the first two or three years of a new programme's development, with the aim of developing the managerial capacity of the Country Director and the sustainability of the local partner organisation. A number of Senior Overseas Programme Managers at MSI London are supported by Assistant Programme Managers. Assistant Programme Managers have very little management experience and are likely to have recently graduated with a postgraduate qualification in reproductive healthcare. Their brief is, working under the supervision of the Senior Overseas Programme Manager, to provide day to day support to overseas programmes through the provision of information and handling of requests for support. Technical backstopping of the programme rests with the Overseas Programme Manager. Nikki Charman, ex Overseas Programme Manager for South Asia feels that MSI does not market it's technical assistance capability well either with partners or with donor agencies (Charman, telephone interview, 1999).

In general both distance as well as 'under capitalisation' means the extent to which MSI London can monitor operations is limited. MSI London has found that one of the most effective means of evaluating field operations is via daily telephone/fax/e-mail

communication between MSI London based Overseas Programme Managers and Country Directors and the one to two technical assistance visits that MSI London staff make to overseas programmes annually.

As mentioned above, in the majority of overseas programmes MSI has control over a Board, believed to be favourable to MSI. This has historically worked well, but has in the past few years begun to hit problems as overseas programmes become more mature and begin to flex their muscles. Over the past five years in particular there has been a perception by some programmes that they are not making as much progress as they could due to the fact that they are 'controlled' by MSI. Whitewright feels that:

'local entities increasingly are not clear about what MSI wants from them and what MSI brings to the relationship.' (Whitewright, telephone interview, 1999).

As overseas programmes mature, how can the issue of control be dealt with? Black's view is that this is dependent largely on the personalities and relationship developed between the Country Director and the Overseas Programme Manager based in London (Black, telephone interview, 1999). Axby believes that this relationship is crucial and argues that when the relationship does not gel there tend to be problems in the organisation (Axby, interview, 2000). Black points out that not all overseas programming personnel come, at least initially, from a business background. He feels therefore that it is necessary for overseas personnel to be micro-managed from London in order to 'mould' them into business-minded people and ensure the success of the programme. He adds that, as programmes mature, overseas Country Directors can begin to see opportunities for themselves and their perception of MSI can become such that they feel MSI is stinting these opportunities. Black feels that in order to curb this, MSI needs to keep programmes in a continual state of expansion (Black, telephone interview, 1998).

Over the years the overseas programming structure has been held together through mutual trust. The growth of MSI, as an organisation, has been rapid but this has led to a gap between some of the more established programmes and senior personnel, eg. Ethiopia and some programmes are coming to resent being 'controlled from the centre'.

MSI is seen by some programmes as being too autocratic with a number questioning what they are 'getting out of the relationship' and whether they would do better to 'go it alone'. In the opinion of Whitewright: '*some of the larger programmes may be able to survive without the assistance of MSI*' (*Whitewright, telephone interview, 1998*).

However, in reality, only four out of 32 overseas programmes are financially sustainable (although this low number may to some extent reflect continuous expansion). Even allowing for expansion the majority of overseas programmes would collapse if they were to operate independently of MSI.

In general one could conclude that MSI can control local entities with relative ease when they are overseeing a small number of projects but there is increasing difficulty over time as the programme expands. Whitewright's view is that:

'if MSI establishes a good working relationship with its partners then the requirement for control should never occur' (*Whitewright, telephone interview, 1998*).

Black's view (telephone interview, 1998), on the other hand, is that once the local entities begin to make money they will want to take control. Whitewright counters this argument by saying: '*that for most – this is a long way down the road*' (*Whitewright, telephone interview, 1998*).

Whitewright (telephone interview, 1998) feels that MSI has backed itself into a corner. He feels that the only way MSI can achieve expansion is through its partners and this therefore relies on trust and goodwill. MSI has to show its partners what it can bring to the relationship in terms of technical expertise and assistance.

The issue of MSI London's role is further developed by Sue Holland, ex-Overseas Programmes Manager for South Asia who feels that the issue of what MSI brings to the partnership is starting to be raised increasingly by both the maturer programmes and the well-funded programmes;

Holland: *'there is increasing pressure on MSI from the maturer, well funded programmes to justify what it does for its money. In India (est: 1978) the programme is now questioning what MSI brings to the partnership. In Pakistan, (est: 1992) whilst the programme appreciates the technical expertise and capacity of MSI London it is putting London under a lot of pressure to see it delivered'. (Holland, telephone interview, 1999).*

Charman, highlights the importance of personalities in maintaining the relationship. She gives the Philippines as an example:

'up until four years ago, whilst the Country Director was familiar with MSI, none of his team members, including his no.2 were. Whether the programme team are brought into the MSI partnership or not can be dependent on the personality of the Programme Director. Local management style is not always participative when a Programme Director wishes to retain control of the programme'. (Charman, telephone interview, 1999).

Charman (telephone interview, 1999) adds that, as the Philippines programme grew, MSI London became more distant from the local entity. Because the programme is personality led, MSI London always has to go through the Country Director, even though the programme has expanded considerably. As a result, the programme team began to question the role of MSI. MSI was now being asked to justify its role – almost to the point of needing to develop a service agreement between MSI London and the local programme.

At MSI's Global Conference, held in Brighton in 1999, MSI took the opportunity to emphasize to its overseas partners the importance of being part of the 'MSI brand'. MSI underlined that, as part of the MSI global partnership, local partners are part of an organisation with a proven track record in the field of reproductive health service delivery and ability to leverage donor funding, hence local partners have more standing with donors. If partners are to place themselves outside the MSI global partnership then they are in a very competitive environment. In addition they do not have the technical backstopping which MSI London provides. The fact MSI is based in London also means that they co-ordinate the cross-fertilisation of ideas and organise regional training.

The point that most programmes need the fund raising is developed by Whitewright: *'whilst a few programmes may survive independently for a while most would falter fairly quickly as they would not be likely to attract the large scale donor funding necessary to sustain and develop their programmes (Whitewright, telephone interview, 1998)'*.

He would also argue that one can become sustainable in a programme which simply aims to standstill. Continued expansion needs donor funding.

Whitewright adds that:

'MSI does need however to provide its overseas partners with greater technical and managerial expertise - this is expensive and is a cost which donors are not going to pay for'. (Whitewright, telephone interview, 1999)

Whitewright points out that MSI UK is already subsidising MSI (in 1999 by £1,000,000 – to date the total has been £6,575,000), which in 1999 cost £2,894,965 to run.

Whitewright (interview, 2000), however, feels that this is a reasonable figure.

Whitewright also points out that donors are now:

'quite rightly measuring the outputs from their money rather than the inputs. If you say you are going to have distributed 12m condoms by the end of the funding period then organisations are expected to have done that and proven it. In order to prove it however, donors want independent evidence based evaluations. To do this requires more expenditure and increased management skills on the part of MSI.' (Whitewright, telephone interview, 1999).

Whitewright added that:

'on the whole, donors don't have to be oversold, as in the past.' (Whitewright, telephone interview, 1999)

3.3.7 Case Studies of Alternative Structures of MSI Overseas Programmes

In addition to service delivery through the establishment of local legal entities, there are a few cases where the local partner is a branch of MSI. The Board of MSI did, however, at its AGM in 1998 take the decision that no new programmes would be registered as a branch of MSI. The reason for this decision is that MSI London has a central liability for programmes registered as a branch in-country. In practice this means that MSI London

is liable for all financial debts and liabilities and for the local management of the programmes, over which it has tenuous control.

As noted above there have been cases where the programme has been established as a branch of MSI. As this includes Yemen, a case study is now described to provide some context of the delivery of a new programme in a politically sensitive area:

The case study is Ethiopia. MSI first expressed interest in working in Ethiopia in 1986. Negotiations began between MSI and the Government of Ethiopia (GoE) during the latter half of the 1980's culminating in the opening of MSI's first Centre in Ethiopia in 1990. This followed the signing of a country agreement between MSI London and the GoE.

During the time when MSI commenced discussions with the GoE and up until the signing of an official agreement, Ethiopia was ruled by a Marxist government (1974-1991) characterised by a highly centralised political system and a state driven command economy. MSIE's current Country Director, Getachew Bekele who joined the programme in July 1991 put forward a number of suggestions as to why MSIE was established as a branch of MSI London rather than as an indigenous NGO:

- The GoE was, during this period, suspicious of indigenous NGOs, viewing them as advocates of the poor, marginalised and oppressed and therefore potentially destabilising elements within society. Bekele feels that the GoE may have preferred the programme to have been established as a branch of an international NGO, whose activities it perhaps felt could be more easily controlled.
- The late 1980s witnessed the aftermath of a severe drought and famine (1984-85) in Ethiopia during which a number of international NGOs had played a major role in successfully mobilising large scale relief to the victims. Bekele suggests that this could have created a feeling that the same could be replicated and achieved by international NGOs wishing to work in the health sector.

- MSI's first project proposal for Ethiopia (subsequently co-funded in 1990 by ODA (now DfID) and Comic Relief states that:

'many NGOs have experienced special difficulties working in Ethiopia and that a clear understanding between the NGO and the Government is necessary'.

Bekele suggests that 'special difficulties' include interference by the GoE in the implementation and management of programmes established by international NGO's. Bekele assumes, therefore, that MSI London opted for the current structure in order to maintain its operational autonomy. (Bekele, email, 1999)

In complimenting the structure experienced by MSIE, Black (1998) noted:

'Structurally, the major advantage of working directly under MSI London has been the absence of dual accountability – from a national board and MSI London, which may create some confusion as to how one is to strike a balance between the two in terms of their respective responsibilities and expectations observed in some of MSI's other overseas programmes the Board members can exert a very hands on approach, reducing the role of the executive director to someone with no executive power.'

In summary this case study has demonstrated the need to forge links with government and local politicians in order to sustain the institution. This will be seen to be important in Chapter 6.

3.4 Overseas Staffing

An organisational culture, developed and rigorously pursued by Black, has evolved within MSI with regard to the recruitment and staffing structure of overseas programmes. There are four key areas to this policy:

- i. small teams
- ii. multi-skilling and multi-tasking
- iii. paramedicalisation of service delivery
- iv. employment of local personnel

Black (1998) states:

'It has been evident for some time that our basic 'small lean mean Stopes clinic machine' not only works but flourishes almost anywhere when we get the formula right – but if we get it wrong it is very difficult to redeem the situation because the resulting clinic is too big, has too many and inappropriate employees, the wrong person in charge.....'

Black (1998) goes on to argue that:

'It is also evident that 'multi-skilling and multi-tasking' formulae such as 'keep the team small, pay more'...work'.

He adds:

'But this is only true if the clinic is implemented strictly to the Stopes model – a small well located facility with a team of five or less, ideally with most of the service menu delivered by paramedics and auxiliaries....'.

This concept of multi-skilling and multi-tasking is central to Black's vision and hence is a key part of the MSI model. The concept is simple: each member of the team performs more than one task, for example a nurse also acts as, say, a receptionist. While superficially extremely attractive as a way of keeping staffing costs low the model has yet fully to be tested. Other members of MSI, while supporting the idea, point out some potential problems. Axby, for example, argues that multi-skilling and multi-tasking only works at the individual clinic level while the overall country programme needs dedicated staff working in a focussed way (Axby, interview, 2000).

Black believes that with the exception of laparoscopic sterilisation, every other aspect of family planning can be offered safely by paramedics and auxiliaries. In response to statements from programmes regarding the legal constraints which may be present in a country and which may therefore present an obstacle to the implementation of the MSI approach, Black (1998) responded:

'I fully appreciate that legal constraints may to some extent determine doctor needs – but as we are finding, even here in Britain, this can be partially overcome by: a) simplifying procedures to make it easier for the nurse/medical assistant/auxiliary to perform them safely 'under doctor supervision' b) pushing their role to the limit of legality, i.e. keeping within the spirit, if not the letter of the law, and c) by scheduling client attendance to coincide with doctors sessional visits to do lists of things they (legally) 'have to do', e.g. minilaps – in other words using one doctor to cover several facilities'.

This policy should be viewed in comparison with many governmental clinics throughout the world which tend to be overstaffed and under utilised.

As a case study Black (1998) describes the MSI model as operationalised in Kenya - small, simple and paramedicalised. On a visit to MSI's Kenya programme Black describes a visit to the Kabira Slum Clinic established using profits from obstetric services at a cost of £2,000. They rented a small, crudely built shop with a corrugated iron roof, on a busy rutted mud street in a sprawling slum. It was opened with a team of three – an enrolled male community nurse, a nurse aid and a receptionist. The male nurse provides a limited range of core reproductive health and family planning services and some elementary medical treatments.

The centre is very small – 400 sq ft or 35 sq metres. The layout consisted of two rooms – a waiting area/reception and the examination/procedure room. There were plans to extend the clinic to include a small procedure room and recovery room. This will enable the clinic (clinette) to offer a wide range of services including vasectomies, with female sterilisation being undertaken by a visiting doctor.

Black (1998) argues that he is often told by other programmes:

'it's not possible here. We have minimum size regulations, we have to use doctors, etc, etc. all of which in theory applies to Kenya. But in many countries these constraints are breaking down.'

There are also ways round the 'size' constraints. For example, Bekele pointed out that in Ethiopia if one wants to get permission to open a clinic, the staffing, room size and other requirements are very onerous. If on the other hand one calls it an 'Aid post' these costly requirements are not imposed. Black (1998), calling strongly for a paramedicalisation of service delivery argues that:

'where there is a managerial will we seem to be able to find ways round the 'it must be a doctor'. In many countries there are Medical Assistants, Registered Medical Practitioners or nurses who have been licensed to deliver the limited range of service we wish to offer.'

Black would argue that the real restraint is a reluctance to push out the frontiers of what a paramedic can do rather than legal realities. He believes that, globally, there is now an increasing de facto liberalisation of the operational climate and that this is entirely desirable (Black, interview, 1999).

Black believes in the following universal principles of delivery - very small, minimal teamed, paramedicalised Stopes Centres offering limited core reproductive health and family planning services and situated in lower income areas where competition is minimal. Black (1998) argues that those programmes that can break the '*classic large clinic/doctor dominated mould*' will be the ones that give MSI and the donors the best return on their investment and will attract the funds – those that cannot will become the "dinosaurs" of the MSI Partnership (Black, interview, 1999).

3.5 Sustainability

This section is organised into three main parts. The first part focuses on financial sustainability, analysing the extent to which MSI clinics are able to generate sustainable sources of income. A second focuses on the issue of the institutional sustainability i.e. the extent to which an MSI clinic can develop the organisational infrastructure to support effective planning and management, establishing a sustainable and renewable client base, and achieving quality of service. Part of this will require good relationships with central and local government and with the local community. Finally, the third part examines the impact of MSI programmes, assessing the success of the MSI clinic based model in reaching its target groups and in providing an appropriate range of services in reproductive healthcare.

3.5.1 Financial Sustainability

The income generating potential of MSI's clinics varies according to a number of factors: clinic location (urban/rural); the socioeconomic profile of the clients; the mix of services provided (which should be determined by the priority health and other needs of the local communities served) and the method of service delivery (ie centre

based/outreach/mobile). MSI programmes appear to be conscious of the need to strike a balance between these factors (location, mix of services, mode of service delivery, and community served) in order to build a service that is appropriate and sustainable within the community served.

This sub-section provides a description of the MSI model of cost recovery. The section is organised into five sub-sections; method of charging; fee setting; exemptions and protection of the poor; effect of cost recovery on service mix and cross subsidisation.

This section attempts to answer a number of key questions which emerge from MSI's financial sustainability strategy:

- to what extent does fee income represent a sustainable source of revenue for clinics ?
- does the Marie Stopes service payment requirement deter low income women and their families from seeking services ?
- does the requirements to meet income to cost goals result in any distortion in service provision, such as an emphasis on the provision of certain services because they have income generating potential (to the neglect of others) ?

This section also looks at MSI's 'market segmentation' approach, ie. the use of surplus income generated in clinics towards the support or expansion of other clinics.

It is necessary at the outset to understand the emphasis on and centrality of cost recovery in MSI's strategy for attaining financial sustainability within the context of recent initiatives on health sector financing in the less developed countries.

Governments are increasingly introducing health service user fees, and bilateral and multilateral donors have also begun to place increasing emphasis on the recovery of healthcare costs through levying user fees. The introduction of fees has mainly been in response to the recognition that there are insufficient resources to meet all health

needs and that users will have directly to bear some of the costs. Donors, in particular, have found the concept of cost recovery attractive as a means for achieving the continuity of activities by them once their inputs stop. However, in recent years there has been a move towards 'affordability' rather than 'sustainability'. This means that programmes have a requirement to deliver reproductive healthcare to all sectors of the population regardless of ability to pay and this implicitly requires some medium term donor commitment.

MSI's objectives include their programmes' independence from external support by the end of an initial period of donor funding (normally 3-4 years); ie a Marie Stopes programme's income to cost ratio should be 100% or above by the end of the third year, and this is achieved primarily through charging fees for services. Such a strategy is in contrast to many other NGOs in the health sector, who seek financial sustainability through a mix of cost recovery and a diversified source of donor and local fund-raising and grants.

3.5.2.1 Method of Charging

In the majority of MSI programmes, charges are made per item of service. In some clinics there is also an initial registration fee and in others a combined package of services is offered for a set fee, eg. at MSI's Sana'a clinic in Yemen, the clinic offered an 'ante-natal' package, where a flat fee is charged.

Alternatively, some MSI programmes, eg. Marie Stopes Society Sierra Leone (MSSL) provide health coverage to the employees of factories and corporations. Under these schemes, run by MSSL, employers agree to reimburse MSSL the full costs of treatment to their employees. These clients are called 'retainers'. In MSSL they are charged a higher rate for medical services and the contracts agreed between employers and MSSL are generally for medical care.

3.5.2.2 Fee Setting

The main criteria used by MSI programmes to set fee levels are charges made by other providers. No explicit consideration of ability to pay is taken when setting fees or cost of services. Programmes usually conduct a survey of charges in government health facilities, private and other NGO health facilities. The aim is to set service fees below those of the private sector and slightly above government charges. A review of charges set by other providers is normally undertaken on an ongoing and regular basis. It should be noted that, as in Yemen for example, whilst many government facilities claim to provide services free of charge, in practice under-the-counter payments to government doctors is widely reported, and in addition clients have to buy prescribed drugs from a pharmacy

For many programmes, by far the largest source of revenue is derived from abortion and sterilisation. The next most important source of clinic income is general medical visits/sale of drugs. Temporary contraception services generally constitute a small level of fee income. Most programmes, therefore, are dependent on a single service or procedure for the bulk of their income. For example, until recently MSIE's main source of income was derived from abortion, contributing about 82% to 86% of overall programme income.

It should be noted that not all clinics within programmes have uniform fees. Some local discretion is allowed, although in practice fees do not vary greatly between clinics.

In some programmes, fee levels are adjusted in order to ensure the objectives of the programme are being maintained. In MSI's Nablus Centre on the West Bank in Palestine, a high number of middle to upper income women and their families were using the Centre for general medical care. Many of these women would previously have sought private medical care, but MSI's Centre was providing general medical care of an equal, often higher quality, at a much lower price than the private sector. The number of clients attending the Centre for family planning services however was very

low in comparison. In order to ensure that the Centre was perceived by the community as a reproductive health and family planning Centre and not a general medical Centre, MSI recommended that the Centre raise its charges for general medical care and lower its fees for family planning services. In so doing, MSI recognised that if clients continued to seek the services of the Centre for general medical care at a higher fee level, then this would subside the provision of family planning services at a lower fee level, but would enable women of all income levels to seek family planning services and thereby ensure the focus of the programme was maintained.

Charges for drugs and supplies within MSI programmes are normally set on the basis of cost plus a percentage mark-up. Again, no explicit consideration of ability of clients to pay is taken when setting charges for drugs and supplies. Charges are normally revised on the basis of charges in the purchase price and the price set by other providers. In some countries these can rise quite frequently, especially on imported supplies due to high inflation and frequent currency devaluation.

In programmes such as MSI's in Yemen which does not offer a high income generating service such as abortion, the profit from the sale of drugs is seen as an important source of clinic revenue. Charges for drugs are set broadly in line with other providers.

3.5.2.3 Fee Exemptions

Ensuring that cost is not a barrier to accessing services is key both in terms of maximising access to services and to the long term sustainability of a project. As an organisation, MSI makes the claim that no client coming to one of its health centres will be refused a service because of their inability to pay.

Most MSI programmes have a policy to exempt those clients whom they consider cannot afford the charges. However, in reality care is more likely to be provided at a subsidised rate rather than totally free. MSI believes that if services were to be provided totally free then the focus of its programmes would be distorted. MSI also believes that all clients can afford to pay something towards the cost of healthcare even

if it is only a nominal amount. In general, though MSI and national programmes expect to serve clients from a broad range of income groups, rather than exclusively the poorest clients. For example, MSI (1990) states:

'It is essential to recognise, when aiming for sustainability, that optimum community benefit can often be achieved without the need to focus exclusively on the poorest sectors.'

Subsequent evaluations of selected MSI programmes, show that some MSI overseas programmes can interpret this policy quite differently.

The provision of subsidised treatment is normally made against the establishment of a subsidised treatment fund (STF). The STF reimburses the Centre for the cost of a client's treatment. Some programmes eg. MSSL and MSI's Centre in Cairo, Egypt, have raised money for the STF fund through donations from the local community.

A client's ability to pay is often not judged by formal methods; in MSIE for example, the receptionist and the nurse make a judgement as to whether a client can pay or not, normally on the basis of appearance and questioning. In MSI's programme in Palestine, the receptionist determined a client's ability to pay by place of residence and family name.

To illustrate the use of STFs Marie Stopes Madagascar (MSM), has established an STF with other NGO's working in the slum areas. MSM (1996) states:

'a set of guidelines have been produced in co-operation with these NGO's which lay out a set of questions. The questions refer to area of residence, family structure and employment situation of the client. These are used to assess clients' financial status without asking direct questions on income and disposable income which can be embarrassing or insensitive. Key clinic team members are authorised to give subsidised treatment on the basis of the outcome of the questionnaire....'

However, anecdotal evidence suggests that the presence of fees may be excluding the very poor from using services and this is an area on which further research is needed. The ability of clients to pay is not considered when setting fee levels.

It has to be noted that in most programmes, the majority of activities consist of the establishment and management of urban-based clinics which serve individual clients rather than community needs. Until recently there has been no co-ordinated attempt to monitor the income groups from which these clients are drawn. In recent years, MSI has been criticised by a number of its donors in that some of its programmes are not accessible to the poorest of the poor. Attempts have therefore been made to monitor the income groups from which these clients are drawn for example in Malawi.

A reason for the lack of awareness of the characteristics of clients is that clinic programmes are mainly monitored by income to cost recovery and for family planning, in terms of CYPs. These indicators make it difficult for programme managers and evaluators to assess whether projects are achieving their broader reproductive health objectives as stated in project proposals. One could, therefore, suggest that more effective exemption schemes need to be implemented by programmes which offer real protection to the very poor so that they are not deterred from using services.

3.5.2.4 Effect of cost recovery on service mix

As mentioned above, the bulk of clinic income from the majority of MSI programmes is derived from abortion, sterilisation and limited general medical care. Relatively little revenue is generated from family planning services. The emphasis on these fee generating services often does not reflect the stated objectives of MSI's project proposals and may be leading to a distortion in the mix of services provided.

In MSIE for example, the programme's main source of income is derived from abortion. Little revenue is generated from family planning services, which are being subsidised by this service. Currently, therefore, there is an overwhelming reliance on a single service for fee income, in the context of low use of modern contraception nationally in Ethiopia. It is worthy of note, that as contraceptive awareness and prevalence increases, demand for abortion will fall. Recently MSIE has begun to revisit its service mix, particularly its focus on abortion. The percentage contribution of abortion, particularly in

four new clinics opened in 1998/99 has been balanced by income from other non-abortion services.

In some of MSI's programmes, eg. MSSSL the MSI sustainability model and the compulsion to meet income to cost does not, in some of the programmes clinics, appear to have led to a distortion in service provision. The mix of services provided at two of the programme's clinics are diverse, comprising medical care, family planning and other reproductive health services, as well as other preventive services, such as a nutrition programme, immunisation and ante-natal care.

Some services inevitably have greater income generating potential than others. In this situation, specific services are cross subsidising other services. In conclusion, it is likely that in the ideal world, the overall aim should be maintenance of an appropriate balance and mix of services that meet both the reproductive health needs of the community served as well as the financial needs of the clinic and the programme overall.

3.5.2.5 Cross Subsidisation

Most MSI clinics are set up with the intention that they may be self-supporting units after donor support has ended. However, some clinics do not achieve this and there needs to be a strategy for such an eventuality. In some cases when surpluses are generated in some clinics in a programme these are used to meet deficits in other clinics. In other words, profit-making units are effectively cross-subsidising less profitable initiatives such as those in urban slum and rural areas.

In other programmes, surplus income is used to establish new projects. At MSSSL for example, surplus income generated by MSSSL's first clinic was used to establish another clinic without donor support. While the stated goal of establishing individual self-sustaining clinics is not always achieved, overall sustainability of the total programme has been achieved in a number of MSI programmes, for example, Sri Lanka.

One might conclude that cross subsidisation across clinics is a more appropriate MSI country programme strategy than the narrower objective of establishing individual self-sustaining units (and, in some cases, closing clinics which do not reach financial self-sufficiency).

3.5.2 Institutional Sustainability

Institutional sustainability has been defined in the introduction to this subsection. An important feature is the need to develop an appropriate staffing and organisational structure for the programme. In addition, for a programme to be sustainable it has to be accepted at three levels: at the macro level by the government, in particular the Ministry of Health; at the meso level by local community politicians and leaders; and at the micro level by the local population. This is an essential aspect of the work of both MSI London (in setting up the programme) and the Country Director in the early months of the programme. While there can be no fixed rule book to describe how to go about this it is a sine qua non for a long term sustainable programme. The development of institutional sustainability in Yemen will be described in Chapter 4 and Chapter 6.

3.6 Monitoring and Evaluation

A crucial aspect of any social business is the need to monitor progress as an aid to management decision making. In addition, in recent years there has been an increasing awareness among donors of the need for proper evaluation of the impact of their investment. This has led to a great increase in the development of methods for evaluation. For example, the United States Agency for International Development (USAID) has invested in excess of \$US 30 million in the EVALUATION and MEASURE Evaluation projects.

In order effectively to monitor and evaluate it is essential to develop an appropriate set of indicators with which to do this. A number of different forms of monitoring and

evaluation are required by MSI London and are undertaken by overseas programmes.

These are listed below and will be described briefly:

- Management Information Systems (MIS);
- Technical Assistance visits to programmes;
- Action Plans
- Annual targets
- Telephone agreed Action Plan and Short Term Objectives Programme (TAPSTOP)
- Annual financial audit

3.6.1 Management Information Systems

This section provides an overview of MSI's MIS and is intended to highlight the means by which MSI monitors and evaluates its overseas programmes on a regular and ongoing basis. The data produced by local partners focus on a number of key indicators. The collation of additional information to cover specific programme activities or individual donor funded projects is also required from time to time. The section is divided in three sections; monthly reports; partnership reports and management indices.

3.6.1.1 Monthly Reports

'In order for a management information to be of use it must be clear, relevant, accurate and timely'. (MSI 1998a).

MSI has developed a MIS which requires all overseas programmes to submit a monthly report. The format of the monthly report has changed considerably over the years. In early years programmes sometimes sent in very random information. By 1998, and in line with the development of the MSI Partner Operations Manual, all programmes were required to submit standard reports. In 1998 responsibility for the monthly reports was brought within the finance team in an attempt to coordinate the development and

processing of financial and non-financial programme reports. Programme monthly reports include the following:

- narrative report: providing information on programme activities and issues;
- statistical analysis: analysing key services and CYPs;
- financial report: providing information on financial performance;

Reports are sent by programmes to MSI's Finance Team within 21 days of the month end. It is the responsibility of the Finance Team to ensure that the reports are received on time and for their distribution to individual Overseas Programme Managers.

Finance managers review the financial section and provide feedback both to the Overseas Programme Managers and to the programme. Overseas Programme Managers review overall programme performance, feeding back to the programmes and taking action as necessary.

The development of a streamlined and standardised reporting format has helped overcome a number of problems which had hampered the production of useful MIS. These were that the reports were:

- viewed as a time consuming exercise;
- perceived not to be particularly useful;
- perceived by many programmes as a requirement by MSI London with little relevance to the programme.

3.6.1.2 Management Indices

Within the statistical analysis of the monthly reports MSI has developed a set of six key management indices of which a number are used on a regular basis to monitor a programme's performance on a month by month basis. These are:

- income to cost recovery;
- family planning client ratio;
- couple years of protection (CYP);
- CYP per full time equivalent staff (FTE).

This thesis will, in Chapter 6, consider these indices in detail when monitoring the success of the Yemen programme. It should also be noted that, in late 1999, as part of the development of the Partner Operations Manual, a number of other indicators have been developed, these have included costs of medical supplies per client. However these will not be discussed in this thesis.

3.6.1.3 The Partnership Report

Quarterly partnership statistics are produced automatically from MSI London's database, utilising information inputted from the monthly reports. Partnership reports are circulated by the Finance Team to programme managers and overseas programme directors. The Partnership Report compares data across the entire MSI partnership.

3.6.2 Technical Assistance Visits

Regular technical assistance visits are made to overseas programmes, normally by Overseas Programme Managers. However at certain times, specialised personnel from within the MSI partnership may undertake a technical assistance visit in place of the Overseas Programme Manager and this will normally be at the request of the Overseas Programme Manager with whom terms of reference would be agreed. Examples include the establishment of a new component such as obstetrics or, for example, if a programme is consistently under-performing in which case the Overseas Programme Manager may be accompanied by another team member with specialisation in the area of weakness.

The frequency of technical assistance visits varies. In the more established programmes visits are usually made once or twice per annum; in a new country

programme visits may be undertaken on a quarterly basis during the first year and thereafter every six months.

The overall aim of the visit is to monitor on the ground the performance of the programme and to provide support to the programme in the development of new initiatives; ongoing needs, etc. Following the visit the programme's Action Plan is updated by the Overseas Programme Manager and Country Director.

3.6.3 Action Plans

All MSI programmes have Action Plans. These are lists of activities which require implementation/development/improvement. Responsibility for undertaking activities is often divided between the Country Director and MSI London. Responsibility for an activity and a target date for completion are specified. Action Plans are monitored and updated by Overseas Programme Managers. Progress in completing activities is frequently referred to by Country Directors in the narrative section of a programme's monthly report.

3.6.4 Annual targets

At the beginning of each calendar year annual targets are agreed between the Overseas Programme Manager and the Country Director. A programme's progress towards achieving its targets is reviewed on a regular basis by the regional overseas team at MSI London. The targets are initially set by the Country Director in conjunction with the programme team and are then finalised with the Overseas Programme Manager.

3.6.5 Telephone agreed Action Plan and Short Term Objectives Programme (TAPSTOP)

This is an internal MSI monitoring procedure for dealing with under-performing programmes. Black (1997) states:

'theidea has evolved from MSI team discussions regarding arms length management..... When a programme is chronically under-performing,.....we should put them on a rigorous 'Telephone agreed Action Plan and Short Term Objectives Programme"or TAPSTOP...'

TAPSTOP is normally used when a Programme Manager (in consultation with Black) agrees that a programme is underperforming. The Programme Manager talks this through with the Programme Director and between them they draw up a remedial action plan. The Action Plan is broken down into tasks which feed into short/medium and longer term objectives. The Programme Manager then introduces a routine once a week call to discuss progress and provide support. TAPSTOP is put in place for a limited period of time and discontinued once it is agreed that the programme is back on track. Black (1997):

'in the event that the Field Manager fails to respond then this must be a clear indication they have to be replaced.'

3.6.6 Annual Financial Audit

An external and independent financial audit is undertaken of all programmes. The annual audit is undertaken in country by a reputable firm of auditors who have usually been identified by the Overseas Programme Manager during the set up phase of a new country programme. The annual audit is submitted to MSI Finance Team.

3.6.7 Summary

This section has provided a brief overview of the MSI strategy with regard to monitoring and evaluation. It should be noted that the quantitative data in the evaluation do not permit an extensive evaluation of the programme as they include no information on the characteristics of the population being served or of the context of delivery. Such information can only be ascertained from the qualitative data contained in the narrative report. This means that effective monitoring and evaluation of these programmes requires the integration of the quantitative and qualitative data. This will be demonstrated in Chapter 6.

3.7 Overall Summary

This Chapter has described the conceptual framework within which MSI attempts to deliver its programmes. The overall feature of a model within this framework is the delivery of low cost, high quality, locally managed and sustainable family planning and reproductive health services. The success of these programmes is assessed by the extent of both institutional and financial sustainability. This chapter has focused on the structure, staffing, sustainability and monitoring and evaluation which are necessary to achieve a successful model. In so doing the Chapter has identified a number of key elements which are crucial to facilitating financial and institutional sustainability within a moderate timeframe. These include:

- an appropriate method mix, including a major income generating service typically abortion or sterilisation but, where appropriate, some other service such as obstetrics;
- small teams featuring multi-skilling and multi-tasking;
- liaison with government, community leaders and key stakeholders;
- effective monitoring and evaluation to facilitate appropriate and timely intervention;
- local staff;
- paramedicalisation of delivery;
- autonomy

The Chapter has also highlighted the development within MSI centrally of a standardisation of programming protocols and procedures in response to the global expansion of its overseas programmes. The following chapters highlight the complexities of reconciling MSI expectations with the local programming environment and will address the extent to which the key features of the MSI model described in this Chapter need to be compromised in developing a programme in Yemen.

4. The Development of an MSI Centre in Yemen

4.1 Preamble

This chapter presents a chronological description of the steps involved in the development of MSI's programme in Yemen. The overall aim is to assess the extent to which the structure described in the previous chapter can be used in the context of Yemen. The chapter is divided into three main sections; Overall Operation; Project Location and Design of the Centre. It starts by describing the initial research undertaken by MSI in London which prompted further investigation of programming opportunities in Yemen, through to an in-country Needs Assessment and finally to the operationalisation of an MSI programme of reproductive healthcare in Yemen. It should be noted that because the Chapter describes events in chronological order a number of activities are referred to more than once, for example, references to donor involvement are made a number of times.

4.2 Methodology

This research is participative in so much as the author was MSI's Arab World Senior Programmes Manager throughout the development of MSI's Centre in Yemen. The strategy in this research is to report the research that was undertaken in the development of the Centre and then to provide a retrospective critique of this work. Hence the approach used in this Chapter is that when the discourse refers to MSI's Arab World Senior Programmes Manager, this refers to the author.

The methodology used in this Chapter is that of a Case Study. Throughout the Chapter the approach is to describe the action undertaken and then to place it in the context of the conceptual framework for an MSI programme described in Chapter 3. The Chapter is also informed by a number of interviews with senior MSI staff and key informants in Yemen.

4.3 Overall Operation

This section aims to provide the background to the development of MSI's operation in Yemen. It covers the initial desk research undertaken by MSI London; the networking undertaken by MSI's Arab World Team in order to establish contacts with individuals and organisations familiar with Yemen; an initial Needs Assessment undertaken in Yemen; follow-up visits by MSI's Arab World Team and the preparation of a project proposal and subsequent donor liaison.

As one would expect, MSI's interest in the establishment of a new country programme often stems from initial research within the organisation which highlights areas of unmet need for reproductive healthcare. Less often, MSI may in the first instance be approached by a donor who is keen to invest in a particular country and MSI would subsequently follow this up with independent preliminary research.

In considering the establishment of a new country programme in the Arab World, MSI would normally follow the route outlined below:

- initial desk research;
- establishment of contacts with people who have experience of the region and/or country;
- meeting and expression of interest with the ambassador to the UK of the country of interest;
- review of potential donors;
- initial visit to the country, followed by a Needs Assessment and a number of follow-up visits;
- development of a project proposal and submission of the proposal to selected donors.

MSI's interest in Yemen arose out of a strategic decision in 1994 to expand its Arab World Programmes. At the time that MSI made this decision it had two Arab World

Programmes; a Centre in the northern West Bank town of Nablus, Palestine and a clinical and IEC programme in Cairo, Egypt. Neither programme was performing well and MSI recognised that the pre-project planning involved in the establishment of both country programmes had been weak. For example, the Cairo clinic was located in an entirely inappropriate location. In addition, there was a general perception within MSI that the location of its Arab World Programmes within the organisation may not have been entirely compatible with MSI's main focus, which was the establishment of programmes performing sufficiently high numbers of a mix of abortions, sterilisations and family planning activities to produce high CYPs and income/cost ratios. However an awareness of the poor reproductive health indicators within several of the region's countries led MSI to make the decision to invest in trying to develop its programmes within the region. In doing so, though, it recognised that it needed to develop only with top class research which would inform a coherent business plan.

The development took place in an organisational climate in which MSI's Senior Managers recognised that its most successful programmes had been financially underpinned by the delivery of, primarily, abortion which had enabled both high CYP numbers and cost recovery. It was immediately recognised by the new Arab World Team that this would not be possible within the context of much of the Arab World due to religious and cultural sensitivity. Therefore, the team had first to engage in discussions within the organisation to establish a change of culture so that a new generation of MSI Arab World Programmes would be culturally sensitive. In order for MSI's Arab World Programmes to achieve financial sustainability without the Centre based high fee services of abortion, for example, MSI's Arab World programmes needed to provide a broader range of reproductive healthcare services, both curative and preventive. However there was a precedent because MSI Kenya had improved its income to cost ratio by providing obstetrics and this was to be developed in Yemen with a similar objective.

As noted above, MSI's initial interest in Yemen stemmed from a review of population data for the Arab World. Such reviews are an ongoing process within all MSI's

overseas programming teams. Whilst this thesis is based on the development of MSI's Yemen project, MSI's review of Yemen's population data was undertaken as part of a wider examination of a number of Arab World countries which included; Sudan, Lebanon, Syria and Oman. MSI has subsequently gone on to develop reproductive healthcare projects in Lebanon and Sudan.

The process of this background research in Yemen is described in the following sub-sections.

4.3.1 Desk Research

The desk research undertaken for Yemen involved a review of relevant literature, which included census data; the 1991/92 demographic and maternal and child health survey, (CSO, 1994); and a review of socioeconomic and demographic indicators sourced from Population Reference Bureau and UNICEF annual country reports. The research highlighted the poor levels of reproductive health and reproductive healthcare in Yemen. In this thesis indicators of reproductive health are described more fully in Chapter 2. The key indicators were the high maternal and infant mortality rates, low CPR and high TFR highlighted in Chapter 2.

4.3.2 Establishing Contacts

As a result of desk research MSI developed contacts and met with a number of people with experience of the Yemen. These included:

i. The Middle East Association

The Middle East Association (MEA) is an organisation established to facilitate networking between companies, organisations and individuals working in the Middle East. The MEA holds a monthly 'At Home' event where members meet on an informal basis. In addition the Association also organises guest speakers; talks by British

Ambassadors to Middle Eastern countries and a number of other events. Invitations are extended in advance to members of the MEA to attend events. In addition the MEA also facilitates contact between organisations and at the request of members arranges meetings for members at its London office.

Following initial conversations by MSI's Arab World Team with the MEA, MSI felt it would be beneficial to join the MEA in order to take advantage of the broad Middle East expertise which could be accessed through the MEA. Membership of the MEA is primarily made up of private sector companies. MSI was the first NGO to apply for membership of the MEA.

Informal discussions with various members of the MEA provided MSI with an overview into Yemen's business culture. A more detailed insight into Yemen's commercial and political environment was provided however during a meeting organised at the suggestion of and by the MEA on behalf of MSI with David Pearce, Deputy Head of Mission, at the British Embassy in Sana'a, Yemen and Ahmed Suleiman, Export Promoter, at the Department of Trade and Industry (DTI) in London. Pearce elaborated the Yemeni government's current position with regard to the presence of international NGOs. He indicated that there still existed a degree of government suspicion to international organisations involved in family planning and that the concept of cost recovery, the basis upon which MSI models its programmes, was an entirely new concept in Yemen. Pearce added, however, that whilst the population was used to paying for healthcare services (either officially or informally), the concept of paying for preventive rather than curative services may be harder to promote amongst both MoH officials and the general population.

Pearce also provided information as to the legal process involved in registering in Yemen as an international NGO working in the health sector. Pearce explained that an international NGO would have to seek country agreements with the MoH and the Ministry of Planning and Development (MoPD). The country agreement with the MoH covers project design and objectives. The country agreement with the MoPD covers

areas such as requirements for hiring of project personnel and any future project expansion. The country agreement with the MoPD also includes a key clause which allows international NGOs to import equipment free of import duty.

ii. **Shelagh Weir, Museum of Mankind, London**

Shelagh Weir is Assistant Keeper with responsibility for the Middle East at the Museum of Mankind, the Ethnography Department of the British Museum. Weir had undertaken anthropological field research in Yemen and had subsequently published a book on qat consumption in Yemen (Weir 1985). Weir provided an overview of the social dimensions of the qat phenomenon and, in so doing, an insight into Yemeni culture.

Weir (1985) states in the introduction that Yemen is:

'a society reeling under the impact of sudden deep involvement with the world economy and adjusting to a radical transformation in material conditions.'

Weir (1985) added that what she had seen and attempted to demonstrate in her book with regard to qat was a:

'traditional social ritual which had formerly helped sustain the high social position of a privileged minority had become a major forum for the negotiation by the majority of a new social order based on achievement and the deployment and display of monetary wealth.'

Weir explains in her book that during the course of her research in Yemen she became aware of the concern of the Yemeni government, international agencies and individuals of the effect of qat consumption on the welfare and development of Yemen. Weir (1985) states that:

'this concern stems from the widespread belief that qat is retarding the development of Yemen by diverting money, time and valuable agricultural resources to what is generally regarded as a harmful, wasteful, meaningless indulgence.'

iii. **Stephen Day, ex-Foreign and Commonwealth Office**

From 1961 to 1967 Stephen Day had served with the British Army as a Political Officer in the Aden Protectorate. Day provided MSI with a vivid if somewhat anecdotal account

of his own experiences during this period. What Day's experiences highlighted was the traditional and unstable political environment prevailing in southern Yemen during this period.

Day had been assigned to work with a number of tribal leaders to try to modernise the federal states over which they ruled. The negotiations which Day describes in attempting to do so were informative in highlighting the patience, diplomacy and ingenuity which had been essential in preparing and pushing through reform measures. Whilst Day's account is limited to a period of six years and to one particular region of Yemen, Day's portrayal of the tribal leaders of that time and their power bases was informative to MSI with regard to the processes and protocols which are inherent and which need to be respected in order to gain acceptance in a traditional tribal society.

Day also put MSI in contact with a well known figure in southern Yemen, Ahmed al Fahdli. Al Fahdli was the son of a former sultan of southern Yemen and spent his time between businesses in London and a farm outside Aden. During a visit by MSI to Yemen, Al Fahdli organised meetings for MSI with a local governor and local tribal leaders.

These meetings were informative for MSI in that they reaffirmed the demand for a programme of reproductive healthcare and potential acceptability of it and the strategies needed in order to deliver culturally sensitive and appropriate health education

iv. Dr Ann Hoskins, Director of Public Health, Manchester

Dr Ann Hoskins had spent a number of years working in the health sector in Yemen. She provided MSI with a first hand account of the health sector in Yemen and was subsequently contracted by MSI to undertake a Needs Assessment (Hoskins, 1994) in Yemen. A summary of Hoskins' Needs Assessment is provided below in sub-section 4.2.4.

v. Yemen's Ambassador to Britain

MSI initiated a meeting with Yemen's Ambassador to Britain. The purpose of the meeting was to convey MSI's expression of interest in establishing a reproductive healthcare programme in Yemen and to gauge 'official' receptiveness to the idea; identify any potential barriers; gain insight into the key figures MSI would need to hold meetings with and any protocols involved in doing so. The Ambassador provided little insight into Yemen's health sector but did provide MSI with the contact details of a Yemeni doctor, should MSI have difficulty in gaining access to key figures. The contact given by the Ambassador was Dr Abdullah Wali Nasher. Dr Abdullah was from Aden and had qualified as a surgeon at Edinburgh University. Dr Abdullah was at that time Head of the Yemeni-British Friendship Society and Head of Sana'a University Medical School. He was considered to be Yemen's leading surgeon and a great anglophile and was later to prove instrumental in the development and establishment of MSI's programme in Yemen.

Establishing contacts with organisations and individuals, as outlined above, played an important role in the development of MSI's programme in Yemen. Whilst the overviews and insights provided were mainly specific to the organisation/individual concerned, overall the knowledge gained provided MSI with an understanding, if somewhat partial, of the programming environment of Yemen. Importantly the meetings and discussions held allowed MSI to make an informed decision as to whether it should continue to pursue its interest in the development of a reproductive healthcare programme in Yemen. At this stage, MSI felt that continued investment in the development of a programme of reproductive healthcare was justified. The next stage in this process was to assess potential donor interest in Yemen.

4.3.3 Donor Interest

As mentioned above, the development of a new country programme by MSI can either be prompted by an approach from an interested donor or, more normally and as in the case of Yemen, from a review of a country's population statistics, an exercise undertaken as part of the ongoing strategic development of MSI's regional teams and their overseas programmes.

MSI's Arab World Team was encouraged by the feedback received from the contacts it had established. Therefore, prior to investing further time and effort, MSI felt it was appropriate to gauge potential donor interest in Yemen. MSI approached two of its main donors, DfID and the EU to determine if they would be interested in funding a reproductive healthcare programme in the Yemen.

Department for International Development funding to Yemen had been reduced considerably following Yemen's civil war (April-July 1994). MSI's Arab World Team met with Martin Rapley, Yemen Desk Officer at DfID. Rapley informed MSI that a review of Britain's aid budget to Yemen was unlikely for some time.

MSI also approached DGI of the EU who at that time were funding MSI's clinic based programmes in Palestine and Egypt. As part of a strategic decision to try and develop its Arab World region MSI presented a request to DGI for funding to undertake feasibility studies to Jordan, Syria and Yemen. The Director of DGI, Mr Rhein, was supportive of MSI's plans and agreed to the funding of the Needs Assessment proposed by MSI. This is summarised in the next section:

4.3.4 Needs Assessment in Yemen

This section analyses the recommendations and MSI's response to the Needs Assessment undertaken for MSI in Yemen (Hoskins, 1994). The analysis includes the recommendations made in the report and MSI's response to them. Whilst I did not carry

out the Needs Assessment the response to the Needs Assessment was in my capacity as Arab World Senior Programmes Manager and the critique of it is entirely my own research. An overview of the report's findings into Yemen's health sector have not been included here as a detailed review of Yemen's health sector is presented in Chapter 2.

In November 1994 MSI contracted Hoskins to undertake a study to investigate the feasibility of an MSI programme of reproductive healthcare in Yemen. The study, which was undertaken between 25 November – 2 December 1994 involved collecting and collating relevant literature and exploring some of the issues relating to the study with key individuals in the public, independent and private sectors in Yemen.

Hoskins Needs Assessment (Hoskins, 1994) provided MSI with a) an insight into the structure of Yemen's health sector; b) an overview of prevailing attitudes to family planning; and c) an outline of a number of issues for consideration by MSI in the establishment of a programme of reproductive health. It should be noted that, at the time Hoskins undertook a Needs Assessment in Yemen, the Minister of Health was a member of the Islah Party. Consideration should therefore be given to the fact that Hoskins' recommendations were made in the context that at that time there was very little political will to develop reproductive healthcare services.

The recommendations made in Hoskins (1994) were as follows (after each one a critique is provided):

- i) *The only appropriate way for MSI to work in Yemen would be to offer a fully integrated MCH/FP service (p. 19);*

This is a sensible suggestion and was no doubt made because Hoskins was aware that in the Arab World it would not be culturally acceptable to promote family planning as an isolated service and that if they offered a family planning service alone MSI would run the risk of being accused of implementing a programme of birth control. The recommendation is also sensible given that the MSI model of service delivery

emphasises self-sufficiency and sustainability. A broad mix of services (in addition to appropriate management and technical expertise) is therefore essential in ensuring that MSI develops programmes that have an impact in their communities beyond the initial funding period.

Hoskins (1994) went on to argue that within this integrated programme a full range of family planning should be offered, excluding male and female sterilisation. This service could be included at a later date depending on demand (Hoskins, 1994). In Yemen, female sterilisation is only performed in government hospitals and is not openly promoted by the MoH. The MoH recognise that there exists an unmet demand for female sterilisation but that to promote it more openly would be culturally inappropriate.

MSI's initial reaction to this point regarding sterilisation was one of disappointment. MSI offers male and female sterilisation on most of its overseas programmes and has invested heavily in developing its techniques and procedures for sterilisation and vasectomy. The provision of male and female sterilisation is considered by MSI as important in offering a broad mix of family planning services and a key towards cost recovery.

The point regarding sterilisation was counter to MSI's philosophy, propagated by Black whose view is that MSI should challenge legal constraints on the provision of services. As an illustration Black (1998) states that services should be: '*keeping within the spirit, if not the letter of the law.*' Black has always disagreed with the argument that a service cannot be provided in a country because it would be culturally inappropriate. In a number of programmes for example, Sri Lanka, Black has proved this point. In the initial development of MSI's Arab World Programmes, Black also challenged the argument put forward by MSI's Arab World Team that it would be culturally inappropriate to offer abortion and sterilisation within MSI Centres. It took a number of years to convince Black of the validity of this argument.

Under this recommendation, Hoskins (1994, p.19) also suggested there is a need for fertility treatment and advice for couples who are unable to conceive. She added that: *'MSI should consider offering this service, as it would be welcomed and could help overcome any propaganda about foreign agencies only being interested in population control.'*

Although MSI encourages programmes to focus on a broad range of family planning services a number of MSI programmes have developed 'additional' components, e.g. Sierra Leone has developed a nutrition programme, and defends this in the context of an approach to integrated healthcare. Fertility treatment and advice however would be outside the MSI remit for a number of reasons i) fertility treatment is not within MSI's area of specialisation ii) it is often difficult to diagnose successfully the cause of infertility iii) fertility treatment can be costly and its success rate is limited iv) in many Arab societies only the woman would come forward for infertility investigation.

In the Arab World it would not be advisable for an international agency not specialised in infertility advice and treatment, to offer this service. Infertility is a sensitive issue in the Arab World. Omran (1992) addresses the question of infertility treatment and reports the following recommendation regarding infertility issued by the National Conference on Islam and Child Spacing held in Mogadishu, Somalia in July 1990:

'The prevention and treatment of infertility is the way to make the Muslim family happy. The Conference was informed about the fatwas by Al-Azhar 'uluma' and those of the fiqh councils in Makkah and Jiddah, confirming the legality of 'assisted' medical fertilization (artificial insemination and in-vitro fertilization) provided that there are indications for such procedures, that the cells used therein come from the spouse of the patient and that the procedure is performed by an experienced and just Muslim physician' (Omran, 1992).

Omran (1992) further states:

'Family planning proponents, while accepting the preference, where possible, for a prolific wife who can give her husband the number of children he desires, raise a number of issues:

- *They believe that a barren woman should not become an outcast. In the first place, being infertile is not always her fault. The Qur'an says*

*And He (Allah) makes barren whom He will.
Al-Shura (Sura 42:50)'*

and adds:

'No jurist in Islam has judged that a barren woman should not be married, or if she is married and does not carry children, that she should be divorced.'

The author's experience in the West Bank, Palestine – a much less conservative society than Yemen - is of a less than tolerant attitude to female infertility. Following marriage, women in the Arab World are under great pressure to conceive a child within their first year of marriage. If a woman has not conceived within a reasonable time (typically around two years) and the family had the financial means, she would undoubtedly seek infertility advice – although this would be dependent on accessibility to infertility advice and treatment. In Yemen such opportunities are severely limited.

In many Middle Eastern countries a man would not consider it appropriate to seek infertility advice and treatment for himself. If a woman has not conceived within a reasonable time she must fear that she will be divorced, which accords with the author's experience based on six years living in a Palestinian refugee camp. Many such women return to their families and to a future of providing help in the family home. The only opportunity a woman may have of re-marrying would be to an older man who may have been widowed.

As a result of the above reasons, MSI would not consider offering infertility treatment and rejected the recommendation made by Hoskins (1994).

- ii) *Due to the cost recovery system, Marie Stopes will have to work through a local NGO or LCCD⁴ in liaison with the MoH (p.19).*

Hoskins (1994) (p.10) states:

'The Ministry of Health (MoH) is interested in cost recovery schemes, although there are difficulties due to legislation. In order to overcome these difficulties, the MoH works in partnership with the LCCDs' Centres. These Centres (12 across the country) have minimum charges'.

It is not clear why Hoskins came to this conclusion; a) further research by MSI indicated that there was no reason why a health centre could not engage in cost recovery; and b) local NGOs are in their infancy at present, are often politically aligned and have not yet gained very solid administrative or project experience,

Hoskins (1994) states (pp.4,19) that:

'Marie Stopes will need to work with a local NGO because of the cost recovery system which Marie Stopes International operates'.

It is the author's belief that in seeking information regarding the establishment of a cost recovery programme, Hoskins was misinterpreted and the feedback provided in Hoskins' report relates to cost sharing rather than cost recovery. The author's experience of Yemen has highlighted that Yemenis do not fully understand the concept of cost recovery and that similar discussions between MSI and MoH officials failed to convey the true nature of cost recovery, with MoH officials believing that ongoing donor funding would be available. MSI was not aware of any legal constraints preventing an international NGO from charging for services.

As discussed in Chapter 3, attempting to deliver reproductive health services through a politically aligned NGO has many drawbacks. For example in Palestine, MSI established a local board to oversee its programme. Attempts were made by MSI's Country Director to recruit board members who were known for their support of one particular faction of the PLO. Had this been allowed to continue, MSI's programme would have been viewed locally as being politically aligned and as such supporters of other political factions would not have used the services of the MSI Centres. Other reasons for preferring not to work through local NGOs are also highlighted in Chapter 3.

⁴ LCCD stands for Local Council for Co-operative Development

To illustrate the possible problems two NGOs mentioned by Hoskins are now considered. These are a) Yemeni Family Care Association (YFCA); and b) Society for Social Welfare:

a) YFCA is an affiliate of IPPF, and had suffered from criticism from the Islah Party regarding lack of counselling and for distributing contraceptives, apparently without much control. MSI also experienced hostility from YFCA's director regarding the establishment of an MSI programme of reproductive healthcare in Yemen. YFCA's opposition to MSI's presence in Yemen appears to be based on concerns that MSI could attract international donor interest in its programme and in doing so could reduce the amount of donor funding given to the YFCA.

There are very fundamental differences in the way IPPF affiliates and MSI deliver services. MSI programmes, with the exception of emergency programmes, are established on a cost recovery basis. IPPF, while more recently recognising the need to address the issue of sustainability, do not at present strive to achieve total cost recovery. Collaboration between the two organisations, whilst perhaps possible in a number of areas, would be incompatible in terms of service delivery.

The Society for Social Welfare, is a local NGO, with strong links to the Islah Party. Such religious allegiances would impact hugely on a) what and how reproductive healthcare could be delivered; and b) the potential lack of use by non Islah supporters.

It should be noted that, as described by Beatty et al (1996), NGOs in Yemen are a relatively recent phenomenon and are still at an early stage of organisational development. Many of these organisations are characterised by a low level of internal democratization, and control by one person within the organisation, and a number have unwritten political objectives. NGOs as a whole are poorly monitored by the government, although there is an increasing tendency by the government to control their activities, including access to donor funding. As yet, NGOs have a limited

absorptive capacity, and are at a stage where intensive capacity building is required in order that they can function more effectively in the future.

Research conducted for this thesis in Yemen involving discussions with government figures highlights the government's concern that a number of NGOs may be fronts for political activities, that certain groups or individuals that approach donors may not represent legitimate NGOs and that the objectives of some NGOs and their geographic priority may be inconsistent with what the government judges to be the priorities for Yemen. These concerns have led to a tightening of control over NGOs in Yemen.

The issues highlighted above reaffirmed for MSI the need to establish an autonomous programme in Yemen and one which would not be constrained by the political allegiances and conflicts that collaboration could potentially bring.

iii) *A cost recovery system will take more than 2-3 years to be self financing due to the economic difficulties in Yemen. (p.19)*

Hoskins (1994, p.4) elaborated on the above consideration stating that 'it is unlikely that the clinic will be self-financing within three years, and if there is a cost recovery system it is unlikely, given the poor economic position in Yemen, that the service will reach the target group of the lower socioeconomic groups.'

MSI has experience of programming in similar economic environments and of achieving cost recovery in these countries although one might argue that within MSI there is no specific focus by any of the MSI programmes on the socioeconomic status or income group of their clients. For example, MSI's Ethiopia programme's attainment of financial sustainability, both at individual Centre level and across the programme stems from their reliance upon a single service, i.e. abortion, which allows for financial self-sufficiency.

The income generating potential of Centres will vary according to a number of factors: location; mix of services; mode of service delivery and the community served. MSI

programmes need to strike a balance between these factors in order to build a service that is both appropriate to the needs of the community and sustainable.

Whilst Yemenis are used to paying for healthcare, the concept of paying for preventive healthcare may take time to develop and would need to be accompanied by health education which explained the benefits of preventive healthcare. In order to achieve a reasonable level of cost recovery in its Sana'a Centre, MSI was aware that it needed to develop a 'service menu' that included preventive services and a range of curative/complementary services from which higher user fees could be generated, for example, laboratory services, sale of drugs and obstetrics.

It is also important, here, to consider how one sets fees. No explicit consideration of ability to pay is taken when setting fees or cost of services by MSI programmes. The main criteria used by MSI programmes to set fee levels are charges made by other providers in government health facilities and private for profit and non profit facilities. The aim of MSI programmes is to set their service fees much below those of private for profit providers and either equal to or slightly above government services.

A number of MSI programmes offer subsidised treatment to low-income clients. In developing its programme in Yemen and addressing the recommendation made by Hoskins, regarding enabling access by very poor people, MSI's Arab World Team always intended, through discussions with local community leaders and the MoH to develop a subsidised treatment fund (STF) for any Centres established in Yemen. In order to assess whether fees were directly preventing low income women from accessing a Centre's services, MSI planned to monitor the rate of exemptions given. If these were low, then MSI felt that this would indicate that poorer sectors of the community were being excluded from a Centre's services. If this proved to be true, then MSI would need to develop an effective exemption scheme which would ensure that the very poor were not deterred from using the services.

iv) *MSI should work in liaison with the MoH.(p.20)*

It was MSI's intention to work in partnership with the MoH for a number of reasons. It would have been inappropriate and politically insensitive for MSI to have developed a project in isolation to the MoH and other providers of reproductive healthcare. However MSI had not previously worked in such close liaison with a MoH and the opportunities presented by a partnership with the MoH in Yemen represented a new and exciting challenge for MSI. The extent to which other MSI programmes liaise with the MoH is normally limited to the signing of country agreements.

The were a number of reasons for MSI wishing to work closely with the MoH in Yemen. First, in establishing a programme in Yemen, initial research had shown that it was unlikely that MSI would be able to secure large scale donor funding. The status of any initial operation in Yemen would therefore be more vulnerable to the external environment than many other MSI programmes. In Malawi, for example, MSI received £13m over a five year period to establish a network of 40 Centres and related outreach and health education activities. Such large scale donor funding meant that the programme was in a strong negotiating position for discussions with the MoH, government and other organisations.

Second, MSI has come under criticism within the donor community for the way in which it has been perceived to have developed programmes in isolation from other providers. MSI was keen to develop a relationship with the MoH and to capitalise on this in promoting its proposal for Yemen to donors.

Third, the MoH increasingly recognised the role that NGOs could play in supporting the MoH's efforts to improve access to quality reproductive healthcare services. MSI recognised therefore that NGO participation in supporting the MoH's policies presented considerable opportunities for the organisation.

Hoskins (1994, p.20) however went on to suggest that MSI should submit a request to the MoH to second staff to work in its Centre. Hoskins suggested that this arrangement would be advantageous for three reasons:

- it would be easier to recruit staff as they will have their pension rights;
- MSI would not have to pay all the wages;
- the MoH would supply vaccination, oral rehydration salts and possibly some other medical supplies to the Centre.

Hoskins' recommendation does not fit in with the MSI philosophy of recruiting 'on the open market' or with the advice given to MSI by the Minister of Health who had told MSI that in establishing a programme the organisation should advertise in Yemen's national daily newspapers and recruit the best qualified and experienced people only.

It should be noted that, as will be described in Section 4.5.2.2, MSI did in fact employ a male health educator on secondment from the MoH. The arrangement was slightly different to that suggested by Hoskins (1994) but was in line with the policy of other organisations. The Health Educator was seconded to MSI by the MoH following written permission from the MoH and MSI paid all the salary.

v) *The emphasis for the family planning services should be on choice and education for couples. (p.20)*

Hoskins (1994) expanded on the above recommendation by stating that:

'the men as much as the women need to understand the importance of family planning and the various methods used. The men will often take the decision regarding whether the women can have family planning.'

This recommendation was important. One of the factors contributing to a lack of confidence in Yemen's PHC system was the fact that clients felt that service delivery was often 'provider driven' rather than serving the needs of the community. In addition, health education campaigns were not coordinated with the availability of supplies and

commodities. A woman or couple might seek a family planning method from a health facility but find it is unavailable. The expense and time involved in seeking family planning or preventive healthcare is not conducive to women or couples making a number of visits before being able to obtain their chosen method. In reality, a couple will be given a method by a provider without any clear explanation as to the benefits of the particular method.

Given this lack of confidence of the population, MSI appreciated that it needed to restore the confidence of those clients seeking the Centre's services for family planning and other preventive healthcare services. In order to achieve this, any MSI programme in Yemen needed to ensure that a range of family planning commodities were available at all times and that their availability meant that through sensitive family planning counselling at the service delivery point, couples could make an informed decision as to the most appropriate and effective method.

- vi) *If MSI runs a totally self-financing system in Yemen the services will not reach the lower socioeconomic groups but will be used by the mid to upper socioeconomic groups. (p.20)*

This has been discussed above.

- vii) *Any foreign organisation working in Yemen will need to obtain permission from the Ministry of Planning and Development (MoPD). (p.21)*

Hoskins (1994) elaborated on the permission required for health projects, which includes developing an agreement with the MoH, which is later endorsed by the MoPD

The overall implications of Hoskins (1994) are now discussed. First, a decision had to be made by MSI as to whether to proceed further in exploring opportunities for the establishment of a reproductive health programme. Although Hoskins (1994) had clearly identified the need for a service, there were a number of issues and practical



problems, in addition to seeking donor funding, that needed to be clarified before a programme could start.

On the negative side, the main issue at that time related to the general mistrust within the Islah dominated MoH and MoPD of foreign agencies which stemmed from attempts by those who only offer technical assistance, advice or programmes that relate purely to family planning. This mistrust had developed from USAID attempts in the early 1990s to implement a programme of technical assistance in family planning. American programmes offering only family planning have been continually refused in Yemen and any reference to such programmes is met with similar hostility. Hoskins (1994) reports, without providing firm evidence, that:

'there have also been unfortunate incidents where women have been sterilised without their consent and this has heightened the propaganda against family planning'.

Whilst MSI programmes offer family planning as part of an integrated programme of reproductive health, MSI had to decide whether it wanted to pursue opportunities within the current climate.

Other concerns not specifically related to the Hoskins (1994) report related to whether MSI would be able to operate independently of a local NGO, whether it would be free to recruit programme personnel based on suitability for the position and whether it would be permitted to select a project location based on unmet need rather than political considerations. As noted in the previous section, MSI was also aware that it would not be able to include abortion and sterilisation within its programme and this therefore had implications for cost recovery.

On the positive side Yemen's reproductive health indicators and Hoskins (1994) emphasised the huge unmet need that existed for quality reproductive healthcare services; MSI had the support of Yemen's medical fraternity and informal discussions with key individuals indicated that the Islah Party were not likely to retain control of the MoH following the next general elections in 1997 and therefore the general mistrust of foreign agencies might dissipate.

Overall, MSI decided in favour of investing in further research in Yemen. MSI's judgement was that Hoskins'(1994) report did not contain sufficient information upon which it could develop a full project proposal and therefore recommended that further missions be undertaken by MSI's Arab World Team.

4.4 MSI Research in Yemen

4.4.1 Initial Contacts

The first visit by MSI to Yemen was undertaken in 1996. The aim of the visit was to meet with the Minister of Health and other key figures within the Ministry to try and gauge support for an MSI presence in Yemen. MSI had only one contact in Yemen at this time together with the contact details given to MSI by the Yemeni Ambassador to London (see Section 4.2.2 (v))

At the time of MSI's first visit to Yemen the MoH was still under the administration of the Islamic fundamentalists, although the country itself was being governed by a coalition government of the GPC and the minority Islah Party, who were not committed to the delivery of family planning programmes and were wary of international intervention in this area as noted above.

As the member of MSI's Arab World team undertaking the visit to Yemen I had asked the one contact MSI did have, Qassim to try and arrange a meeting with the Minister of Health and other figures within the MoH. Upon arrival in Yemen, it quickly became apparent that Qassim did not have the connections required to facilitate a meeting with the Minister.

Qassim did however introduce MSI to Sharon Beatty, an independent primary healthcare consultant and Wilhelmina Koch, a Dutch midwife who had been in Yemen for 12 years and who had established a family planning component within a primary

healthcare Centre in Hodeideh. At this meeting discussions centered around the viability of MSI's proposal for a reproductive health Centre modelled on a cost recovery basis. Beatty and Koch were both very encouraging of MSI's proposed initiative but reiterated the suspicion with which foreign agencies working in reproductive health and family planning were viewed by the MoH.

In an attempt to meet with the Minister of Health, MSI contacted Dr Abdullah, the contact given by Yemen's Ambassador to the UK. Accompanied by Dr Abdullah, MSI met with the then Minister of Health. MSI proposed to the Minister the establishment a reproductive health and family planning Centre based on cost recovery. From the outset of the meeting the Minister made it clear that he was opposed to the idea of foreign agencies offering only family planning and it quickly became clear that the Minister was not going to be convinced of MSI's proposal for an integrated programme of reproductive health. The Minister instead limited his offer of an MSI presence in Yemen to MSI undertaking a training programme in maternal and child health, although with little sincerity.

MSI was disappointed by the outcome of this meeting. Training is not MSI's primary area of expertise and MSI would certainly not be able to establish any such programme along cost recovery lines. It was clear however from MSI's first visit to Yemen that, as outlined in Hoskins (1994), there did exist a huge unmet need for accessible, affordable, quality reproductive healthcare services, and that whilst the political will and commitment existed amongst Yemen's medical fraternity it did not within the MoH. Upon return from Yemen MSI decided to monitor events with a view to revisiting programming opportunities at a later date.

In 1997 following Yemen's second general election, the Islamic fundamentalists were defeated in a landslide victory for the GPC who gained sufficient votes to form a majority government. The election 'allowed the GPC to restore fully its pre-unity control of governing institutions' (Carapico, 1998) and as a result all ministries came under the control of the GPC.

MSI's initial conclusions before the GPC victory were that while Yemen was a country that needed high quality reproductive healthcare interventions such that MSI could deliver, it would be difficult in the prevailing political climate for MSI to have established a programme that would be sustainable.

The change of political power in Yemen was crucial to the development of a successful MSI project in Yemen. MSI had already established good relations with Yemen's medical fraternity and, as a result, was considered to be politically acceptable to the new government. MSI's key medical contact, Dr Abdullah was, under the new administration, elected Minister of Health.

As a result of the changed political climate, MSI entered into renewed discussions with the MoH over the establishment of a reproductive healthcare programme. At the invitation of the MoH, MSI undertook three missions to Yemen during 1997 to research and design a programme of reproductive health assistance to supplement the MoH's renewed commitment to provide quality, affordable, accessible and sustainable reproductive health.

Whilst an MSI presence in Yemen now had the support of the MoH, MSI had to adjust to a more formal relationship with Dr Abdullah in his capacity as Minister. Meetings were now held with Dr Abdullah and his advisors, rather than on an informal one to one basis, although Dr Abdullah did continue to make direct contact with MSI's Arab World Senior Programmes Manager.

One might ask if MSI's entry into Yemen would have been undertaken differently had MSI not been introduced to Dr Abdullah. It is true that normally within MSI negotiations regarding programme development with prospective governments are usually undertaken on a much more formal basis and are not undertaken at ministerial level, rather MSI's Country Director (in the case of the expansion of an existing programme or an MSI London Programme Manager in the case of new country development) would

use established channels typically at a lower level of the MoH in this process. In developing an operation in a country like Yemen, and in order to be successful in a relatively quick period of time, it is essential to have a powerful political ally who also has the political will and commitment. Prior to becoming Minister of Health Dr Abdullah was an outspoken proponent of the need to improve access to family planning services. As Minister of Health, Dr Abdullah acquired the political standing with which to support such interventions.

The first visit undertaken by MSI to Yemen following Dr Abullah's election as Minister of Health was in April 1997. The objective of the meeting was to revisit MSI's original proposal for the establishment of a Centre based programme of integrated reproductive healthcare in Yemen and to seek the approval of the MoH for this.

During this visit MSI was introduced by the Minister to Dr Nagiba Abdul Ghani. Abdul Ghani had recently replaced the Director of MCH/FP at the Ministry. The previous occupant of this position was intolerant of discussions with foreign agencies interested in family planning initiatives in Yemen. This was widely acknowledged as being for ideological reasons which represented the interest of her own political party who appointed her into that position. Abdul Ghani had been appointed by the new Minister because of her personal commitment to improving the quality and availability of reproductive health services in Yemen. MSI immediately established a very good relationship with Abdul Ghani.

It was clear to MSI that both Drs Abdullah and Abdul Ghani were very keen for MSI to establish a presence in Yemen and in addition that the objectives of any MSI programme would have to be consistent with the National Population Strategy endorsed by the Government of Yemen in 1992 and with Yemen's National Plan of Action (1996-2006) described in Chapter 2.

MSI concluded its visit to Yemen with a final round of meetings with MoH officials at which it agreed to try to seek donor funding for its proposed programme. In support of

MSI's efforts, the Minister provided MSI with a letter of support for its programme in Yemen. Following this visit MSI approached a number of donor agencies to try to secure funding for the initial development of a Centre.

In May 1997, a member of MSI's Arab World Team undertook a third mission to Yemen. The aim of the mission was to continue ongoing discussions with the MoH regarding the establishment of a programme of reproductive healthcare. This visit took place in the context of a lack of success in interesting potential donors either in the West (for example, the European Union) or in the Middle East. For example, contacts established through Day (see section 4.1.2 (iii)) led to unsuccessful discussions with a number of Arab governments.

These efforts to raise funds for an MSI programme of reproductive healthcare were discussed with the Minister. The Minister was sympathetic to MSI's efforts and said that he would also inform MSI of any funding possibilities that he might discover. At this stage MSI's Arab World Senior Programmes Manager began to feel under increasing pressure from the Minister and Abdul Ghani to identify a funding source. Indeed MSI felt frustrated by the fact that it had developed such a good relationship with the Minister and senior officials within the MoH, had developed a project proposal with the MoH which had the Ministry's full approval and yet had failed in efforts to secure funding for the programme.

During this mission MSI continued to meet and strengthen its relations with individuals and organisations based in Sana'a. MSI's relationship with British Embassy officials was by now excellent and Pearce at the British Embassy had indicated that the Embassy would like to support financially an MSI programme of reproductive health in Yemen. Any funding from the Embassy would however be relatively small and could be used for purchasing, for example, items of equipment but would not be sufficient for sustaining the start up of a programme.

MSI also met with Dr Tolkotter, GTZ's (German Technical Aid Agency) advisor to the MoH and his advisee, Saleh, a prominent member of the Islah Party. Tolkotter was

impressed by MSI's track record and model of cost recovery but Saleh was, however, totally against the establishment of an MSI programme of reproductive health in Yemen. Saleh stated that MSI should limit its input to providing financial support to improve government facilities. MSI explained that it was not a funding agency and as such it was not in a position to fund such an initiative. A few months after this first meeting with Saleh, Saleh left the MoH to establish his own NGO called The Society for the Development of Women and Children (SOUL). In setting up SOUL, Saleh employed a number of people who had previously worked in the MoH prior to Dr Abdullah's appointment as Minister. As with Saleh, these people were members of the Islah Party. It quickly became apparent to MSI that Saleh's opposition to MSI had been made because of a conflict of interest, for example, SOUL hoped to obtain international donor funding for a number of proposed MCH initiatives.

In the meantime MSI continued to liaise informally with Dr Abdullah. On an official visit to London in his capacity as Minister, MSI was asked by the DTI to present its proposal for Yemen alongside a speech by Dr Abdullah to commercial organisations with either an interest or potential interest in Yemen. Dr Abdullah was however to provide a key impetus to MSI obtaining funding for its programme in Yemen. Dr Abdullah was very closely connected to the President and his family. He was aware that the President's son, Ahmed Ali Saleh an MP in Sana'a was keen to be seen to deliver improved services to the local population. As a result of discussions between Dr Abdullah and Ahmed Ali Saleh, the President's son offered to pay MSI's rental on a Centre building.

Dr Abdullah, having obtained Ahmed Ali Saleh's financial and political support was clearly now under some pressure to deliver an MSI presence in Yemen. MSI's Arab World Senior Programmes Manager was equally conscious that Dr Abdullah had invested considerable personal effort in attempting to secure funding for MSI in Yemen. MSI was now under considerable pressure to secure funding. This will be addressed in the next subsection.

Ahmed Ali Saleh's offer did however have a number of implications for MSI. Whilst, it would have been politically unacceptable for MSI to have refused the offer, in accepting it, MSI would have a number of additional considerations:

- i. MSI's programme in Yemen would be openly linked with the President's office;

This did not present a problem to MSI as long as the President remained in power and continued to enjoy the support of the people of Yemen. Yemen was at that time politically stable and the President was a popular figure in Yemen. In being seen to be supported by the President's office, MSI was also protected from any potential attempts to try and interfere with its operation in Yemen.

- ii. MSI was bound to rent a building, rather than to consider building or purchasing Centre premises;

In setting up its first Centre in a new country programme, MSI would normally initially rent premises for a number of reasons not least that this provides the flexibility to relocate premises should the initial choice of location prove to be unsuitable. At the time of establishing an initial Centre, MSI would rarely have secured the additional funding with which to expand the programme to other geographic areas. MSI would therefore not want to make significant capital investment into a one Centre programme. Section 4.4.4 discusses the issues surrounding purchased or rented premises in greater detail.

- ii. Choice of location

A major concern for MSI was whether it would be able to retain the freedom to choose the most appropriate area within Sana'a to site a Centre, on the basis of research, or whether it would be expected to locate the project in Ahmed Ali Saleh's constituency. This point is expanded on below. A further consideration for MSI was whether it would

be free to relocate its Centre premises should the initial choice of location prove unsuccessful, or whether this would be considered to be politically insensitive.

iii. Relationship with landlord

As a foreign organisation new to Yemen MSI would clearly not have obtained as favourable a rental rate as that obtained by a Yemeni.

In addition, MSI has had prior experience of landlords attempting to disrupt its programme activities. In Palestine for example, the landlord of MSI's Centre in Hebron flooded the Centre premises when MSI refused to offer free healthcare to his immediate family and relatives and reneged on an agreement to erect a protective barrier on the outer stairs in order to provide women with the expected level of privacy when entering and leaving the Centre.

However, as the rental agreement for an initial Centre in Yemen would be with the President's office, MSI would be 'protected' from attempts by disreputable landlords who may attempt to disrupt programming activities for either financial or personal gain.

4.4.2 Future Funding

In order to progress, MSI decided to investigate the potential for funding from one of the major foundations and again tried the European Union. A review of the possibilities suggested that the Packard Foundation may be a possibility as it was a rapidly expanding US foundation, who had moved into a major programme of funding population activities post ICPD.

The Packard Foundation had not previously funded any projects in the Arab World but invited MSI in the first instance, to submit a concept paper for its proposed reproductive health programme in Yemen. The concept paper developed by MSI set out the background and the proposed programme's objectives, including the envisaged size of

the project and how it fitted with the country's population policy. MSI also included an anticipated budget for the proposed programme. Finally, MSI included a statement of agreement to the proposed project from the Yemeni authorities and a supporting letter from the MoH.

Whilst MSI tries to avoid being 'donor driven', inevitably, operating in a sector which has become increasingly competitive for funding means that MSI does to some extent have to reflect a donor's priorities in its proposals. The concept paper also invited comments from the donor. This can be extremely useful, as any donor concerns/priorities can be addressed at the pre-project design stage and incorporated into a project proposal.

The concept paper was based on MSI's House Style Guide. The Style Guide has been devised to ensure uniformity of house style within and across external publications produced by MSI. MSI feels that a consistent house style has two distinct benefits:

- it assures quality, through setting professional standards and promoting a recognisable brand;
- it aids understanding, through demonstrating clarity of purpose.

The Packard Foundation responded positively to MSI's concept paper and, as a result, asked MSI to submit a project proposal. Because of the immense need for improved reproductive healthcare in Yemen, the Packard Foundation were receptive to a proposal, even though Yemen was not one of its key programming countries, and offered MSI two years funding. MSI was aware that its programme in Yemen would not be financially sustainable within a two year period, however the organisation made a judgement that it was better to accept the Packard grant and start a programme, rather than to continue to pursue longer-term funding. MSI felt that by commencing a programme it may also be in a better position to secure further funding than from a position where it did not have a presence in Yemen. MSI received a total of £231,800 of which £148,100 was allocated by MSI for Year 1 and £83,700 for Year 2.

The next section in this Case Study describes the development of MSI's Centre in Yemen.

4.5 The Development of MSI in Yemen

This section describes the process undertaken by MSI in the development of its initial Centre in Yemen. In so doing, it describes each step of this process and the impact on the project's development of both the political and cultural environment in which the Centre was to be established and the manner in which the development fitted in with and differed from the MSI model.

4.5.1 Project Location

This section describes the process undertaken by MSI in determining the location of its first Centre in Yemen. Having determined the regional location of its Centre, this section then also examines MSI's criteria for choice of locality within the chosen region, Sana'a, and describes how cultural considerations and factors influenced the decision as to where precisely to locate the centre. At the outset it is important to note that it is essential that a programme's location is based on sound research. This is because the location of a Centre plays an essential and determining role in the performance and success of the Centre. Black (1996) states:

'Over the years MSI has opened well over two hundred Centres. Most are successful, some have failed – usually because they were in the wrong location.'

Black (1996) adds:

'Contraceptors are customers not patients. Family planning is a marketing challenge not a medical task. My experience over the last twenty years, initially with Social Marketing and subsequently with clinic based services is that contraceptors want what all desire – convenient, affordable, satisfying fulfillment of their needs.'

In support of his argument, Black (1996) cites Ray Kroc, founder of the global McDonald's hamburger business who stressed that McDonald's critical success factors

were a total commitment to Quality, Service, Cleanliness and Value and that the key to successful sales outlets is location.

MSI's strategy in developing a new country programme is to establish an initial centre in a busy urban centre, normally the capital city of the country. Under effective management and with adequate initial donor funding (normally three to four years in the first instance – note that in this regard the Sana'a Centre already deviated from the MSI model), such Centres stand a good chance of generating surplus income.

There are a number of reasons for this:

- good communication and transport links;
- potentially greater pool of national personnel with appropriate experience/qualifications;
- good access to local representation of international donors, who in turn can visit the centre/evaluate the activities of the project, often with a view to future funding in other urban/rural areas;
- opportunity to pilot collaborative initiatives with other organisations;
- self sufficiency through location in densely populated urban areas can sometimes lead to the generation of surplus income to underwrite initiatives in poorer, less accessible communities.

Given that around 70% of Yemen's population live in rural areas, the choice of an urban as opposed to a rural area reflects a number of issues. First, Yemen is in what USAID (1990) terms the 'launch' phase of family planning delivery. This means that the target client populations should be: '*urban and peri-urban early and educated acceptors*'. The reason for this is that in a launch phase there is very little family planning whatsoever and experience in many settings has dictated that family planning acceptance occurs amongst educated women in urban and peri-urban areas. USAID (1990) add that '*innovative ways of delivering services and expanding urban and clinic bases are needed.*'

Second, MSI's choice of urban over rural location largely reflected the research which highlighted, as in many less developed countries, that support for family planning in Yemen is higher in urban than in rural areas. This research involved discussions with primary healthcare experts in Yemen who were familiar with the socioeconomic and demographic scene in a variety of urban areas as well as a review of data from YDMCHS (1997). As an international NGO, establishing a new country programme in a deeply conservative programming environment, MSI faced the challenge of building credibility and support for its programme. By locating its first centre in urban Sana'a, MSI felt that it would be able to promote its services at a population who would be relatively easy to reach and potentially most likely to be receptive to its services.

Third, there was the need, through cost recovery, to establish a sound financial base for the organisation. MSI would normally expect its initial Centre to have achieved around 40% income to cost recovery at the end of two years. It should be noted, however, that this would be for a Centre offering services which generate higher fee revenue (abortion, male and female sterilisation) than the income generated solely from family planning services. Hence to gain such an income to cost ratio it would be necessary to generate a broad mix of culturally appropriate services. MSI's initial Centre in Yemen was being established with funding for two years only. During this period the Centre needed to make reasonable progress towards achieving financial sustainability. This could be achieved through offering an appropriate and broad mix of services in an area which was felt to provide MSI with the best opportunity, through culturally sensitive marketing initiatives, to build up a significant client caseload within the first two years of the project.

Fourth, consideration of donor priorities. If a donor's priority is to expand the provision of reproductive health and family planning services to rural areas then the potential for cost recovery and financial sustainability would be limited. Such an initiative would need, for example, to be considered as part of the expansion of a country programme,

where the cross subsidisation across Centres would enable the programme to serve hard to reach sectors of the population and the poorest in the community.

4.5.2 Identifying the City

Having determined that its initial Centre would be located in an urban as opposed to a rural area, this section now describes the process by which MSI selected its choice of urban location. The urban location of the programme within Yemen was chosen as a result of initial research which included the following:

- i. Initial desk research using Census data; Demographic and Child Health Surveys and other available references (CSO, 1996; Hoskins, 1994; MoH, 1995; Radda Barnen, 1994). This initial research enabled the identification of socioeconomic, demographic and health indicators for a number of potential urban locations;
- ii. Selected interviews with the MoH, other central government groups, and key NGOs and organisations including the YFCA, John Snow Incorporated (JSI), German Development Services (DED), ICD, Soul and Oxfam and donors such as UNFPA, UNICEF, World Bank, DfID, KfW ,the Dutch and German governments, USAID, UNHCR and the WHO. These interviews aimed to identify current priorities; future developments (planned or desired); any complementary developments and a view of the advantages and disadvantages of different locations.
- iii. Interviews with local government and health officials, NGOs and potential project beneficiaries in a number of potential locations. The commitment of the regional health office to reproductive health needs to be considered as at each step of project development the cooperation and support of the regional authorities is essential and required.

To enable these meetings to be conducted effectively a semi-structured question route was developed. The question route covered the following topics:

- current provision of reproductive health services including, for example, hospitals and health centres;
- current methods of family planning used in the community;
- local views of various key health indicators such as infant, child and maternal mortality; unmet need for contraception; levels of sexually transmitted diseases;
- perceived barriers to uptake of services, for example, cultural aspects, male views, distance to Centre, times of opening;
- potential for charging for services;
- expected and desired future development;

Sana'a, the capital city, was chosen as the location for MSI's initial Centre in Yemen for the following reasons. First, as capital city, it immediately satisfies a number of the criteria described above which are desirable for an initial Centre. It should also be remembered that, in Chapter 3, it was noted that MSI would normally establish an initial Centre in a capital city.

Second, Sana'a was among the MoH's priority areas for the development of reproductive healthcare services. MSI's relationship with the Minister of Health had been a key factor in facilitating the operationalisation of MSI's programme in Yemen. The Minister was keen to work with MSI in piloting a number of initiatives on behalf of the MoH and in identifying areas for collaboration between MSI and the MoH with a view to their possible replication on a national scale. As a result, MSI considered that by locating its initial Centre in Sana'a it would have greater ease of access to the MoH and other government departments.

Third, as MSI was establishing the Centre on a two year budget, MSI's Arab World Team planned to approach other donors during the two year funded period with a

proposal for extended funding. By siting its initial Centre in the capital city, Sana'a, potential donors could visit the Centre to evaluate its activities much more easily than if it was located in another area of Yemen which might only be accessible either by a lengthy overland journey or an internal flight.

Fourth, in many of its programmes, MSI's partner organisations establish a Head Office in the capital city at the time of commencing programming activities. The Head Office serves as a base for management, financial and administrative support staff and as a focal point for donor liaison and visits. It should be noted, however, that MSI's Arab World Team did not consider it appropriate to establish separate Head Office facilities initially due to the limited funding on which the project was being operationalised and because it was a one Centre programme at that stage. In the case of Yemen, MSI decided, therefore, to establish a Head Office within the Centre premises itself.

Fifth, a contributory factor in MSI's decision to site its first Centre in Sana'a were the opportunities for cooperation that it had identified with other organisations whose head offices were based in Sana'a. During the course of the discussions MSI had held with local and international organisations regarding the design of its project, MSI had identified a number of opportunities for collaboration, in addition to those being developed with the MoH. For example Proctor & Gamble, whose Head Office was based in Sana'a, were in the process of developing a community based health education initiative in Yemen's peri-urban and rural areas. Discussions between Proctor & Gamble and MSI resulted in the identification of ways in which the two organisations could collaborate in the implementation of this programme. The development of this relationship is described more fully in Chapter 6.

Having identified the city of Sana'a as the location for a Centre, MSI next had to identify the location within Sana'a.

4.5.3 Selecting the Locality

This section describes the process one would undertake to identify the most appropriate locality for a reproductive health Centre and also describes the process by which MSI's Arab World Team selected the locality for MSI's Centre in Sana'a.

Within the city, the area with maximum potential demand for reproductive health and family planning services has to be identified and considered in relation to existing providers and the location of the programme's target communities. If the Centre is to be established on a cost recovery basis, but the project's target market is primarily low income women and their families, then the Centre would need to be sited in an area accessible and acceptable not only to low income communities, but also to middle income communities whose ability to pay for services would be greater and as a result would enable the Centre to make progress towards financial sustainability at the same time as enabling the project to offer subsidised treatment to poorer members of the community.

With regard to accessibility, MSI's India Programme (1996) state that there are four criteria which should be considered:

- i) The Centre should be on or near a main transportation route and close to public transport, e.g. main bus terminal or railway station;
- ii) If the Centre is near a well known landmark such as a school, bank or department store, it is easy for clients to locate without the need for too many directions;
- iii) The address should be simple and easy to convey. A short and simple address also takes less space in advertisements;

- iv) The Centre should be located within a reasonable distance of a blood bank and district hospital so that emergency care services can be accessed quickly.

The next issue concerns public perceptions of a potential area. It is important to gain an insight into the perceptions of local people regarding the area. A Centre should be located in an area in which women feel comfortable in. Seeking reproductive health and family planning services in many parts of the world remains a sensitive issue and it is preferable that a Centre is adjacent or near to shopping areas frequented by women, e.g. garment shops, hairdressers, etc. A Centre located near to a garage or an industrial area, for example, would not be a conducive environment for women in many parts of the world from which to seek reproductive health and family planning services as for many it would be difficult to justify their reasons for visiting that particular area.

In many countries, consideration needs to be given as to whether a Centre should be sited in the old or the new part of the city. It has often been witnessed by MSI in its Asia programmes, that clients residing in the older part of a city will be willing to seek services from a Centre located in new areas, but the reverse does not often happen and is not considered culturally acceptable. Care should also be taken to ensure that a Centre does not appear too upmarket as women from low income communities may not feel comfortable in seeking its services.

In some countries certain geographic areas or localities may prove difficult to access or at times be inaccessible due to political reasons or unrest. For example, in considering where to site a Centre in Palestine, MSI had to take into consideration that clients or staff members who held West Bank identity cards would not always be permitted by the Israeli authorities to enter Jerusalem, similarly political unrest in the West Bank often meant that the area was closed off and access into the area was severely restricted. Restriction on travel movements would be a constraint both to the uptake of services and development of client caseload and to the recruitment of team members to the project.

Finally, there are towns where the availability of key team members, e.g. doctors, is a constraint, although such towns/areas are otherwise good locations for a Centre. For example, in MSI's programme in India in the city of Kanpur in Uttar Pradesh, a city with a population of over 4 million, finding a regular doctor is extremely difficult.

The section above described the issues which MSI takes into consideration in determining where to site a Centre and is drawn from the experience of MSI programmes globally over a number of years. The section now describes the process by which MSI identified the location for its initial Centre in Sana'a.

In determining where to site its initial Centre in Sana'a, MSI's Arab World Team first examined the experience of other MSI programmes (as described above). In addition, MSI's Arab World Senior Programmes Manager was also aware that pressure may be exerted from the President's office to ensure that its Centre was located within the constituency which Ahmed Ali Saleh represented. In order to try and avoid a potentially sensitive situation, MSI's Arab World Senior Programmes Manager met first with the President's personal assistant, Muhammed Duwaid, who was also a local MP and who had been assigned by the President's office to assist MSI in identifying suitable premises. MSI's Arab World Senior Programmes Manager emphasised the criteria used by MSI in identifying both the locality and premises for a clinical Centre. In the case of Yemen, the criteria listed as essential by MSI were:

- densely populated area of the city;
- low to middle income area;
- lack of service provision by other providers;
- in an area where attitudes to reproductive health were not deeply negative;
- in an area in which women would feel comfortable walking and one in which it would be acceptable for them to be seen in.

MSI did not undertake baseline surveys to determine the location for its Centre. Many people might argue that baseline surveys should have been undertaken prior to deciding upon the choice of location. However to undertake baseline surveys in a number of locations is almost never feasible financially. In addition, undertaking baseline surveys in a number of areas in Yemen (or in Sana'a) may have caused intense political pressure. For example, local leaders would have queried what was wrong with their area if it was subsequently not selected for a Centre and this could have been extremely disruptive to the development of a Centre. The survey undertaken by MSI, which is discussed in more detail in Chapter 5 had a different strategy - to gather information on the experience and attitude of MSI's target communities to reproductive health and family planning. The information was subsequently used to inform the mix of services and mode of delivery.

4.5.4 Purchased or Rented Premises

Although the Sana'a Centre was to be rented because of the intervention of the President's son, this section describes, for completion, the factors which would normally influence the decisions whether to rent or buy premises. This decision is dependent on a number of factors. Bearing in mind the financial status of the organisation, a decision has to be made as to whether the Centre's premises should be rented or whether land or a building should be purchased. The bottom line, though, is that a good location is essential however, as relocating a Centre is expensive. The final selection of premises is therefore critical. The factors are:

- i. **The financial status of the local partner organisation (or branch of MSI as in the case of Yemen);** in some instances the donor is happy for costs pertaining to the purchase of Centre premises to be written into the project budget. In this instance, it will be made clear in the project proposal what will happen to property (assets) acquired under the project at the end of the donor funded period. The standard statement on this in EU proposals for example is that property acquired under the project will remain in place for use of the stated objectives and would

normally remain under the control of either the local partner NGO or MSI, whichever was applicable.

- ii. **Maturity of the programme;** it may be prudent not to purchase property within the first few years of a country programme, but rather to assess the performance and viability of the project (i.e. a Centre) first and within the context of the overall sustainability of a country programme.

Similarly, renting Centre premises, particularly in the initial stages of the development of a programme, gives the programme the option to re-locate if after careful assessment it is felt that the Centre would perform better in an alternative location.

- iii. **Donor commitment;** in countries where long term donor commitment to the country is not guaranteed the purchase of clinical premises would not be advisable. This would similarly apply in politically unstable environments.
- iv. **Government Regulations;** in Ethiopia for example, the country agreement signed between the national authorities and international NGOs states that an international NGO may rent premises for some years, after which premises must either be purchased or constructed.
- v. There may be **external factors**, as in this case, which determine the decision.

When renting premises a number of other issues are important. First, an understanding with the landlord that only one Centre is located within the building is desirable. Having similar Centres or clinics in the same building can create confusion. For example, in the building housing MSI's Delhi Centre, in India, a TB clinic has opened creating confusion amongst clients.

Second, if the Centre is located within a building, sharing an entrance/corridor with other tenants in the building should be avoided. A common entrance can result in disputes over maintenance of the shared area and more commonly can present problems in trying to maintain standards of cleanliness and hygiene. A shared entrance may also deter potential clients from entering the Centre due to a lack of privacy.

Third, if a rental agreement is taken out on a short-term basis, i.e. annually, it is likely that at each renewal the rent will be increased. As rent is often one of the major recurring costs to a programme, frequent increases in rent can affect the project's progress towards being financially sustainable. It is therefore preferable to enter into longer-term rental agreements, which should include a clause which allows for termination of the lease agreement. This provides the project with flexibility if a decision is made to relocate the Centre or if the project does not prove to be viable.

It should be noted that the decision to rent in the first instance allows a degree of flexibility which is entirely within the spirit of the MSI model.

4.5.5 Building

4.5.5.1 Size and Layout

The discussion now turns to the actual building within which the Centre would be located. With regard to size and layout, Marie Stopes Operations Manual (1998) quotes the following operating principle:

'Small is beautiful. The size of a Marie Stopes Centre must be the minimum area required to serve the anticipated caseload. This will maximise efficiency and minimise rental, staffing and other costs, thereby enhancing prospects of attaining sustainability.'

The size of a Marie Stopes Centre is based on a number of factors: the minimum space required to serve the maximum anticipated daily number of customers; the number of relatives accompanying a customer; the type of services offered; the climatic conditions;

the buildings available; and efficient use of space. The next section will discuss how these factors influenced the choice of MSI's premises for the Sana'a Centre.

4.5.5.2 Choice of building in Sana'a

Muhammed Duwaid, the President's Personal Assistant and a local MP had identified a few potential buildings for MSI to view and accompanied MSI personally to undertake this process, joined also by his own security personnel. The respective constituencies of both Muhammed Duwaid and Ahmed Ali Saleh are in Sana'a and it became clear to MSI's Arab World Senior Programmes Manager in preparing to view potential Centre buildings that, as mentioned earlier, pressure may be exerted on the organisation to site a Centre in their constituencies. A purposive decision such as this is compatible with a strategy to introduce an initial Centre into a country so long, and this is a sine qua non, as the areas and locations proposed satisfy MSI's criteria for the location of a Centre. On the first attempt to identify a Centre site, MSI viewed two buildings. The first building was located along a dirt track opposite a boy's school and was a traditional Yemeni house. Yemeni houses are tall and are normally accessed through one main entrance, normally a small doorway which one has to stoop down to enter. The interior layout of a Yemeni house normally comprises three or four floors. On each floor there are one or two rooms which are accessed via a steep and narrow staircase.

MSI considered that the location of the first building viewed was inappropriate primarily because i) its location opposite a boy's secondary school might deter women from visiting the Centre or being permitted by a husband or male relative from walking in the vicinity of the building ii) the approach to the Centre was along a long mud road which was not visible from any main transportation routes iii) the area, whilst reasonably densely populated was primarily residential, there were no shops nearby and women therefore may not have an excuse to be in the area.

The visit to the first site raised a number of issues however for MSI which had perhaps not been previously considered. If the Centre was located in a traditional Yemeni style

house, would this make the project more acceptable to the local community, for example, when a member of MSI's Arab World Team pointed out to Muhammed Duwaid that pregnant women visiting the Centre may find it difficult to walk up steep flights of stairs or even be deterred from taking up the Centre's services if they were not easily accessible, it was pointed out by the Yemeni entourage that this is something Yemeni women are quite used to. The outcome of the conversation for MSI was the criteria that was laid down as 'best practice' by MSI London may not be culturally acceptable in Yemen. MSI's scepticism as to the suitability of the building was however supported by the Director of MCH/FP who also thought that the layout of the building may restrict the activities of the Centre.

The second building shortlisted was in a much better location but the building itself was not conducive to serving as an MSI Centre. The building was a ground floor apartment with small rooms. The windows were small and high, making the building very dark. It later transpired that the landlord would only enter into a rental agreement for a minimum of two years. Such an agreement could have potentially affected MSI's project had it been found subsequently that the Centre location was not right.

The third building viewed appealed most to MSI and was chosen for the project. The building was modern, had large rooms and so was well ventilated and light, was in excellent structural and decorative order and was in a densely populated area of Sana'a. The building fronted one of the main transportation routes into Sana'a and was close to a bus stop. There were a number of shops either side of the entrance to the building which included a hairdressers, a fabric shop, stationers and dry cleaners – all shops which women might visit or would feel comfortable being seen in the vicinity of. The area was a mixture of low-income and low-middle income communities and the road fronting the Centre was known as the 'dividing line' between the two. The Centre was a short walk from downtown Sana'a and was equally accessible by foot from Sana'a's Old City. Being on a main transportation route into Sana'a, the Centre was also accessible to people travelling in from Sana'a peri-urban and more rural environs.

In all aspects except one the building satisfied the MSI model's criteria. The drawback for MSI was that the building was much larger than would normally be used by MSI for such purposes. However, the project being developed by MSI in partnership with the MoH was not going to be limited to service delivery. The MoH was keen for MSI to take on a training role for MoH personnel. In order to accommodate this, MSI was conscious that additional space would be useful. MSI accepted the building and was supported by the Director of MCH/FP in doing so.

The selection of the building again threw up a number of issues which MSI had not previously considered, although these issues were to emerge several months into the Centre's active life. Prior to MSI's rental, the building had been used by a Korean company. Three issues emerged from this: i) MSI put up signs in Arabic on the outer wall of the Centre under the heading Marie Stopes International, written in English. The signs described the services offered in the Centre under the heading of Marie Stopes International. On seeing a foreign name, some people in the local area thought that the building had been taken over by another foreign company and were not aware that reproductive health and family planning services were being provided; ii) the Korean Company had a reputation amongst local Yemenis for bad management and corruption. MSI had to overcome this reputation in its promotional efforts; and iii) there was a small and separate one room building at the side of the building. The room housed an Ethiopian man, his wife and their child. The man (Ali) had been employed as a guard by the Korean company. When MSI took over the building there was some confusion as to Ali's future. On the Yemeni side it appeared that Ali 'came with the building', MSI on the other hand were sceptical about being 'presented' with an employee but were under pressure to retain Ali. However, Ali had worked as a guard for the Koreans and MSI was going to have to recruit two guards for its project. There was also going to be some delay between MSI taking on the building and the Centre opening. It therefore seemed prudent to have some security at the site. Ali's presence at the Centre was however to prove extremely disruptive and is expanded on in Chapter 6.

Other issues also arose for MSI. The Centre rental was to be paid directly by the President's office. In the first few months, the landlord claimed persistently that he had not received any rent. This was a sensitive issue for MSI as it could not openly follow up on the landlord's claims. Again in the early months of opening, the Centre Manager noticed that the monthly water and electricity bills were increasing substantially, month by month. The Centre Manager subsequently discovered that the landlord also owned a number of the buildings which housed the shops on either side of the entrance to the Centre. Unknown to MSI the landlord had linked the Centre's electricity and water meters to that of the shops. MSI was therefore being billed for both its own and that used by six shops. Being an international organisation and new to Yemen, MSI was aware that it would be culturally unacceptable openly to accuse the landlord of malpractice. In order to resolve the issue MSI had to employ local figures to act as a go between.

4.6 Centre Design

This section describes the operationalisation of MSI's Centre in Sana'a. The section is divided into the following sub-sections which, together, describe the process involved in the setting up and opening of the Centre. It should be noted that the MSI model would require a relatively small team, paramedicalised and featuring multi-skilling and multi-tasking working in a Centre which was operating autonomously.

- staff recruitment
- equipping the Centre
- liaison with stakeholders
- design of the Centre layout
- service delivery; method mix
- development of collaborative links

4.6.1 Recruitment of Centre Manager

MSI's recruitment policy has been described in Chapter 3 and can be summarised as being based on local staff with a direct line management to London. This section describes the operationalisation of this strategy with respect to the establishment of the Sana'a Centre. The section starts by highlighting the conflicting pressures exerted on MSI's Arab World Team by MSI's policy on staffing and local expectations. The section then continues by describing the processes which led to the decisions regarding the final portfolio of staffing. The section ends by highlighting the key parts of the selection process.

A key tenet of the MSI model is that:

'MSI programmes are managed and implemented by appropriately qualified and trained local people.' (Statement of Capacity, 1997).

Intensive on-going technical assistance in management, medical, marketing and fundraising activities and policy issues is provided by MSI London and through south-south training initiatives. Another key strategy allows for the provision of support to new programmes from more 'senior' MSI Partners such as Population Services Lanka (Sri Lanka). Population Services Lanka is a frequent provider of technical and medical training to partner organisations throughout the Partnership. Through recruiting local nationals and through the technical assistance outlined above, MSI aims to facilitate the transfer of enduring knowledge and skills and thereby to contribute to broadening the indigenous pool of reproductive health professionals.

The majority of MSI programmes globally are managed and implemented by local people. Only where a particular skill base does not exist locally will MSI employ an expatriate staff member and then on a short-term basis. In such circumstances, the expatriate's brief will be to identify and train a national counterpart to assume responsibility for the position within a given time period.

When setting up a new country programme, the first staff member to be recruited is the country director. The recruitment process is undertaken in the field, usually by two MSI London personnel, one of whom will be responsible for the management of the specific country, supported by a member of MSI's senior management team. In some countries, a locally retained consultant may also assist in the recruitment process.

In the first instance, MSI normally advertises the position of country director in a national daily newspaper, through international and local NGOs working in the country and by word of mouth. Shortlisting of applicants is undertaken at MSI London by the overseas programmes manager. Arrangements are then made for shortlisted candidates to be interviewed in-country. In preparing to shortlist applicants, MSI has in some countries had to investigate in more detail the background of the applicant prior to shortlisting. As mentioned earlier, this was necessary in setting up a programme in Palestine, where MSI had to be certain that staff members were not so highly politicised so as to run the risk of MSI Centres being thought of as aligned to one particular faction of the PLO. In such a politically charged environment such as Palestine, perceived political allegiance to one faction of the PLO could have potentially alienated clients who supported other factions from using the Centre's services.

In preparing to recruit a country director in Yemen, MSI's Arab World Senior Programmes Manager met with the Minister of Health to discuss the recruitment process. The Minister was keen that MSI should appoint a non-Yemeni to head its programme as he felt that the required managerial skill base did not exist in Yemen. MSI also spoke to a number of expatriate primary healthcare workers who had considerable experience of working in Yemen, who also did not feel that MSI would be able to identify a Yemeni with the required skills and expertise to head the project. For example, Beatty also felt that MSI should in the first instance appoint an expatriate in particular because the implementation and management of the project would be overseen by MSI from London and not from a base in Sana'a.

MSI agreed with the views of the Minister and Beatty that the expertise to head a reproductive healthcare programme based on a cost recovery model probably did not exist in Yemen. MSI and the Minister agreed, that as MSI was to pilot the delivery of reproductive health and family planning services based on a cost recovery system then it was important that the appropriately qualified project management was in place. It was agreed however that the situation would be reviewed, with a view to the expatriate programme director identifying and training a national counterpart.

As with other MSI programmes when recruiting an expatriate MSI began the recruitment process for a country director by advertising in Britain. Around 30 applications were received but the interviews were disappointing and did not result in an appointment. As a result and given Yemen's unique programming environment MSI increasingly felt that it probably needed to recruit an expatriate country director from within Yemen.

MSI's Arab World Senior Programmes Manager had met on a mission to Yemen a female Iraqi doctor, Dr Hind Khalid, who at that time headed International Cooperation for Development's (ICD) reproductive healthcare project in Sana'a which existed only to serve Somali refugees. MSI's Arab World Senior Programmes Manager was extremely impressed by the ICD Centre and had portrayed it to organisations and individuals in Yemen as representative of the standards that MSI aims to set in its delivery of reproductive healthcare. Referees for Dr Hind were highly supportive although there was a general consensus of opinion that Dr Hind did not perhaps have the experience to fulfil the position of country director, but was eminently qualified and experienced to be a Centre manager. MSI's Arab World Senior Programmes Manager conducted two telephone interviews with Dr Hind, following which a decision was made to offer her the position of Centre manager/doctor. One might have appointed a Centre manager and a doctor but until the caseload increased financial constraints meant that one would expect one person initially to undertake both tasks. It should be noted that Dr Hind herself was sceptical of her ability to undertake both roles (see Chapter 6, section 6.3.1.1) but agreed on the understanding that the position would be reviewed.

The appointment of Dr Hind as Centre manager and doctor conformed with MSI's approach to 'multi-skilling and multi-tasking'. The appointment of a doctor as Centre manager did, however, conflict with MSI's de-medicalised approach and as MSI would not normally hire a doctor to manage a Centre. As Black (1998) states:

'I fully appreciate that legal constraints may to some extent determine doctor needs – but as we are finding, even here in Britain, this can be partially overcome by: a) simplifying procedures to make it easier for the nurse/medical assistant/auxiliary to perform them safely 'under doctor supervision' and b) pushing their role to the limit of legality, i.e. keeping within the spirit, if not the letter of the law, and c) by scheduling client attendance to coincide with doctors sessional visits to do lists of things they (legally) 'have to do', e.g. minilaps – in other words using one doctor to cover several facilities.'

4.6.2 Recruitment of the Centre team

The Chapter now turns to the recruitment of the Centre team. There is first a discussion of the type of staff an MSI programme would normally recruit. As the personnel required would be heavily dependent on the services to be offered the section next discusses these before finally describing the practical processes of recruitment.

To start with normal MSI practice. As part of the development of the Operations Manual, MSI has laid down guidelines relating to the size of its Centre teams. Black (1998) states:

'it has been evident for some time that our basic small lean mean Stope's clinic machine not only works but flourishes almost anywhere when we get the formula right – but if we get it wrong it is very difficult to redeem the situation because the resulting clinic is too big, has too many and inappropriate employees....'

Black (1998) adds that the MSI 'formula' works:

'if the clinic is implemented strictly in accordance to the Stope's model – a well located facility with a team of five or less, ideally with most of the service menu delivered by paramedics and auxiliaries...because apart from laparoscopic sterilisation such personnel can safely and effectively deliver every aspect of FP and most of the reproductive health that we offer at far lower costs than doctors.'

It should be noted that the standard operating procedures laid down in the Operations Manual relate to standard MSI Centres i.e. those which offer abortion and other

reproductive health services, but few curative services. In MSI's centre in Sana'a where abortion could not be included, the range of services provided had to be more comprehensive in order to achieve a reasonable level of cost recovery and in order for the Centre to be culturally acceptable. It was therefore important that MSI's Sana'a Centre had to provide curative and preventive medical care. The mix of services is described next and obviously affects the range of expertise needed and the number of personnel required. It should be noted that this mix will lie within the framework of the model as defined in Chapters 1 and 3 for a society where income generation could not come from abortion or sterilisation.

4.6.2.1 Service Delivery

This section aims to describe the research which went into the decision making process surrounding the delivery of services. The services which were finally chosen are first described and then the discussion focuses on the process through which these decisions were reached.

The range of services to be chosen would normally be influenced by the need and potential for cost recovery and also, of course, cultural considerations and the reproductive health needs of the community to be served.

It was decided that MSI's Sana'a project would have four interlinked principal components;

- i. Centre-based component; the establishment of community based reproductive health and family planning service delivery. This would be by far the major activity;
- ii. an IEC component to be based in the Health Centre and to provide both Centre and community based health education in addition to outreach activities. Project personnel would liaise with a network of community organisations and local opinion and religious leaders;

- iii. Outreach activity. Project personnel would provide outreach services throughout the local communities. Outreach activities are integrated and co-ordinated with the IEC activity.
- iv. Capacity building; in-service training of project personnel undertaken on an ongoing basis.

The major activity (and revenue earner) was the **Centre**. MSI's Arab World Senior Programmes Manager, in conjunction with the Centre Manager, Dr Hind, identified three areas which could potentially provide the Centre with high income and which would serve the needs of the Centre's target communities. The areas were:

- i. **Obstetrics**

As described in Chapter 2, Yemen has some of the highest mortality rates in the world: for mothers it is estimated to be 1,400 per 100,000 live births. Delivery practices are generally poor, with 90% of all births taking place at home, the majority without the assistance of trained medical personnel. Only a small fraction of Yemeni women receive antenatal care and postnatal care is rare.

MSI recognised that its Sana'a Centre could play a role in contributing to a reduction in maternal mortality through the provision of high quality obstetrics and related health education. In order to promote a sustained improvement in maternal health, it was intended that MSI's Sana'a Centre would develop a package of maternal health services.

- ii. **Pharmacy**

In Yemen, as in many other countries, people measure the quality of health services by the possibility of obtaining essential drugs through them. The Yemeni health system has, over recent years, delivered very poor health services in this respect, one of the main problems being the poorly functioning logistics and supply system for essential

drugs as well as for medical supplies. Many public sector health centres often lack even the most basic supplies.

Besides logistics, there are many unsolved problems in this sector. In the public as well as the private sector, prescription practices are irrational, due to the perception among the public and many professionals that 'more is better'. Weak diagnostic skills, and lack of proper examination of patients are also major issues. In addition, the private drug sector is currently well developed, badly controlled, and making handsome profits on unnecessary drugs, often in collaboration with prescribers.

Since pharmaceuticals is a lucrative area for private business, many influential people in Yemen have entered this market. The smuggling of drugs is widespread and Yemen has become the recipient country of many banned and out of date drugs. In trying to ensure the provision of high quality services, MSI in developing the Sana'a Centre, felt that it should establish a small pharmacy within the Centre in order to ensure that clients received appropriate and safe drugs, upon the recommendation of the Centre's health personnel. As Yemenis are used to paying for drugs, MSI recognised that through developing a pharmacy the Centre would be able to generate additional income whilst also ensuring the provision of appropriate drugs based on accurate diagnosis.

iii. Laboratory services

As described in Chapter 2 there is a need for quality laboratory services in Yemen and it was therefore decided that it would be possible to make money from a laboratory in the Centre and that this could help the push towards financial sustainability in addition to ensuring accurate diagnostic testing and therefore overall quality of care.

The second component was **Health Education**. This is because modern preventive healthcare has only recently been introduced to Yemen. IEC initiatives therefore have a crucial role to play in explaining and gaining acceptance of the benefits of modern preventive health principles and procedures. MSI's experience world-wide had shown

that women would attend a family planning facility in large numbers if it also offers relevant information, education and counselling services and immunisation for children.

The third component was **Community Outreach**. The design of the Centre's outreach activity was largely informed by an analysis (see Chapter 5) of the survey undertaken in the immediate environs of the Centre. This ensured that the project's outreach activities relate to local perceptions and needs within the broader framework of reproductive behaviour. In addition to health education sessions, outreach activities included vaccination, ante-natal, post-natal, family planning and basic curative services.

Strong motivation to seek out sources of supplies and services of family planning are not always forthcoming in Yemen. Outreach activity therefore plays a crucial role in reducing barriers and facilitating uptake of reproductive health services and information. It is important to note though, that neither of these last two components is directly revenue generating although women referred to a health facility as a result of outreach activity will affect levels of cost recovery (note that one would also need to take into account the cost of the outreach activity).

The final component was **Training**. MSI is committed to encouraging a continuous personal development culture (MSI, 1998). Staff both in London and in the field are actively encouraged by MSI's senior management to undertake appropriate training courses, with the aim of enhancing the organisation's operational needs and effectiveness and the institutional sustainability of programmes. In addition, as previously noted, it was always intended that the partnership with the MoH would include an element of training for MoH staff and this had influenced the choice of building.

4.6.2.2 Human Resource Requirements

In order to deliver the Centre and community based services and IEC and health education outlined in the previous section, MSI's Arab World Team determined initially that the Centre needed to recruit the following personnel:

- Centre Manager/Doctor
- Two midwives
- Pharmacist
- Laboratory technician
- Two health educators (one male, one female)
- Receptionist
- Guard/Cleaner
- Driver

The proposed number of project personnel conflicted with the expectations of MSI London as Black (1998) advocates that MSI clinical services can be delivered by teams comprising of around five team members. He justifies this by advocating 'multi-skilling and multi-tasking', arguing for example that a driver can also act as a messenger and play a role in delivering community based health education activities.

Contrary to the advice from the Minister and Beatty the Director of MCH/FP wanted all Centre team members to be Yemeni nationals and also felt that the role of Centre Manager and doctor should not be combined. On the other hand discussions with local leaders provided an alternative view. MSI had been introduced to a local political committee (the relationship with this committee will be developed in Section 4.8 below). Members of the committee believed that MSI should staff its Centre entirely with expatriate nurses and doctors. Their views reflected the general lack of confidence of the population in Yemen's primary healthcare system and the committee was therefore wary of MSI's ability to provide improved quality reproductive health services if these

were to be delivered by locally recruited personnel whom they associated with the poor service provision prevalent within existing public sector health facilities.

MSI also came under pressure from both the MoH and local committee to employ personnel upon their recommendation. As mentioned earlier in this Chapter the Minister of Health however had urged MSI to recruit its personnel on the 'open market' in order to attract personnel with the appropriate qualifications and level of expertise. The Minister's support for this recruitment strategy was extremely helpful for MSI in enabling it to conduct a fair and appropriate recruitment process.

There were however a number of additional factors which were to affect the final composition of the Centre team;

i. During the course of interviewing short-listed applicants it became clear to the Centre Manager that the calibre of applicants for the positions of midwives fell short of the standards desired by MSI. A decision was therefore made to employ one Yemeni midwife, supported by a more highly qualified and experienced Sudanese midwife. It was agreed that the two midwives would initially work together and that the Sudanese midwife would provide training and support.

There was an advantage to the Centre in this combination. The Yemeni midwife resided in the local community and was well known to the community, as a result she was also familiar with local traditions and reproductive health practices. Similarly, Sudanese midwives working in Yemen have a good reputation in most of the country and are respected.

Through discussions with other international organisations, MSI was informed that the Centre premises would need to be guarded at all times. MSI therefore needed to recruit two guards instead of the one budgeted for. It would not be culturally acceptable for a guard (who would be male) to undertake cleaning duties, even if these were to be

undertaken before and after the Centre was open and therefore ensuring the privacy of female clients. MSI therefore had to recruit a dedicated cleaner.

It should finally be noted that as the Centre developed it proved possible successfully to train the driver to act as the accountant (a position which, whilst initially undertaken by the Centre Manager, would have arisen as the Centre and corresponding caseload developed) and hence to multi-task.

The Centre team finally comprised:

- Centre Manager/Doctor
- Two midwives
- Pharmacist
- Laboratory technician
- Two health educators (one male and one female)
- Receptionist
- Two guards
- Cleaner
- Driver

The recruitment of the two additional project personnel did not however significantly affect the project budget. The information provided by the MoH to MSI regarding salary levels for the various clinical positions had in retrospect been on the high side and MSI was able therefore to create two additional posts within the original budget. In addition a local consultant was retained in order to assist the Centre Manager in the initial development of the Centre. However it has to be said that the size of this team was contrary to that expected by the model which would have advocated a smaller team multi-skilling and multi-tasking.

4.7 Equipping and furnishing the Centre

This section describes the process involved and the issues that were considered in equipping MSI's Sana'a Centre. In the majority of MSI's programmes, equipment for the project is purchased locally. In countries where equipment is not available locally, MSI London purchases equipment on behalf of the programme using project funds held in London. In Yemen, MSI had identified through discussions with other international organisations that most equipment required for a standard reproductive health and family planning programme was available through local suppliers.

In equipping and furnishing a Centre it is important that the right ambience is created so that clients feel relaxed and comfortable in the Centre environment. MSI's Operations Manual, MSI (1998a) states:

'The sign posts, building, its interior, the furniture, fixtures and fittings are the 'packaging' for the Marie Stopes services. The team members' friendliness, behaviour and professionalism are the 'ingredients'. Together they must provide a client-satisfying and memorable Marie Stopes Centre experience.'

MSI's Arab World Team incorporated MSI criteria in the equipping and furnishing of its Sana'a Centre. The creation of a non-medical environment was a new phenomena in Yemen and MSI's Arab World Team had come under pressure from local individuals to provide a wide range of curative services. This would have fallen outwith the MSI remit and would also have required sophisticated equipment. It was therefore resisted by MSI's Arab World Team. The British Embassy in Sana'a who were very supportive of MSI's efforts to establish a project in Yemen allocated MSI £10,000 from British Partnership Scheme funding towards the purchase of laboratory equipment and furnishing for the Centre.

It should be noted that at this stage of the development of the Centre that, as the Centre Manager had not yet started and in order to maintain momentum, MSI hired a consultant, reporting directly to MSI's Arab World Programme Manager in London, to purchase some of the equipment. The consultant was an expatriate German with experience of equipping MCH Centres for GTZ but the arrangement was unsuccessful as much of the equipment bought was culturally inappropriate and overpriced. This arrangement was terminated early and highlights some of the problems of distance management. However the equipment was finally purchased and the Centre furnished and equipped by the Centre Manager. The equipment was purchased locally and so conformed to the framework of the model.

4.8 Layout of the Centre

This section describes the issues which were considered in determining the layout of MSI's Sana'a Centre. In its Operations Manual, MSI has developed four standard clinical layouts (which primarily relate to Centres providing sterilisation and abortion).

In determining the layout of its Centre in Sana'a, two key issues had to be considered: i) that the layout of the Centre was culturally sensitive in order to ensure acceptance by the local community; and ii) the need quickly to generate cost recovery.

Examples of these issues are given below:

- In Yemen, women will almost always be accompanied by their husband or a male relative when attending a health facility. It is not culturally acceptable however for men and women to sit together, particularly in a public place. The Centre therefore needed to create two separate, male and female waiting areas.
- In the initial layout of the Centre, the reception area was the first room which clients entered. Having registered with the receptionist, the women would wait in the female waiting area and the men in the reception area. A TV/video was placed in

both the male and female waiting areas in order to show health education programmes for waiting clients and accompanying visitors. A small pharmacy was situated in the female waiting area and outside the doctor's room. It was planned that women leaving the doctor's room would be able to purchase any needed commodities from the pharmacy before returning to their husbands. Women however preferred to return immediately to their husbands and did not subsequently return to the pharmacy. The husband would then take the prescription and they would leave the Centre. Centre staff found themselves chasing clients to inform them about the pharmacy.

- Sales from the pharmacy were important to MSI's Sana'a Centre in the development of financial sustainability. It was therefore decided that the position of the Centre's pharmacy should be re-located near to the men's waiting area as it was observed that women gave their husbands the prescription to buy the drugs (in Yemeni society, as demonstrated empirically in Chapter 5, many women do not have money of their own to spend).
- MSI London had recommended that the obstetrics unit should be located on the ground floor of the Centre, arguing that heavily pregnant women or women in labour would not want to climb a flight of stairs to the first floor. Feedback from clients however led to the obstetrics unit being relocated to the first floor. Women said that they preferred to be well away from any areas where men were present. Similarly men coming to the Centre also emphasised that they wished their wives to be in an area which guaranteed their total privacy from other men attending the Centre. A room on the ground floor was however also equipped in order to accommodate any pregnant women attending the Centre who may be fully dilated and not able to make it upstairs.
- The majority of Yemeni men will carry a gun outside the home. The Centre Manager in agreement with MSI did not feel it was appropriate for men to retain their

weapons inside the Centre. On entering the Centre premises, the Centre guard asked men to disarm and weapons were stored in an external room.

The issues described above highlight two points: i) the need to be able to judge carefully when to diverge, in a culturally sound way, from accepted practice and tradition; and ii) when divergence from accepted MSI practices is warranted and justified. Again the layout satisfied the criteria of the model in that it placed the needs of the client first.

4.9 Liaison with the Local Community

During the development of the Sana'a Centre, as mentioned in Section 4.5.2.2, MSI liaised closely with a local committee called Al-Wafa. MSI was introduced to the committee by Muhammed Duwaid, who is their President. The committee is made up of community leaders representing the different local communities in the district. It was felt that by negotiating with this Committee, who were largely representative of the local community, one reduced the potential for conflicts that might occur if one had attempted to negotiate individually with all community leaders. The aims of the Committee are to assist the poorer members of the local community in areas of education and health.

Al-Wafa were keen to establish collaborative links with the Centre in order to facilitate access to the Centre's services by the poorest members of the community.

MSI was keen to collaborate with Al-Wafa for a number of reasons: i) to facilitate acceptance of the Centre by the local community; ii) to ensure that the Centre was serving the poorer members of the community; and iii) to gain a more detailed insight into the reproductive health needs of the local community.

Initial liaison between MSI's Arab World Senior Programmes Manager and the Committee was constructive. The Committee agreed to promote the services of the Centre throughout the local community; to collaborate in the holding of community based health education activities and discussions and to assist the Centre in identification of those families most 'at risk' and in need of the Centre's services and those families who did not have the ability to pay for services.

MSI agreed with the Committee that it would make provision for a certain amount of subsidised treatment to be made available to very low income clients by maintaining a 'Subsidised Treatment Fund' (STF) in order to ensure that cost does not become a barrier to access to services. MSI agreed with the Committee that the precise mechanism for operating a STF in the Sana'a Centre would be worked out with the project team, after analysis of the data from the survey described in Chapter 5 together with consultation with beneficiary groups, and in conjunction with the committee. The development and operation of STFs is a key project activity in MSI programmes globally, both in terms of maximising access to services, and the long-term sustainability of the project.

MSI has used STFs in most of its programmes worldwide. In developing a STF for MSI's Sana'a Centre, MSI's Arab World Senior Programmes Manager discussed with MSI team members their experiences of implementing STF in other countries. MSI's Arab World Senior Programmes Manager then discussed with the Centre Manager the sort of STF one would expect to develop in the Sana'a Centre. MSI's Arab World Programme Manager examined guidelines for the management of a STF for MSI's programme in Bangladesh and the criteria used for the development of STFs in MSI's programmes in Mozambique and Madagascar.

It was agreed between MSI and the local Committee that the Committee would refer a fixed number of clients for STF to the Centre each month. MSI had imposed a restriction on the numbers referred for STF, as its experience of operating STFs globally

had highlighted that the aims of a project can lose focus if a community is able to access unlimited free or subsidised services.

4.10 Summary

In describing the processes involved in the establishment of MSI's Sana'a Centre, this Chapter has highlighted the impact of the programming environment, MSI expectations and the availability of donor financing, in the design of the Centre. In addition, this Chapter highlights a further influence upon the project, that of the special relationship developed between MSI and the Minister of Health. Whilst this speeded up the process of the development of MSI's Centre it also placed MSI at the heart of Yemen's political arena and in so doing added a further, unique dimension to the project's development – MSI was now inextricably linked to Yemen's political hierarchy but also needed to retain autonomy to ensure that its programme was established on a sound footing and to reduce its vulnerability in the event of a change in the political environment and more specifically a change of political leadership within the MoH. One would expect from the processes described above that MSI had ensured that this could be achieved.

5. A survey to describe the characteristics of demand for family planning and reproductive health services in urban Sana'a

5.1 Introduction

The previous two chapters have described the MSI contextual framework within which MSI's Sana'a Centre was developed and the processes which led to its opening. An important part of the process of developing an effective Centre was a survey which aimed first, to identify the characteristics of the demand for family planning and reproductive health services in urban Sana'a; and second, to identify the social and cultural obstacles to the effective delivery of appropriate services. This Chapter describes the design and results of this survey and, through use of ancillary data, places it in a national context.

Two sources of data are used in this Chapter. First, a household survey of 284 women undertaken by MSI in August 1998 in a poor area of urban Sana'a. The target population was married women aged 14-45 within a 30 minute walk of MSI's Sana'a Centre and the aim was to obtain information on past and current experience of childbearing; contraceptive use; fertility desires; on general reproductive health and its service delivery; on attitudes to aspects of the supply of services; and on the sociodemographic characteristics of the respondents.

The second data source is the 1997 Demographic and Maternal and Child Health survey (YDMCHS, 1997) which is used as a comparator for the MSI Sana'a survey. The decision to compare the MSI data with the national picture, rather than a sub-national sample such as an urban sample was made because it was thought essential to place the target population for the Centre in a national context. One would expect that in an urban area of the capital city there would be, for example, higher levels of education and indeed contraceptive use. The comparisons here are made to gauge the extent of such differences to give some insight into the potential for subsequent expansion of the MSI Yemen programme. Where appropriate, a comparison has also

been made between the MSI data and the YDMCHS (1997) urban sample, although again, it should be noted that the YDMCHS (1997) urban data will reflect a more diversified background and socioeconomic characteristics of respondents because of the relatively special nature of an urban area of a capital city.

5.2 Survey Overview

The presentation of the results of the survey focuses on presenting the most important data on the demographic and health characteristics of the sample households. These data provide an insight into perceived barriers to uptake of services, for example, cultural and traditional aspects; past and current methods of family planning used in the community and perceptions of various key health indicators.

The data are complementary to the, albeit limited, experience gained by the MSI Sana'a Centre since its opening in June 1998 and therefore provide a basis from which MSI Sana'a could ensure that its services were accessible, affordable and appropriate for its target population; assist in the development of the most cost-effective strategy for the delivery of quality reproductive healthcare services and could inform the Centre's health education and promotional activities.

5.2.1 Survey Design

This section describes the design of the survey. There were two main objectives:

- To inform decisions regarding the range of services to be provided and the optimum strategy with which to deliver them.

- To provide a baseline from which ongoing monitoring and evaluation of the project could be measured⁵.

The survey was a structured interview survey. The design was based on the conceptual framework proposed by the USAID funded Evaluation Project (Buckner et al, 1995). This framework argues that as societies develop, both economically and socioculturally, their uptake of family planning and general levels of reproductive health will increase regardless of the introduction of an intervention such as a reproductive healthcare centre. Therefore, to measure the impact of the introduction of a reproductive healthcare centre properly it is necessary to control for changes in the demographic and socioeconomic circumstances of the local population. To be able to do this requires that longitudinal data are collected from the same communities. Therefore a clustered design was developed for this survey as the follow-up survey will take place in the same communities.

A caveat is important at this point. This thesis is concerned with the setting up and initial development of MSI's Sana'a Centre and it is outwith the scope of this thesis to address the follow-up survey which will take place in late 2000 or 2001.

This thesis is concerned only with the results of the initial survey undertaken in 1998.

The two neighbourhoods of Safia al Sharqia (population 55,142) and Kuliat al Shorta (population 18,469) were selected for the MSI survey. The selection of the two neighbourhoods was based on a number of factors; both areas are adjacent to the Centre; clients attend the Centre from these neighbourhoods; the socioeconomic characteristics of the population are varied; the total population of the two areas presented sufficiently large enough catchment areas for MSI initially to focus its promotional efforts so as to develop a reasonable client caseload.

⁵ It should be noted that the specific use of the survey for monitoring and evaluation, namely through comparison with a follow-up survey two to three years after this survey, is not within the scope of this thesis.

A questionnaire was developed which, as noted above, aimed to obtain information on past and current experience of childbearing; contraceptive usage and general reproductive health seeking behaviour, together with future intentions. The questionnaire had a number of questions which would be asked on many similar studies around the world and a number, for example on alternative services, which are specific to Sana'a. The questionnaire was finalised after a small pilot survey. The pilot survey did not result in any major changes to the questionnaire, which is included in Appendix 2.

The fieldwork took place during July 1998. A fieldwork team was put together which comprised the two health educators from the MSI Centre, three students from the University of Sana'a's Empirical Research and Womens' Studies Centre and one research supervisor. Training of the fieldwork team, in both how to carry out the interview and how to conduct the sample, was undertaken by MSI's consultant to the Sana'a Centre and took place over four days. Preparatory work was carried out with the Central Statistical Office (CSO) to gather the census information and maps needed to develop an appropriate sampling strategy.

The strategy was to undertake a cluster sample within each of the two areas. Six clusters were chosen for Safia al Sharqia and three for Kuliat al Shorta. A cluster constituted a block (*al hara*) and two members of the fieldwork team were trained by the CSO on how to identify the borders of a block. Then, the geographic centre of the block was identified and systematic sampling was undertaken within each block in order to achieve a representative sample of each neighbourhood. The quota was obtained from the CSO, who used census data to identify the age distribution of women in each of the areas.

Within each household all women between 15 and 45 years of age were interviewed. The target sample was a little over 400 women of reproductive age and it was expected that a number of these would be excluded from the analysis because they had never

been married. The questionnaires were checked in the field and the data entered into a database. The statistical analyses in this thesis use standard univariate statistics.

The analysis of the MSI Sana'a survey on current use and those factors relating to fertility is restricted to the 254 currently married women aged 15-45. This is because in a society such as Yemen, demand for family planning and reproductive healthcare will be exclusively among those women who are currently married. Section 5.2, however, which covers the background characteristics of the respondents, looks at the entire sample of ever married women (with a sample size of 284) and compares this ever married sample with the YDMCHS (1997) survey. Ever but not currently married women are included with currently married women in these analyses because, although they may not have a need for family planning they may have a need for reproductive health services and would not be excluded, culturally, from seeking them.

A note on the reason to exclude the never married sample is important. Whilst there may be a need for reproductive healthcare among never married women it is extremely unlikely that there would be a demand either currently or in the medium term. This is because in a society such as Yemen, these women would never attend a clinic to seek reproductive healthcare services.

5.2.2 Survey Evaluation

Following completion of the survey an assessment of the quality of data collection was undertaken by MSI. Although a few problems were experienced during the fieldwork, it was not felt that they affected the validity or quality of the survey, which was felt to be of a high standard. A number of these problems are highlighted below:

First, individual interviewers felt that some questions were problematic for some women, although no question stood out as being a significant problem for women in general. For example, in answering Question 15a, 'Do you know of any ways that couples can use to prevent or delay pregnancy?', some women were initially reluctant

to admit that they knew of a method of family planning. By day two of the survey this had been recognised by the team, and the question was re-phrased and expanded to: 'Have you heard of any ways to prevent pregnancy, for example, what a neighbour or friend might have used, and not necessarily what you have used ?'.

In addition, a number of conflicts occurred within the research team, although these were confined to general personality conflicts which do not appear to have compromised the quality of the data.

Overall, a total of 97% of the targeted interviewees were interviewed, which is considered to be an excellent response rate.

5.3 Background Characteristics of Respondents

This section presents information on selected socioeconomic characteristics of individual survey respondents namely age, education and participation in the labour force. This background information is useful for understanding the factors which affect the reproductive and contraceptive use behaviour of survey respondents.

5.3.1 Educational Attainment

The educational attainment of the survey respondents is important because, as highlighted in Chapter 2, educational attainment is related to many demographic and health outcomes including reproductive health behaviour, contraceptive use, hygiene practices, health of children and status of women.

Table 5.1 compares the distribution of ever married women by highest level of education attended according to age for the MSI Sana'a survey and the YDMCHS (1997). Initially consider the distribution by age for the MSI data alone.

This is illustrated in Figure 5.1 which shows that just over half of the women surveyed (54%) are below age 30; and 35% are below 25. Overall the level of education among

women in the MSI Sana'a survey is relatively high with 59% having received some education of whom 23% had completed primary education, 13% preparatory and 14% secondary or higher education.

In comparing the MSI Sana'a survey data with the YDMCHS (1997) data, Table 5.1 reveals that, overall, 84% of respondents in the YDMCHS (1997) have received no education or are illiterate. Respondents classified as illiterate in the YDMCHS (1997) include respondents who have received no education and those who have received a little education but did not learn to read or write. However, when the respondents from the YDMCHS (1997) are restricted to those who live in urban areas, 64% were illiterate.

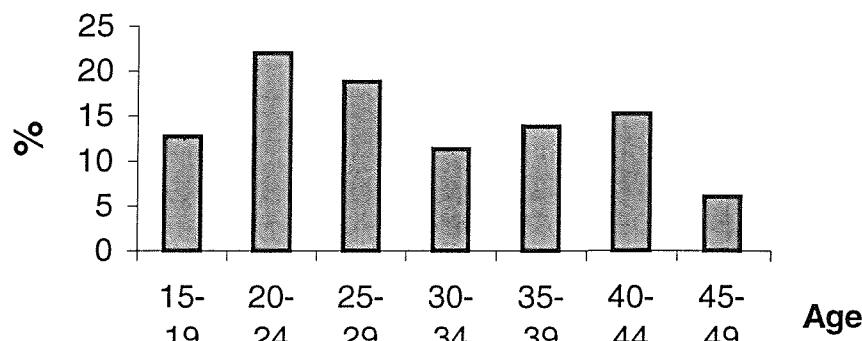
One would expect this variation in educational levels between the two surveys for two reasons a) area of residence of the survey respondents. The MSI household survey was undertaken in urban Sana'a, while 75% of respondents in YDMCHS (1997) live in rural areas and 25% in urban areas. Women living in urban areas are more likely to be educated than those in rural areas due to greater

Table 5.1 Percentage distribution of ever married women by highest level of education attended, according to age.

	Age Group	Level of education (%)					Total (%)	Number of women
		No educn./ illiterate	Literate/ Literacy Class	Primary	Preparatory	Secondary +		
MSI	15-19	5.6	2.8	38.9	33.3	19.4	100.0	36
DHS ¹	15-19	70.7	10.0	13.1	4.4	1.8	100.0	1,110
MSI	20-24	15.9	9.5	34.9	17.5	22.3	100.0	63
DHS	20-24	73.7	8.0	11.4	3.7	3.1	100.0	1,992
MSI	25-29	26.4	11.3	26.4	13.2	22.6	100.0	53
DHS	25-29	82.4	6.3	6.6	1.3	3.4	100.0	1,943
MSI	30-34	43.8	15.6	15.6	6.3	18.8	100.0	32
DHS	30-34	86.5	4.7	5.0	1.4	2.5	100.0	1,680
MSI	35-39	65.0	7.5	15.0	7.5	5.0	100.0	40
DHS	35-39	91.3	3.4	2.5	1.0	1.8	100.0	1,766
MSI	40-44	81.4	9.3	7.0	2.3	0.0	100.0	43
DHS	40-44	94.9	2.5	0.7	0.5	1.4	100.0	1,091
MSI	45-49	88.2	11.8	0.0	0.0	0.0	100.0	17
DHS	45-49	97.2	1.5	0.3	0.5	0.5	100.0	833
Total MSI		40.9	9.5	22.5	12.7	14.4	100.0	284
Total DHS		84.2	5.5	6.1	1.9	2.3	100.0	10,414
DHS Urban		63.7	9.6	13.7	5.3	7.7	100.0	2,620

¹ Data extracted from Table 2.10, YDMCHS (1997). Data are for whole sample including both urban and rural dwellers.

Figure 5.1: Age Distribution: MSI Sana'a Survey



accessibility to school and less likelihood of being required to help in the family home than those women living in rural areas. YDMCHS (1997) shows that, overall, 12.6% of rural dwellers state 'family need help' as a reason for not attending school, in comparison to 5.4% of urban dwellers; and b) urban dwellers in Yemen's capital city, Sana'a are more likely still to have greater access to education than women residing in other urban areas of Yemen.

As well as these very low levels of female educational attainment there is a high disparity between women and men. The 1994 Census (CSO, 1996) shows that throughout Yemen, female school enrolment rates are lower than for males – although it should be said that the differences are lowest in urban Sana'a.

As expected, highest level of education decreases with increasing age of the respondent. Table 5.1 shows that for the MSI survey the percentage of women under 20 years of age who have completed primary school is more than twice the percentage among women aged 30-34 (39% and 16% respectively). A comparison with YDMCHS (1997) data reveals a similar trend; 13% of women under 20 have completed primary school education compared with 5% among women age 30-34. This is not surprising and indicates that enrolment rates are increasing among younger women. It should also be noted that those older women without any education will still have a need for

reproductive healthcare. However, they will be likely, as pointed out by Diamond, Newby and Varle (1999), not to be empowered to seek such healthcare to the same extent as their more educated counterparts and there is thus a need for services to be targeted at such people.

5.3.2 Employment status

The MSI Sana'a survey collected information from women regarding their current work status. Women were asked whether they were currently working or not. Current work status can be used as a measure of the status of women, particularly regarding her independence in decision making and control over financial resources. Information regarding the employment status of individual survey respondents is also useful in determining at which times of day it is most convenient for women to access reproductive healthcare services, either alone or with her husband.

Table 5.2 contains the distribution of ever married women by employment status according to age for the MSI Sana'a survey and for YDMCHS (1997).

Data from the MSI Sana'a survey contained in Table 5.2 show that, overall, 11% of respondents were working at the time of the survey. A comparison of the current work status of the MSI survey and the urban respondents in YDMCHS (1997) in Table 5.2 reveals little difference (11% and 8% respectively). However comparing the MSI Sana'a data with both urban and rural YDMCHS (1997) data reveal a much larger difference between those currently employed (11% and 27% respectively) which can be attributed to the larger numbers of rural women working. Many of these women will be working in subsistence agriculture for either their immediate or extended family. It is also important to note that in rural areas childbearing and working is much more expected than in urban areas.

Table 5.2 Percentage distribution of ever married women currently employed according to age.

Age Group	MSI Sana'a % working	MSI Sana'a number of women	YDMCHS 1997 ^{1,2} % working	YDMCHS 1997 number of women
15 - 19	0.0	36	23.3	1,110
20 - 24	9.7	62	21.8	1,992
25 - 29	20.7	53	24.5	1,943
30 - 34	6.3	32	26.3	1,680
35 - 39	20.5	39	29.3	1,766
40 - 44	9.3	43	34.9	1,091
45 - 49	0.0	17	34.5	833
Total	11.0	282	26.8	10,414
Urban Sample, YDMCHS			8.0	2,620

¹Table 2.14, YDMCHS (1997). Data are for whole sample including both urban and rural dwellers.

² YDMCHS data include those women currently employed either: 5+ days per week; less than 5 days per week; or seasonally. They do not include those women who had worked in the last 12 months (prior to YDMCHS, 1997) or who reported that they worked occasionally.

It could be expected from the MSI Sana'a survey that the majority of working respondents would be working for cash, regardless of their level of education. In comparing the employment status of women living in both rural and urban areas, YDMCHS (1997) reveals that women living in rural areas are more likely to be employed by a relative (68%), and the majority do not earn cash (67%). Urban women, however, are less likely to work for relatives and are more likely to be paid in cash than rural women. It would be reasonable to assume, therefore, that within the household those urban women who are working are more likely to have some independence in decision making and control over their financial resources than rural women.

Table 5.2 also shows that there appears to be no real pattern of employment status by age. However, the lower proportion of working young women highlighted in both the MSI Sana'a survey and to a lesser extent in YDMCHS (1997) may be related to their greater childcare responsibilities.

It is encouraging to note, as one would expect, that the probability of working is higher as education levels increase: the MSI Sana'a data reveal that of those women who have completed at least secondary education, 33% were working, in contrast to only 7% of women who have received no education.

According to level of education, YDMCHS (1997) reports that illiterate women and highly educated women are the most likely to be employed: 29% of women who are illiterate and 46% of women who had completed at least secondary education are currently working.

The differentials between the MSI Sana'a data and the YDMCHS (1997)⁶ data regarding the number of ever married women who have completed secondary education or higher and who are currently working (33% and 45% respectively) can be attributed partly to the fact that the YDMCHS (1997) data will reflect the national picture

⁶ Source: YDMCHS (1997), Table 2.14

and thus includes urban areas such as Aden where secondary education and above were relatively well developed under the former PDRY government.

5.4 Fertility

One of the main objectives of the MSI Sana'a survey was to gather information on fertility and child-bearing from women living within close proximity of the MSI Centre. This section considers patterns of childbearing

Table 5.3 contains the distribution of currently married women by number of children ever born (CEB) and mean number of children ever born and living according to age for the MSI Sana'a survey and YDMCHS (1997). It reveals high levels of fertility and infant mortality in both surveys.

Table 5.3 Percentage distribution of currently married women by number of children ever born (CEB) by age.

	Age Group	Children ever born												Total %	Total number of women	Mean no. of CEB ²	Mean no. of living children
		0	1	2	3	4	5	6	7	8	9	10+	%				
MSI	15-19	47.1	26.5	17.7	5.9	0.0	2.9	0.0	0.0	0.0	0.0	0.0	100.0	34	0.9	0.9	
DHS ¹	15-19	54.9	29.7	11.8	3.0	0.4	0.2	0.0	0.0	0.0	0.0	0.0	100.0	1,063	0.65	0.56	
MSI	20-24	21.1	35.1	21.1	14.0	7.0	1.8	0.0	0.0	0.0	0.0	0.0	100.0	57	1.6	1.5	
DHS	20-24	15.4	25.1	28.0	17.0	9.1	3.5	1.5	0.3	0.0	0.0	0.0	100.0	1,902	1.97	1.74	
MSI	25-29	4.3	6.4	21.3	19.2	17.0	17.0	8.5	2.1	0.0	4.3	0.0	100.0	47	3.6	3.4	
DHS	25-29	5.0	6.9	13.3	16.9	18.4	16.5	10.3	6.6	3.9	1.5	0.7	100.0	1,855	4.0	3.48	
MSI	30-34	0.0	0.0	10.0	10.0	6.7	13.3	20.0	10.0	6.7	3.3	20.0	100.0	30	6.3	5.9	
DHS	30-34	3.2	2.3	4.5	8.4	10.7	12.5	16.2	14.6	11.9	7.5	8.3	100.0	1,585	5.94	5.10	
MSI	35-39	5.3	0.0	7.9	2.6	5.3	10.5	18.4	7.9	10.5	15.8	15.8	100.0	38	6.7	5.7	
DHS	35-39	1.6	1.4	2.2	4.4	5.7	8.2	11.9	13.3	15.6	11.7	24.0	100.0	1,637	7.39	6.25	
MSI	40-44	0.0	2.9	2.9	5.7	0.0	5.7	8.6	14.3	25.7	20.0	14.3	100.0	35	7.5	6.7	
DHS	40-44	2.2	1.3	1.5	2.5	4.3	5.1	7.2	10.3	14.0	13.0	38.6	100.0	999	8.38	6.91	
MSI	45-49	0.0	0.0	0.0	0.0	0.0	23.1	7.7	0.0	7.7	15.4	46.2	100.0	13	8.5	7.3	
DHS	45-49	1.4	0.2	1.0	2.5	3.5	3.7	5.3	8.9	12.4	15.2	45.8	100.0	746	9.06	7.27	
Total MSI		12.6	13.0	13.8	9.8	6.3	9.1	8.3	4.7	6.3	7.1	9.1	100.0	254	4.4	3.9	
Total DHS		11.0	10.2	10.6	9.4	8.7	8.0	8.0	7.6	7.7	5.9	12.9	100.0	9,786	4.95	4.19	

¹Table 3.6, YDMCHS (1997). Data are for whole sample including both urban and rural dwellers.

² CEB refers to Children Ever Born

Data from the MSI Sana'a survey in Table 5.3 resemble very closely the national picture. The mean number of CEB rises above six by the time women reach their thirties, increasing to 8.5 at age 45+. YDMCHS (1997) show that at ages over 30, the mean number of CEB reaches 6.0, rising to 8.4 at age 45-49. In both surveys, the mean number of births increases with age, reflecting the natural family growth process and shows that a substantial proportion of women continue to bear children in their later years.

The data show that childbearing begins early for many Yemeni women. The MSI Sana'a data highlight that 53% of respondents aged 15-19 had given birth and whilst the numbers in the sample are small they do reflect the national picture. YDMCHS (1997) reports that 45% of currently married women below the age of 20 had given birth. YDMCHS (1997) also reveals that one in six women under age 20 either had been pregnant in the past, was a mother, or was currently pregnant with her first child.

The last two columns in Table 5.3 show the mean number of living children from both the MSI Sana'a and YDMCHS (1997) surveys. In both surveys the difference between the number of CEB and the number who are still living is small among women aged under 30, but increases for those aged 30 and above. This might indicate that, primarily, higher levels of infant mortality are likely to be associated with higher parity and generally are likely to occur among older mothers. An alternative explanation could, of course, be that infant mortality has fallen. However, whilst infant mortality levels have fallen between the YDMCHS 1991/92 and the YDMCHS (1997), high levels of infant mortality remain. This is a powerful indication of the need for improved reproductive and child healthcare.

Table 5.4 shows, for the MSI Sana'a data, the distribution of currently married women by CEB, by level of education and age. As one would expect, the mean CEB increases with age. In addition, the mean number of CEB differs widely by level of education. As the educational level of women

Table 5.4 MSI Sana'a survey percentage distribution of currently married women by number of children ever born (CEB) and mean number of CEB and living according to age and level of education.

Age and level of education	Children ever born %											Total %	Number of women	Mean number of CEB	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+				
Age															
15-19	47.1	26.5	17.7	5.9	0.0	2.9	0.0	0.0	0.0	0.0	0.0	100.0	34	0.9	0.9
20-24	21.1	35.1	21.1	14.0	7.0	1.8	0.0	0.0	0.0	0.0	0.0	100.0	57	1.6	1.5
25-29	4.3	6.4	21.3	19.2	17.0	17.0	8.5	2.1	0.0	4.3	0.0	100.0	47	3.6	3.4
30-34	0.0	0.0	10.0	10.0	6.7	13.3	20.0	10.0	6.7	3.3	20.0	100.0	30	6.3	5.9
35-39	5.3	0.0	7.9	2.6	5.3	10.5	18.4	7.9	10.5	15.8	15.8	100.0	38	6.7	5.7
40-44	0.0	2.9	2.9	5.7	0.0	5.7	8.6	14.3	25.7	20.0	14.3	100.0	35	7.5	6.7
45-49	0.0	0.0	0.0	0.0	0.0	23.1	7.7	0.0	7.7	15.4	46.2	100.0	13	8.5	7.3
Level of education															
No education	0.0	4.1	4.1	8.2	4.1	9.2	13.3	6.1	13.3	17.4	20.4	100.0	98	7.1	6.2
Literacy class	8.0	8.0	16.0	8.0	0.0	32.0	8.0	0.0	8.0	0.0	12.0	100.0	25	4.6	4.3
Primary School	19.3	19.3	21.1	12.3	7.0	5.3	5.3	7.0	1.8	1.8	0.0	100.0	57	2.6	2.5
Preparatory	23.5	32.4	11.8	5.9	11.8	5.9	2.9	5.9	0.0	0.0	0.0	100.0	34	2.1	1.9
Secondary+	27.0	12.0	12.0	15.0	10.0	2.5	5.0	0.0	0.0	0.0	0.0	100.0	40		
Total	12.6	13.0	13.8	9.8	6.3	9.1	8.3	4.7	6.3	7.1	9.1	100.0	254	4.4	3.9

rises, the mean number of CEB decreases. The mean number of CEB is 7.1 births for uneducated women, or 2.5 more births than for women who have completed literacy class (4.6 births). However the mean number of CEB between uneducated women and those with at least primary education reveals a very marked difference of 7.1 births and 2.1 births respectively. It should be noted that some of this difference will reflect the difference in the distribution of age between uneducated and educated respondents as highlighted earlier in this Chapter. However it is likely that much of the difference will reflect delayed marriage amongst those with education (for example, YDMCHS (1997) reports that the median age at first marriage for women with no education is 16, whilst for those women who have completed primary education it is two years higher at 18 years) and also changing desired family size which, as discussed in Chapter 2, results from increased education.

5.5 Family Planning

This section describes the data collected on the respondents' knowledge of family planning methods and the sources where they can be obtained, their use of contraception and their sources of information about family planning. Data on mode of transportation to a family planning facility and the suitability of its location and quality of care are also examined in this section. This information is of particular use for programme managers as analyses of the data highlight some of the social and cultural barriers to the uptake of family planning. For example, from the MSI Sana'a survey, the information on the MSI Sana'a Centre's target population could assist the Centre in its efforts to provide improved access to appropriate, effective and safe methods of family planning.

5.5.1 Knowledge of Family Planning

Information was sought about six modern methods – the pill, IUD, injectables, vaginal methods (diaphragm, suppositories) and the condom – as well as four traditional

methods – withdrawal, abstinence, rhythm and breastfeeding. Other methods mentioned by respondents were also recorded.

Table 5.5 contains the MSI Sana'a survey and YDMCHS (1997) distributions of currently married women by contraceptive knowledge and reveals that knowledge of family planning methods is high both nationally and amongst the MSI Sana'a target community.

Data from the MSI survey highlight that just over 98% of women have heard of at least one method of family planning and the same percentage had heard of a modern method of family planning. The most widely known method was the pill, known to almost 98% of women. 96% of women had heard of the IUD, 60% knew of the injectable and a little under 60% the condom. Of the vaginal methods, 44% knew of suppositories and 20% knew of diaphragms.

Data from the MSI survey regarding knowledge of traditional methods highlight that 84% of women had heard of at least one traditional method. The most widely known traditional method was withdrawal, known to 64% of women. In addition, 49% had heard of the rhythm method, 45% knew about breastfeeding, 15% cited abstinence and 20% 'other' methods.

In contrast data from the YDMCHS (1997) in Table 5.5 show that 84% of currently married women had heard of at least one method of family planning and 79% a modern method of contraception. As in the MSI Sana'a survey, the pill is the most widely known method, known to around 75% of currently married women. About two-thirds of women have heard of the IUD and 56% know about injectables. Knowledge of the condom was much lower at 24%.

Table 5.5 Distribution of currently married women by contraceptive knowledge.

Contraceptive method	Know method %	
	MSI	YDMCHS ¹
Any method	98.4	83.8
Any modern method	98.0	79.2
Pill	97.9	76.1
IUD	96.4	64.4
Injectables	61.2	55.7
Condom	57.4	24.1 ³
Diaphragm	20.0	19.2
Suppositories	43.6	Not asked
Any traditional method	84.3	65.4
Withdrawal	64.0	28.6
Abstinence	15.2	Not asked
Rhythm	57.2	32.6
Breastfeeding	44.8	61.0
Others ²	20.4	12.7
Total number of women	254	9,786

¹Table 4.1, YDMCHS (1997). Data are for whole sample including both urban and rural dwellers.

²Other traditional methods include: herbs, Arab medicine, soap and salt.

³YDMCHS (1997) data include diaphragm, foam, jelly

According to the YDMCHS (1997) around 65% of women knew of a traditional method, mainly breast-feeding (61%), while the rhythm method and withdrawal are known by much smaller proportions of respondents (33% and 29% respectively).

There is a good deal of variation in level of contraceptive knowledge by place of residence. According to YDMCHS (1997) around 96% of urban women knew of at least one modern method compared with around 75% of rural women. The variation in results between the MSI Sana'a survey and YDMCHS (1997) is, then, to be expected as the YDMCHS (1997) include both rural and urban dwellers. The YDMCHS (1997) data presented in Table 5.5 indicate a substantial increase in knowledge of contraceptive methods among currently married women since the 1991-92 YDMCHS. In the 1991-92 YDMCHS only 60% of women reported having heard of any method of family planning and 53% of a modern method of family planning.

5.5.2 Sources of contraceptive knowledge

Table 5.6 shows the percentage of currently married women from the MSI Sana'a survey who have heard of family planning methods from one or more sources, according to their age and level of education.

Overall, 86% of women had heard of a family planning method from friends or neighbours. The proportion of women who had heard of a family planning method from other sources was much lower. A total of 42% had heard of a method from other family members, 25% from a private health facility, 22% each from a government health facility and the media, 21% from their husband, 8% from their mother and 7% from their mother-in-law.

Across all age groups, friends or neighbours were the most likely source of information regarding a method of family planning. According to level of education, Table 5.6 reveals that, across all educational groups, friends or neighbours were the most likely source of information regarding a method of family planning. The second most likely source of information, across all educational levels, was other family members. These data emphasise the extent of word-of-mouth and family influences in the dissemination of information throughout the local community. In comparison, the highest percentage of women who had heard of a method of family planning through the media were those who had completed at least secondary education (44%). Interestingly, this group of women were also least likely (3.9%) to have heard of a method from their mother-in-law, which may reflect the fact that in urban Sana'a, educated couples are least likely to live as part of their extended family.

Table 5.6 MSI Sana'a survey: Percentage distribution of currently married women who have heard family planning methods from different sources according to their age and education

Age and level of education	Different sources (%)									Number of women
	Government health facility	Private health facility	Mother	Mother-in-law	Husband	Other family member	Friends/ neighbours	Media	Other sources	
Age										
15-19	12.5	9.4	12.5	15.6	15.6	40.6	62.5	9.4	6.3	32
20-24	17.5	22.8	19.3	12.3	21.1	45.6	82.5	29.8	0.0	57
25-29	27.6	27.7	6.4	4.3	23.4	44.7	91.5	23.4	4.3	47
30-34	16.7	36.7	3.3	3.3	33.3	33.3	86.7	23.3	3.3	30
35-39	25.0	27.8	2.8	2.8	16.7	44.4	94.4	19.4	0.0	36
40-44	28.6	28.6	0.0	0.0	20.0	42.9	94.3	20.0	2.9	35
45-49	23.1	23.1	7.7	7.7	7.7	38.5	92.3	23.1	7.7	13
Level of education										
No education	26.0	25.0	2.1	4.2	24.0	38.5	94.8	17.7	2.1	96
Literacy class	28.0	40.0	4.0	12.0	20.0	52.0	92.0	20.0	0.0	25
Primary school	15.8	21.1	15.8	10.5	22.8	35.1	80.7	22.8	3.5	57
Preparatory school	15.1	27.3	18.2	9.1	12.1	39.4	72.7	9.1	3.0	33
Secondary+	20.5	20.5	11.5	3.9	17.9	58.9	79.5	43.5	15.4	39
Total	21.6	25.2	8.4	6.8	20.8	42.4	86.0	22.0	2.8	250

5.4.2.1 Knowledge of local sources of family planning services

Table 5.7 shows the proportion of currently married women from the MSI Sana'a survey who knew of a place nearby where family planning services are offered according to their age and education. Overall 52% of women could name a nearby source of family planning services.

Considering the distribution by age, the major point of note is that women aged 15 -19 were least likely to know of a nearby source of family planning services. Although, following marriage, they would want to conceive a child, it is worrying that they are not yet prepared for a more broader reproductive health.

It is also noteworthy that although knowledge of methods is high, knowledge of a nearby source of family planning (at 52%) is rather lower. This is a function both of lack of availability and lack of knowledge of local sources and is an indicator, potentially, of a need for services.

5.6 Use of Contraception

This section examines 'ever' and 'current' use of contraception. Whilst the major focus of this section is on 'current' use, 'ever' use is examined first in order to gain an insight into women's previous experience (if any), with both modern and traditional methods of contraception.

5.6.1 Ever Use of Contraception

Table 5.8 shows the proportion of currently married women who have ever used any contraceptive method according to age, for both the MSI Sana'a survey and YDMCHS (1997). In total, 68% of MSI Sana'a survey respondents had experience of using family planning. 53% had used a modern method, of which the pill had been used by 40% and the IUD by 34% of women respectively.

Table 5.7: MSI Sana'a survey: Percentage distribution of currently married women who know close by places where family planning services are offered according to their age and level of education

Age and level of education	Know nearby sources of family planning services (%)			Number of respondents
	Knows	Does not know	Total	
Age				
15-19	28.1	71.9	100.0	32
20-24	54.4	45.6	100.0	57
25-29	66.0	34.0	100.0	47
30-34	76.7	23.3	100.0	30
35-39	52.8	47.2	100.0	36
40-44	65.7	34.3	100.0	35
45-49	50.0	50.0	100.0	12
Level of education				
No education	61.1	39.0	100.0	95
Literacy class	60.0	40.0	100.0	25
Primary school	43.9	56.1	100.0	57
Preparatory school	60.6	39.4	100.0	33
Secondary+	61.5	38.5	100.0	39
Total	52.2	47.8	100.0	249

As Table 5.8 highlights, ever use of other modern methods dropped significantly. Experience of a traditional method of contraception was reported by 32% of women, of whom the highest proportion, 18%, had used withdrawal and 16% breastfeeding.

The YDMCHS (1997) data in Table 5.8 show that 39% of currently married women had used a method to regulate their fertility at some point in their lives. Of these, 23% had used a modern method, a substantial increase since the 1991-92 demographic and maternal and child health survey (CSO, 1994) which reported a 13% rate of ever use. Pill use was reported by 16% and IUD use by 7%.

The MSI Sana'a data indicate that 32% of women had used a traditional method of family planning of whom 18% had used withdrawal; and 16% breastfeeding. Other traditional methods were used markedly less by women.

According to YDMCHS (1997), a quarter of currently married women had used traditional methods, of whom 20% had used breastfeeding, overall the most widely used method among YDMCHS (1997) respondents. It should be noted that breastfeeding is only an effective method of family planning if practised under frequent and intensive breastfeeding which delays the return of menses. The relatively short duration of postpartum amenorrhea in Yemen is related to breastfeeding patterns, especially the early introduction of supplemental foods. Exclusive breastfeeding is relatively rare in Yemen. Among infants under two months, only 32% receive nothing except breast milk. YDMCHS (1997) indicates that bottle feeding is common in Yemen among both breastfeeding and nonbreastfeeding children (40 percent and 48 percent respectively) due in part to the availability of cheap plastic bottles in small shops everywhere, even in remote villages.

The YDMCHS (1997) data indicate that mothers in urban areas and in the Coastal region are more likely to feed their children with a bottle than other mothers. Also, the practice of bottle feeding increases with mother's level of education. Inadequate feeding practices in urban areas may be related again to the easy availability of cheap bottles with nipples and the use of ready made baby foods.

Table 5.8 Distribution of currently married women who have ever used any contraceptive method, by age.

	Age	Any Method	Any modern method	Pill	IUD	Injectables	Condom	Other ²	Any traditional method	Withdrawal	Abstinence	Rhythm	Breast feeding	No. of respondents
MSI	15-19	37.5	26.5	18.8	18.8	0.0	3.1	0.0	11.8	3.1	0.0	3.1	6.3	34
DHS ¹	15-19	13.3	5.9	4.4	1.1	1.1	0.6	0.1	9.9	2.1	not asked	1.4	7.6	1,063
MSI	20-24	61.4	47.4	33.3	31.6	1.8	0.0	1.8	22.8	10.5	1.8	7.0	10.5	57
DHS	20-24	33.6	16.1	11.0	4.5	2.0	2.1	1.1	24.6	6.1		4.7	19.4	1,902
MSI	25-29	78.7	70.2	46.8	38.3	4.3	12.8	4.3	40.4	27.7	0.0	8.5	19.2	47
DHS	25-29	42.0	24.1	16.8	7.2	4.7	3.4	1.2	29.7	7.8		5.6	22.8	1,855
MSI	30-34	86.7	70.0	60.0	43.3	3.3	16.7	3.3	46.7	30.0	0.0	10.0	23.3	30
DHS	30-34	45.2	28.7	21.5	9.8	4.6	3.1	2.4	30.4	8.7		6.5	22.8	1,585
MSI	35-39	69.4	44.7	33.3	30.6	2.8	13.9	8.4	39.5	25.0	2.8	8.3	13.9	38
DHS	35-39	46.8	31.5	21.6	11.0	6.2	3.9	2.7	28.9	7.7		5.3	22.7	1,637
MSI	40-44	77.1	62.9	57.1	40.0	8.6	14.3	20.0	37.2	17.1	2.9	0.0	22.9	35
DHS	40-44	43.8	28.7	20.1	7.1	6.1	2.5	1.9	24.8	5.0		3.4	20.6	999
MSI	45-49	61.5	38.5	30.8	30.8	0.0	0.0	7.7	30.8	15.4	0.0	7.7	15.4	13
DHS	45-49	39.4	25.4	17.1	5.4	5.2	2.0	2.5	23.5	4.5		3.4	19.3	746
Total MSI		68.0	52.8	40.4	33.6	3.2	8.8	6.0	32.3	18.4	1.2	6.4	15.6	254
Total DHS		38.6	23.1	16.3	6.9	4.2	2.7	1.7	25.6	6.4	not asked	4.7	20.0	9,786

¹Table 4.3, YDMCHS (1997). Data are for whole sample including both urban and rural dwellers.

² Other include: MSI – Diaphragm and suppositories; YDMCHS – Diaphragm and Foam Jelly. Sterilisation (Male and Female) and implants are not included in this table as the percentages were extremely small.

One would expect the variation in ever use between the MSI Sana'a and YDMCHS (1997) data to be primarily the result of differentials in place of residence. In 1992, only 45% of the population had access to reproductive health services (CSO, 1994) as the predominantly rural population (currently around 75% of Yemen's population live in rural areas) live outside the catchment area of health facilities. Access to family planning services is still difficult especially in rural areas. In urban areas, 79% of current contraceptive users could access a family planning facility within an hour, while in rural areas for 40% of the population it took more than two hours (CSO, 1994). As noted by World Bank (1998), geographical accessibility is further hindered by high transport costs (a taxi ride in an emergency situation from a village to the closest hospital, 38 km away, may cost as much as 7% of average annual per capita expenditure).

According to Table 5.8, the age differentials in ever use among currently married women in the MSI Sana'a survey indicate that the rate is lowest for women under 20 (38%), increasing to 61% for women aged 20-24 and 79% for women aged 25-29. Ever use peaks at 87% for women aged 30-34 before declining thereafter. Ever use of a modern method is highest between the ages of 25-34 at 70%.

The age differentials in ever use of both modern and traditional methods of family planning among currently married women from YDMCHS (1997) indicate that the rate for women age 15-19 is only 13% increasing to 34% for women age 20-24, and 42% among women aged 25-29. Ever use peaks at 45% to 47% among women in their thirties before declining to 39% among women aged 45-49.

5.6.2 Current Use of Contraception

This section focuses on a comparison of current contraceptive use between the MSI Sana'a survey and the urban dwellers in YDMCHS (1997). Table 5.9 reveals that overall 43% of respondents in the MSI Sana'a survey are using a method of contraception in comparison to 36% in YDMCHS (1997). The variation between the two

surveys is most likely to be due to the fact that Sana'a is Yemen's capital city. Here, access to family planning, exposure to health education and freedom of movement for women would be expected to be greater than for urban women nationally some of whom would live in traditionally conservative urban areas of Yemen.

The MSI data in Table 5.9 indicate that in urban Sana'a use of a modern method is similar to the national picture presented by the urban data in YDMCHS (1997) (23% and 21% respectively). There were no significant differences in uptake of individual methods between the two surveys, with the exception of the IUD which was being currently used by 14% of MSI Sana'a survey respondents and 7% of YDMCHS (1997) respondents. One would assume that IUD usage would be higher in the capital city than in urban areas nationally due primarily to two factors i) a greater availability of the product either through public or private sector outlets and ii) a higher number of medical personnel trained in IUD insertion, particularly women.

It is interesting to compare the MSI Sana'a data on ever-use of the pill and IUD (Table 5.8) with current-use of these two methods. Current use of the IUD is almost double (14%) the number of women currently using the pill (8%), whereas ever-use of these two methods is IUD 34% and pill 40%. This may suggest more women are looking to prevent future births rather than to limit births. These figures may also suggest that

Table 5.9 Distribution of currently married women by contraceptive method currently used, according to place of residence

	Any method	Modern method (%)					Traditional method (%)						Other ²	No of respondents
		Any modern method	Pill	Injectable	IUD	Condom	Any traditional method	With-drawal	Abstinence	Rhythm	Breast feeding			
MSI	43.2	23.0	7.7	0.4	13.7	1.2	20.2	8.1	0.8	2.0	4.4	4.8	248	
DHS ¹	36.0	21.2	9.2	1.0	7.3	0.8	14.5	4.3	not asked	3.1	7.2	0.6	2,427	

1 Table 4.7, YDMCHS(1997) data refer to urban dwellers only.

2 Other traditional methods include: herb, Arab medicine, soap and salt.

women need to have some knowledge of what is offered. Women sometimes do not choose, they simply take what is offered. Family planning counselling is weak in Yemen and has been prioritised by the MoH for improvement. This is also, of course, a key area to be addressed in the post Cairo agenda.

Table 5.9 highlights that use of a traditional method of contraception is higher amongst MSI Sana'a survey respondents than amongst urban dwellers nationally (20% and 15% respectively). It is possible that this could reflect a demand to delay or stop having children which is starting in a capital city and may diffuse first into other urban areas and then to rural areas. It should be noted that in other Islamic countries, for example Iran, initial demand for family planning has been manifested through use of traditional methods in urban areas (Raftery, Lewis and Aghajanian, 1996). This is a very interesting result and indicates a possible unmet demand for modern methods.

According to the MSI data, the most widely used traditional method is withdrawal (8%) in comparison with YDMCHS (1997) where breastfeeding is the most widely practised traditional method, used by 7% of respondents. Breastfeeding is practised by 4% of MSI Sana'a survey respondents.

Comparing the MSI survey with the entire national picture, Table 5.10 shows the distribution of currently married women by contraceptive method currently used, according to age for both MSI Sana'a and YDMCHS (1997) data. As expected, it shows that, overall, current contraceptive use amongst MSI Sana'a survey respondents was significantly higher than YDMCHS (1997) at 43% and 21% respectively. Again, area of residence is likely to be the primary reason for the variation between the two surveys presented in Table 5.10, as a large difference in overall contraceptive prevalence is observed in the YDMCHS (1997) between urban and rural areas (36% and 16% respectively).

Table 5.10 Percentage distribution of currently married women by contraceptive method currently used, according to age.

	Age	Any method %	Modern Method					Traditional method							Total %	No. of respondents
			Any modern method %	Pill %	IUD %	Injectables %	Condom %	Any traditional method %	Withdrawal %	Abstinence %	Rhythm %	Breastfeeding %	Other ² %			
MSI	15-19	31.3	21.9	6.3	15.6	0.0	0.0	9.4	0.0	0.0	3.1	6.3	0.0		32	
DHS ¹	15-19	8.6	2.7	1.2	0.8	0.5	0.1	6.0	0.8	not asked	0.1	5.1	0.0	100.0	1,063	
MSI	20-24	28.1	17.9	3.6	14.3	0.0	0.0	8.9	0.0	0.0	3.6	5.4	0.0		56	
DHS	20-24	18.7	6.1	3.0	2.5	0.4	0.1	12.6	1.3		0.9	10.3	0.2	100.0	1,902	
MSI	25-29	48.9	29.8	10.6	19.2	0.0	0.0	19.2	8.5	0.0	2.1	8.5	0.0		47	
DHS	25-29	24.2	9.8	4.1	3.4	1.6	0.4	14.2	2.1		1.4	10.7	0.4	100.0	1,855	
MSI	30-34	56.7	40.0	13.3	26.7	0.0	0.0	16.7	10.0	0.0	0.0	0.0	6.7		30	
DHS	30-34	24.8	12.1	5.6	4.0	1.1	0.2	12.7	1.9		1.8	9.0	0.2	100.0	1,585	
MSI	35-39	47.2	13.9	5.6	0.0	2.8	5.6	33.3	16.7	2.8	0.0	2.8	11.1		36	
DHS	35-39	25.8	14.7	5.4	4.3	1.8	0.5	10.9	2.2		1.3	7.4	0.3	100.0	1,637	
MSI	40-44	62.9	26.5	11.8	11.8	0.0	1.9	35.3	14.7	0.0	0.0	0.0	17.7		34	
DHS	40-44	21.5	12.9	3.4	2.7	1.4	0.3	8.0	1.6		1.4	5.0	1.2	100.0	999	
MSI	45-49	30.8	0.0	0.0	0.0	0.0	0.0	30.8	15.4	7.7	7.7	7.7	0.0		13	
DHS	45-49	14.7	9.9	2.4	1.6	1.1	0.0	4.8	1.9		0.6	2.2	0.2	100.0	746	
Total MSI		43.2	23.0	7.7	13.7	0.4	1.2	20.2	8.1	0.8	2.0	4.4	4.8		248	
Total DHS		20.8	9.8	3.8	3.0	1.2	0.3	10.8	1.7	not asked	1.1	8.0	0.4		9,786	

¹Table 4.6, YDMCHS (1997). Data refers to urban and rural dwellers.

²Other traditional methods include: Herbs, Arab medicine, soap and salt

To turn to modern methods, the MSI data reveal that, by five year age group, use of a modern method is significantly higher among women age 30-34 (40%) of whom 13% are using the pill and 27% the IUD. In comparison, use of a modern method among women aged under 25 is significantly less than that of women aged 30-34 (30%). This pattern would fit in with the pattern of contraceptive use in Islamic societies where pills and IUDs are used for prevention of births rather than simply for spacing future births.

Table 5.10 also shows that according to YDMCHS (1997), use of a modern method of contraception for both urban and rural dwellers, according to age, is highest amongst women aged 35-39 (15%) of whom 5% are using the pill and 4% the IUD.

Overall, use of a traditional method of contraception (Table 5.10) amongst Sana'a survey respondents is almost double that of YDMCHS (1997) respondents (20% and 11% respectively). When current use is broken down by age the MSI Sana'a data indicate that use of a traditional method is significantly higher among women aged 40-44 (35%) of whom 15% practice withdrawal and 18% other methods. In comparison, use of a traditional method amongst YDMCHS (1997) respondents is highest amongst women aged 25-29 (14%) of whom the highest percentage (11%) are breastfeeding. It should be noted that a comparison of the YDMCHS results in Tables 5.9 and 5.10 indicate the higher use of traditional methods in the urban areas.

Table 5.11 shows the distribution of currently married women by contraceptive method currently used, according to level of education for both the MSI Sana'a survey and YDMCHS (1997). It reveals pronounced differences in current use of contraception by level of education. As one would expect, overall, current contraceptive use is highest amongst those women who have secondary or higher education. MSI data presented in Table 5.11 show that 81% of women who have completed secondary education or higher are currently using a method of contraception. YDMCHS (1997) data reveal significant differences in current use of contraception by level of education. The proportion of currently married women using contraception rises from 18% among uneducated women to 32% among

Table 5.11 Percentage distribution of currently married women by contraceptive method currently used, according to level of education.

Level of Education		Any method %	Modern method					Traditional method								Total %	No of respondents
			Any modern method %	Pill %	IUD %	Inject-ables %	Condom %	Any traditional method %	With-drawal %	Abstinence %	Rhythm %	Breast feeding %	Other ² %	Total %			
No education	MSI	46.9	18.1	5.3	9.6	1.1	2.1	27.7	12.8	1.1	1.1	4.3	8.5	100.0	94		
	DHS ¹	18.1	8.0	2.6	2.3	1.3	0.2	9.9	1.2	not asked	0.6	8.1	0.3	100.0	8,248		
Literacy class	MSI	44.0	32.0	4.0	28.0	0.0	0.0	12.0	8.0	0.0	0.0	4.0	0.0	100.0	25		
	DHS	33.1	16.2	9.3	4.3	0.2	0.5	16.4	4.2		2.7	9.5	1.1	100.0	528		
Primary	MSI	33.3	17.5	3.5	12.3	0.0	1.8	15.8	5.3	1.8	1.8	5.3	1.8	100.0	57		
	DHS	32.2	17.4	10.0	5.6	0.6	0.3	14.8	4.5		4.1	6.2	0.0	100.0	595		
Preparatory	MSI	54.6	39.4	15.2	24.2	0.0	0.0	15.2	3.0	0.0	3.0	3.0	6.1	100.0	33		
	DHS	36.5	20.5	7.8	8.9	0.0	1.8	15.7	4.3		4.8	6.7	0.6	100.0	185		
Secondary +	MSI	80.8	46.2	30.8	15.4	0.0	0.0	34.6	11.6	0.0	11.6	7.7	3.9	100.0	39		
	DHS	49.0	31.4	15.5	12.8	0.5	1.6	17.6	4.3		8.4	4.8	0.0	100.0	230		
Total	MSI	43.2	23.0	7.7	13.7	0.4	1.2	20.2	8.1	0.8	2.0	4.4	4.8	100.0	248		
Total	DHS	20.8	9.8	3.8	3.0	1.2	0.1	10.8	1.7	not asked	1.1	8.0	0.4	100.0	9,786		

¹ Table 4.7, YDMCHS (1997). Data refer to urban and rural dwellers.

² Other traditional methods include; Herbs, Arab medicine, soap and salt.

those with primary school education, increasing to 49% for women with at least secondary education. The higher rate of current use amongst MSI Sana'a survey respondents is likely to be due to a number of factors related to area of residence including: greater accessibility to family planning outlets; broader method mix; and higher exposure to health education and family planning messages.

The MSI Sana'a data indicate that use of a modern method of contraception increases as level of education increases. A total of 46% of women with at least secondary education reported using a modern method of contraception, in contrast to 18% of women with no education. The MSI Sana'a data reflect the national trend as the YDMCHS (1997) data show that 31% of women with at least secondary education are currently using a modern method of contraception in contrast to 8% of those with no education. The MSI Sana'a data also reveal that use of a traditional method of contraception is highest among those women who have completed at least secondary education.

5.6.3 Reasons for never using contraception

The percentage distribution of currently married women from the MSI Sana'a survey according to the reasons for never having used any method of contraception by age and level of education is given in Table 5.12. Overall the main reason expressed by 41% of women for never use was because they wanted a child. Women under the age of 25 were more likely to cite wanting another child as a reason for never use than older women. One would expect that this is because they have more recently married and have not completed their desired family size. As level of education increases women were more likely to cite 'want a child' as a reason for never use and again this may reflect delayed age at marriage.

Overall, 13% of women reported that they had never used any method of contraception because of the attitudes of their husband or some other person (this figure reached 67% for women aged 30-34) while 11% of women were fatalistic as far as reasons for never use were concerned and around 10% cited side effects. It is possible that

improved counselling could reduce the proportion reporting side-effects and this could inform health education initiatives and counselling. Notably, only 3% of women cited cost as a reason for never having used contraception. It is also important that, in Yemen, although officially health services are free, as mentioned in Chapter 2, it is no secret that staff, due to their low salaries, solicit 'under the table' contributions from the patients (MoH, 1998). The vast majority of the population are therefore used to paying for health services.

5.6.4 Reasons for not currently using contraception

Table 5.13 shows, for the MSI Sana'a survey the percentage of currently married women according to their reasons for not currently using any method of contraception, according to their age and level of education. Overall, 49% of women cite 'other reasons' for not currently using any method of contraception and 16% say they are not using any contraception because they want another child. It should be noted that although the percentage reporting 'other reasons' is high the number of women who had previously used contraception and were not currently using contraception is small and hence the percentage reflects a small number of women. However the large percentage indicates that this is an area worthy of further indepth research.

5.7 Fertility Preferences

Information on fertility preferences is of fundamental importance for family planning programmes. Whether couples want to cease childbearing or to delay their next pregnancy determines the demand for family planning and the potential impact on the fertility rates. This section compares the MSI Sana'a and YDMCHS (1997) data on fertility preferences – both with regard to past reproductive behaviour and future

Table 5.12 MSI Sana'a survey: Percentage distribution of currently married women according to the reasons for never use of contraception according to their age and level of education

Age and level of education	Reasons for not used family planning methods (%)										Number of respondents
	Want child	Lack of knowledge	Husband/ others opposed	Costs too much	Side effects	Health concerns	Hard to obtain methods	Fatalistic	Others	Total	
Age											
15-19	50.0	5.0	5.0	0.0	0.0	0.0	0.0	5.0	35.0	100.0	20
20-24	54.6	0.0	4.6	4.6	13.6	4.6	0.0	9.1	9.1	100.0	22
25-29	20.0	10.0	30.0	0.0	0.0	0.0	0.0	20.0	20.0	100.0	10
30-34	33.3	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	100.0	3
35-39	36.4	0.0	18.2	9.1	18.2	0.0	0.0	18.2	0.0	100.0	11
40-44	25.0	12.5	0.0	0.0	12.5	0.0	12.5	12.6	25.0	100.0	8
45-49	20.0	20.0	20.0	0.0	20.0	0.0	0.0	20.0	0.0	100.0	5
Level of education											
No education	20.0	12.0	24.0	8.0	16.0	0.0	0.0	12.0	8.0	100.0	25
Literacy class	37.5	0.0	0.0	0.0	12.5	0.0	12.5	12.5	25.0	100.0	8
Primary school	57.7	0.0	11.5	0.0	3.9	3.9	0.0	11.5	11.5	100.0	26
Preparatory school	50.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	30.0	100.0	10
Secondary+	40.0	10.0	0.0	0.0	10.0	0.0	0.0	0.0	30.0	100.0	10
Total	40.5	5.1	12.7	2.5	8.9	1.3	1.3	11.4	16.5	100	79

childbearing intentions and timing. An examination of the data provides an insight into the unmet need for family planning and a measure of excess fertility and wanted total fertility rates.

5.7.1 Timing of last birth

The MSI Sana'a survey asked respondents about the planning status of prior births, i.e., whether a birth was planned (wanted then) or whether it was wanted later (mistimed). An examination of the data in this subsection provides an indicator as to how successfully couples control their fertility and the extent to which there is an unmet need for contraception.

Table 5.14 shows the proportion of currently married women by the planning status of their last child, according to the mother's age for both the MSI Sana'a survey and for YDMCHS (1997).

The MSI Sana'a survey data reveal that, overall, 65% of women would have preferred to have waited before conceiving their last child. Table 5.14 highlights that the planning status of births is affected by the age of the mother. In general, the older the mother the larger the percentage who would have preferred to have waited before their last conception. In the MSI Sana'a survey, around 70% of women aged 25-39 would have preferred to have delayed the timing of their last child and more than 86% of women aged 40 and older reported that they would have preferred to have waited before the conception of their last child.

To make the comparison with YDMCHS (1997) one needs to take into account the fact that YDMCHS (1997) asked the questions somewhat differently in that they distinguished between not wanted at all and wanted later. To make a realistic comparison, therefore, it is necessary to amalgamate the percentage wanted later with the percentage not wanted. It can be seen that, at older ages, there was a clear unmet need for contraception at the birth of the last child. The YDMCHS (1997) data indicate

Table 5.13 MSI Sana'a survey: Percentage distribution of currently married women according to the reasons for not currently using any contraception according to their age and level of education

Age and level of education	Reasons for not currently using any family planning method %								Number of respondent
	Want child	Husband/ others opposed	Side effects	Health concerns	Fatalistic	Infrequent sex	Others	Total	
Age									
15-19	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	2
20-24	33.3	5.6	5.6	5.6	0.0	0.0	50.0	100.0	18
25-29	7.1	7.1	7.1	7.1	7.1	7.1	57.1	100.0	14
30-34	0.0	0.0	22.2	22.2	0.0	11.1	44.4	100.0	9
35-39	25.0	0.0	12.5	0.0	0.0	0.0	62.5	100.0	8
40-44	0.0	0.0	16.7	16.7	16.7	16.7	33.3	100.0	6
45-49	25.0	25.1	0.0	0.0	25.0	25.0	0.0	100.0	4
Level of education									
No education	11.5	11.5	7.7	15.4	3.9	11.5	38.5	100.0	26
Literacy class	0.0	0.0	0.0	16.7	16.7	16.7	50.0	100.0	6
Primary school	16.7	0.0	16.7	0.0	8.3	0.0	58.3	100.0	12
Preparatory school	50.0	0.0	25.0	0.0	0.0	0.0	25.0	100.0	4
Secondary+	23.0	0.0	7.0	0.0	0.0	0.0	69.0	100.0	13
Total	16.4	4.9	9.8	8.2	4.9	6.6	49.2	100.0	61

Table 5.14 Percentage distribution of currently married women by planning status at conception, according to age

	Mother's age at birth	Planning status of birth at conception			
		Wanted then %	Wanted later %	Number of births ¹	Number of women ²
MSI	15-19	63.6	36.4		22
DHS ³	15-19	71.3	28.5 ⁴	2,123	
MSI	20-24	55.1	44.9		49
DHS	20-24	63.2	36.0	3,890	
MSI	25-29	30.4	69.6		46
DHS	25-29	53.9	45.5	3,242	
MSI	30-34	30.0	70.0		30
DHS	30-34	44.8	54.4	2,680	
MSI	35-39	27.8	72.2		36
DHS	35-39	39.9	59.5	1,636	
MSI	40-44	14.3	85.7		35
DHS	40-44	33.0	66.8	606	
MSI	45-49	7.7	92.3		13
DHS	45-49	31.4	68.5	148	
Total MSI		34.6	65.4		Total MSI 231
Total DHS		54.6	44.8	Total DHS 14,324	

¹ DHS data refer to all births in the past 5 years and hence can refer to more than one birth per women.

² MSI data refer to last birth.

³ Table 6.9, YDMCHS (1997), Data refer to urban and rural dwellers.

⁴ YDMCHS (1997) % are an amalgam of those reported not wanting another child and those who reported wanting their last child later.

that almost 45% of births in the five years preceding the survey were either mistimed or not wanted, highlighting a clear unmet need for contraception for both birth spacing and prevention of births. The YDMCHS (1997) data highlight that by the age of 35, almost 60% of women reported that conception was either mistimed or not wanted.

5.7.2 Timing of Next Baby

Table 5.15 shows the percentage distribution of currently married women by fertility preferences, according to age, from both the MSI Sana'a survey and from YDMCHS (1997). The MSI Sana'a data reveals that overall, almost half (46%) of women do not want any more children and 32% want to wait two or more years before their next pregnancy. In addition 18% of women want to have a child as soon as possible. Table 5.15 highlights that potentially over three quarters of currently married women may be considered to have a potential need for family planning either to space or to limit births.

The MSI Sana'a survey data reflect the trend in the YDMCHS (1997) data on future reproductive intentions of currently married women which highlights that almost half of currently married women do not want any more children and 22% want to delay their next birth for two years or more. Thus, YDMCHS (1997) considers that seven in 10 currently married women may have a potential need for family planning services either for spacing or limiting births.

Fertility preferences vary by women's age. The MSI data show that the majority (64%)

Table 5.15 Percentage distribution of currently married women by fertility preferences, according to age.

	Age	Planning status of next baby					Total %	No of respondents
		Have another soon ¹ %	Have another later ² %	Wants no more %	Undecided %			
MSI	15-19	22.7	63.6	0.0	13.6	100	22	
DHS ³	15-19	38.5	37.8	14.8	4.7	100		1020
MSI	20-24	30.6	44.9	14.3	10.2	100	49	
DHS	20-24	24.7	39.5	25.5	4.6	100		1788
MSI	25-29	21.8	54.4	23.9	0.0	100	46	
DHS	25-29	16.1	28.5	44.9	4.9	100		1744
MSI	30-34	13.4	26.7	60.0	0.0	100	30	
DHS	30-34	12.7	17.0	59.5	4.5	100		1490
MSI	35-39	11.1	2.8	83.3	2.8	100	36	
DHS	35-39	9.5	8.7	68.9	3.9	100		1490
MSI	40-44	5.8	8.8	82.4	2.9	100	34	
DHS	40-44	8.1	2.6	68.4	3.8	100		829
MSI	45-49	7.7	0.0	92.3	0.0	100	13	
DHS	45-49	5.4	1.7	60.1	4.2	100		530
Total MSI		17.9	31.7	46.1	4.4		230	
Total DHS		16.9	21.8	47.8	4.4			8891

¹ Want next birth within two years.

² Want to delay next birth for two or more years.

³ Table 6.2, YDMCHS (1997). Data refer to urban and rural dwellers.

of women aged 15-19 want to delay having another child while the proportion of women wanting a child soon and wanting a child later decreases with age. The relatively high percentage of younger women wanting to delay having another child is likely to be influenced by their relatively high level of education. This highlights the great potential demand for family planning for birth spacing. The YDMCHS (1997) data reveal a similar trend, with 40% of women aged 20-24 wanting to delay having another child. By age 30-34 both the MSI and the YDMCHS (1997) data reveal that around 60% of women do not want any more children with this figure further increasing with age in both the MSI and YDMCHS (1997) surveys.

Table 5.16 shows, for the MSI Sana'a survey, the percentage of currently married women according to their desires regarding the timing of their next baby by level of education. The highest percentage (76%) of women who do not want any more children by level of education is for uneducated women. It can be assumed that this is because uneducated women are more likely to have married earlier, started their childbearing earlier and to have achieved their desired family size. In the sample, they are also more likely to be older than those women who had received some education. In contrast, the lowest percentage (18%) of women who do not want any more children is among those women who have completed at least secondary school. This is presumably because they married later, commenced their childbearing later and have not yet achieved their desired parity.

Again, the MSI Sana'a survey results, broken down by level of education are similar to those of the YDMCHS (1997). Half of those women who are illiterate do not want any more children while the lowest percentage (37%) of women who want no more children is among women who have completed at least secondary school (Table 6.3, YDMCHS, 1997).

Table 5.16 MSI Sana'a survey: percentage distribution of currently married women according to the timing of their next baby by level of education

Age and level of education	Planning status of next baby (%)					Number of respondents
	As soon as possible	Within 2 years	After 2 or more years	Do not want any more	Total	
Age						
15-19	9.1	13.6	63.6	0.0	100.0	22
20-24	20.4	10.2	44.9	14.3	100.0	49
25-29	10.9	10.9	54.4	23.9	100.0	46
30-34	6.7	6.7	26.7	60.0	100.0	30
35-39	11.1	0.0	2.8	83.3	100.0	36
40-44	2.9	2.9	8.8	82.4	100.0	34
45-49	7.7	0.0	0.0	92.3	100.0	13
Level of education						
No education	9.3	4.1	12.4	76.3	100.0	97
Literacy class	8.3	16.7	50.0	33.3	100.0	24
Primary school	20.8	10.4	52.1	20.8	100.0	48
Preparatory school	7.4	3.7	70.4	22.2	100.0	27
Secondary +	5.0	5.0	41.0	12.0	100.0	34
	10.9	7.0	31.7	46.1	100.0	230

5.8 Quality of Family Planning Service Provision

5.8.1 Family Planning Services

Table 5.17 shows the MSI Sana'a survey data regarding the type of family planning facility last used, according to age and level of education. The data show that 59% of woman had sought services from a private health facility; 29% from the public sector and 9% from an LCCD co-operative. These figures reflect the lack of confidence in the public health sector highlighted in Chapter 2, although one might also expect women in urban areas to seek private healthcare due to the greater concentration of private providers in urban areas and because urban women may enjoy greater autonomy than women residing in other urban areas. In addition the overall cost of seeking improved quality of reproductive healthcare, i.e. through private sector facilities, will likely be

relatively less for women residing in urban Sana'a, than for women seeking improved quality of care from private sector facilities in rural areas.

There were no real differences according to age, although women aged 45-49 (67%) were most likely to have sought services from a co-operative. According to educational level, the greater the level of education the more likely women were to have sought services from the private sector and less from the public sector.

Table 5.17 MSI Sana'a survey: percentage distribution of currently married women by type of family planning facility used for the last time according to their age and level of education

Age and level of education	Type family planning facility last used (%)					Number of respondent
	Government	Private	Co-operative	Don't know	Total	
Age						
15-19	25.0	50.0	25.0	0.0	100.0	8
20-24	23.1	69.2	3.9	3.9	100.0	26
25-29	23.3	63.3	10.0	3.3	100.0	30
30-34	35.0	60.0	0.0	5.0	100.0	20
35-39	21.4	64.3	14.3	0.0	100.0	14
40-44	45.5	50.0	4.6	0.0	100.0	22
45-49	33.3	0.0	66.7	0.0	100.0	3
Level of education						
No education	38.3	51.1	10.6	0.0	100.0	47
Literacy class	40.0	53.3	6.7	0.0	100.0	15
Primary school	21.7	65.2	13.0	0.0	100.0	23
Preparatory school	26.3	63.2	5.3	5.3	100.0	19
Secondary +	0.0	74.0	5.0	11.0	100.0	19
Total	29.3	59.4	8.9	2.4	100.0	123

51% of women with no education as opposed to 74% of women with at least secondary education had used a private sector facility. One might expect this result for two reasons; firstly as table 5.2 showed, those women with at least secondary education were more likely to be working and, as a result, were more likely to have access to

cash and secondly, women with higher education are more likely to be empowered to seek higher quality of care.

5.8.2 Quality of Services Used

This section examines the data in the MSI Sana'a survey on women's experience regarding various aspects of quality of care and family planning counselling provided by healthcare personnel at family planning facilities. Table 5.18 presents MSI Sana'a survey data and shows the percentage of currently married women by their rating of the care given by staff at family planning facilities, according to their age and education. Overall 81% of women felt that the quality of care given by staff was excellent. Only 4% of women felt that the standard of care could be improved. It should be noted, of course, that these analyses are restricted to those people who had used services and hence their views may represent a select group. It should also be noted that although services are hugely lacking in Yemen, those of a high standard that do exist are, to an extent, clustered in urban areas. Whilst there were no real differences by age, the majority of women aged 30 and over felt that the quality of care provided by staff was excellent. It should be noted that, as the majority of respondents who had sought family planning services had done so from the private sector one might expect the quality of care to relatively high. There were no marked differences by level of education.

Table 5.19 shows the percentage of currently married women by their rating of the speed and efficiency of service given by staff at family planning facilities, according to their age and education for the MSI Sana'a survey. Overall, 77% of women felt that the service provided by the staff had been quick and efficient; and a further 13% felt that it had been adequate. There were no real differences by age although according to educational level, of those women who had no education, 81% felt that the service was excellent, as opposed to 65% who had completed at least secondary education. This could reflect the fact that as levels of education increase women become more empowered and their levels of expectation increase – to expect better services.

Table 5.18: MSI Sana'a survey: percentage distribution of currently married women by rating of care given by staff at the family planning services according to their age and level of education

Age and level of education	Care given by staff (%)				Number of respondents
	Excellent	Adequate	Needs improvement	Total	
Age					
15-19	87.5	0.0	12.5	100.0	8
20-24	68.0	24.0	8.0	100.0	25
25-29	64.5	32.3	3.2	100.0	31
30-34	95.2	4.8	0.0	100.0	21
35-39	93.3	6.7	0.0	100.0	15
40-44	91.3	4.4	4.4	100.0	23
45-49	100.0	0.0	0.0	100.0	3
Level of education					
No education	79.2	18.8	2.1	100.0	48
Literacy class	86.7	6.7	6.7	100.0	15
Primary school	86.4	13.6	0.0	100.0	22
Preparatory school	81.0	9.5	9.5	100.0	21
Secondary +	75.0	20.0	5.0	100.0	20
Total	80.9	15.1	4.0	100.0	126

Table 5.19 MSI Sana'a survey: percentage distribution of currently married women by rating of speed and efficiency of service given by staff at the family planning services according to age and level of education

Age and level of education	Quick and efficient service given by staff (%)				Number of respondents
	Excellent	Adequate	Needs improvement	Total	
Age					
15-19	87.5	0.0	12.5	100.0	8
20-24	68.0	16.0	16.0	100.0	25
25-29	64.5	25.8	9.7	100.0	31
30-34	76.2	14.3	9.5	100.0	21
35-39	80.0	13.3	6.7	100.0	15
40-44	95.7	4.4	0.0	100.0	23
45-49	100.0	0.0	0.0	100.0	3
Level of education					
No education	81.3	10.4	8.3	100.0	48
Literacy class	73.3	13.3	13.3	100.0	15
Primary school	77.3	13.6	9.1	100.0	22
Preparatory school	81.0	14.3	4.8	100.0	21
Secondary +	65.0	25.0	10%	100.0	20
Total	77.0	14.3	8.7	100.0	126

To turn to the explanation given about contraceptive methods at whichever facility had been used. Table 5.20 shows that, for the MSI Sana'a survey, across all educational groups, 79% of women felt that the explanation given by staff was excellent; only 9% felt it needed improving. Again, it needs to be remembered that these answers were not given in the context of an experiment when women had a series of alternative explanations. Rather, they are reporting only their own experience which would possibly be ignorant of alternatives and may again reflect the predominant use of the private sector by these women.

Table 5.20 MSI Sana'a survey: percentage distribution of currently married women by rating of the explanation of methods by the staff at the family planning services according to their age and level of education

Age and level of education	Explaining methods by staff (%)				Number of respondent
	Excellent	Adequate	Needs improvement	Total	
Age					
15-19	87.5	0.0	12.5	100.0	8
20-24	68.0	16.0	16.0	100.0	25
25-29	67.7	19.4	12.9	100.0	31
30-34	76.2	14.3	9.5	100.0	21
35-39	86.7	13.3	0.0	100.0	15
40-44	95.7	4.4	0.0	100.0	23
45-49	100.0	0.0	0.0	100.0	3
Level of education					
No education	87.5	8.3	4.2	100.0	48
Literacy class	80.0	13.3	6.7	100.0	15
Primary school	86.4	9.1	4.5	100.0	22
Preparatory school	76.2	19.1	4.8	100.0	21
Secondary +	50.0	25.0	30.0	100.0	20
Total	78.6	12.7	8.7	100.0	126

Table 5.21 presents the MSI Sana'a survey data for the percentage of currently married women by their rating of the confidentiality of the service maintained by staff at the family planning facilities used, according to their age and level of education. The vast majority of women (94%) felt that the level of confidentiality was excellent and there were no real differences between age groups or level of education. It is necessary to stress the great importance given to confidentiality in a society where seeking family planning services remains a sensitive issue for many women. Throughout the Middle East, the extended family structure means that the level of privacy is low and so confidentiality on a sensitive topic such as this is crucial to the majority of women.

Table 5.21 MSI Sana'a survey: percentage distribution of currently married women by rating of confidentiality of the service maintained by staff at the family planning services according to their age and level of education

Age and level of education	Maintaining confidentiality by staff (%)				Number of respondent
	Excellent	Adequate	Needs improvement	Total	
Age					
15-19	87.5	12.5	0.0	100.0	8
20-24	100.0	0.0	0.0	100.0	25
25-29	83.9	12.9	3.2	100.0	31
30-34	95.2	0.0	4.8	100.0	21
35-39	93.3	0.0	6.7	100.0	15
40-44	100.0	0.0	0.0	100.0	23
45-49	100.0	0.0	0.0	100.0	3
Level of education					
No education	95.8	4.2	0.0	100.0	48
Literacy class	100.0	0.0	0.0	100.0	15
Primary school	90.9	4.6	4.6	100.0	22
Preparatory school	90.5	4.8	4.8	100.0	21
Secondary +	90.0	5.0	5.0	100.0	20
Total	93.6	4.0	2.4	100.0	126

Table 5.22 shows the proportion of currently married women by their rating of the range of methods offered by staff at family planning facilities used, according to their age and education for the MSI Sana'a survey. Overall, 68% of women felt that the range of methods offered was excellent while 14% felt it needed improving. There were no marked differences between age groups. However, according to educational level, of those women who had received primary school education or less, around 78% felt that the range of methods offered was excellent, as opposed to 45% of those women who had received at least secondary education. Again, this could reflect the fact that, as educational levels increase, women become more empowered to expect better services and choice (an explanation of the mechanisms through which education drives this is provided by Diamond, Newby and Varle, 1999). The prosecution of a true post Cairo agenda would entail that a range of services and quality advice were available to all women.

Table 5.22 MSI Sana'a survey: percentage distribution of currently married women by rating of range of methods offered by the staff at the family planning services according to their age and level of education

Age and level of education	Range of methods offered by staff (%)				Number of respondent
	Excellent	Adequate	Needs improvement	Total	
Age					
15-19	62.5	37.5	0.0	100.0	8
20-24	58.3	16.7	25.0	100.0	25
25-29	58.1	29.0	12.9	100.0	31
30-34	66.7	23.8	9.5	100.0	21
35-39	73.3	6.7	20.0	100.0	15
40-44	91.3	4.4	4.4	100.0	23
45-49	66.7	0.0	33.3	100.0	3
Level of education					
No education	78.7	10.6	10.6	100.0	48
Literacy class	73.3	26.7	0.0	100.0	15
Primary school	77.3	13.6	9.1	100.0	22
Preparatory school	52.4	28.6	19.1	100.0	21
Secondary +	45.0	25.0	30.0	100.0	20
Total	68.0	18.4	13.6	100.0	126

5.9 Mode of transport and suitability of location of family planning facility

Table 5.23 shows the percentage of currently married women in the MSI Sana'a survey who had used services, by mode of transportation and convenience of the location of the family planning facility. Table 5.23 shows a roughly equal number travel by vehicle (52%) and by foot (48%) to a family planning facility. In total, 89% of currently married women said that the location of the family planning facility was convenient. There were no marked differences by age or level of education. Whilst the data reveal that the family planning facilities used by women were accessible, the data on ever and current use of contraception, discussed earlier in this Chapter, highlight the need for improved quality of services in order to facilitate an increased uptake in reproductive health and family planning services.

Table 5.23 MSI Sana'a survey: percentage distribution of currently married women by mode of transportation used and suitability of the location of the family planning facility according to their age and level of education

Age and level of education	Mode of transportation to go to family planning facility (%)			Suitability of the location of the family planning facility (%)			Number of respondents
	Vehicle	By foot	Total	Yes	No	Total	
Age							
15-19	50.0	50.0	100.0	88.9	11.1	100.0	8
20-24	50.0	50.0	100.0	96.0	4.0	100.0	26
25-29	53.3	46.7	100.0	86.7	13.3	100.0	30
30-34	50.0	50.0	100.0	85.0	15.0	100.0	20
35-39	66.7	33.3	100.0	80.0	20.0	100.0	15
40-44	45.5	54.6	100.0	90.9	9.1	100.0	22
45-49	66.7	33.3	100.0	100.0	0.0	100.0	3
Level of education							
No education	47.9	52.1	100.0	85.4	14.6	100.0	48
Literacy class	40.0	60.0	100.0	78.6	21.4	100.0	15
Primary school	60.9	39.1	100.0	100.0	0.0	100.0	23
Preparatory school	65.0	35.0	100.0	90.0	10.0	100.0	20
Secondary +	50.0	50.0	100.0	89.0	11.0	100.0	18
Total	52.4	47.6	100.0	88.7	11.3	100.0	124

5.10 Summary

An analysis of the MSI Sana'a survey data, presented in this Chapter, highlights a number of poor reproductive health indicators amongst the survey's respondents and a need for improved access to quality reproductive health and family planning services. It should be noted, however, that in the context of the national picture, a comparison of the YDMCHS (1997) with the MSI Sana'a survey data reveals the even lower reproductive health indicators for the country as a whole. It is interesting to note though that a comparison of the MSI Sana'a survey data with the YDMCHS (1997) data on a number of key indicators, revealed a much more similar trend than one might have expected.

For example, whilst the overall CPR among currently married women from the MSI Sana'a survey data is higher than the national figure at 43% and 21% respectively, use

of a modern method among MSI Sana'a survey respondents is very similar to the YDMCHS (1997) urban sample. Given that the YDMCHS (1997) urban data will include urban women who live in more traditionally conservative urban areas of Yemen, one might expect use of a modern method to be higher amongst women living in Yemen's capital city, where access to family planning, exposure to health education and freedom of movement for women would be expected to be greater. These results highlight, therefore, the large unmet need for improved access to appropriate and effective (modern) methods of family planning amongst women living in urban Sana'a.

Fertility levels in both surveys are high. The mean number of children rises to six by the time women reach their thirties, and is 8.5 by age 45. If one compares these figures with the MSI Sana'a data regarding the planning status of prior births, where overall 65% of women would have preferred to have delayed the timing of their last birth and the percentage of women who do not want anymore children (46%) then the MSI data provide a clear indication of the high unmet need for family planning to both space and limit births.

It is also noteworthy that whilst knowledge of a method of family planning is almost universal amongst MSI Sana'a survey respondents (98%), knowledge of a source of family planning is much lower (52%) which may reflect both knowledge and a lack of supply.

The MSI Sana'a survey data also highlight the considerable potential for increased use of family planning, accompanied by culturally sensitive community based health education. In the provision of reproductive health and family planning services one should also consider ensuring access for low income groups. The MSI Sana'a survey revealed that only 11% of women were working, and whilst these data do not reveal the socioeconomic circumstances of their household, it is perhaps an indication of the limited access to cash that women, in a traditionally male dominated society, have even in urban Sana'a.

In summary the data confirm the need for improved services in urban Sana'a which provide quality delivery across social groups and educational levels and also for further work to inform the reasons why some women do not seek reproductive health and family planning services.

6. Monitoring and Evaluation

The aim of this Chapter is to describe the development and progression of MSI's Sana'a Centre over the period from its opening until November 1999. In so doing, this section provides a quantitative and qualitative analysis of monthly reports as well as supplementary information from interviews with key actors.

The Chapter starts by describing briefly the methodology used in the chapter. It then provides descriptive statistics on a number of key indicators which describe the development in the Centre. This is followed by an analysis of the qualitative data provided by the text of the monthly reports and finally the results of the preceding two sections are assessed in the context of the MSI model introduced in Chapter 3.

6.1 Methodology

This chapter integrates both quantitative and qualitative data. An iterative approach was used in the analysis. The quantitative analyses comprise primarily descriptive statistics on the time series of data which underlie the development of the Centre. The strategy for analysing the qualitative data was a relatively standard textual method. The monthly reports, described in detail in Chapter 4, were read repeatedly and various themes running through them were identified. Some themes were identified initially by the researcher on the basis of expectations of what would be important themes to describe the development of the Centre. Other themes were developed as the analysis of the monthly reports progressed. After an initial analysis of the data a number of questions were asked of the key actors, most notably the Centre Manager, to elucidate some of the developing themes. Both qualitative and quantitative data were then revisited to integrate this new information and to develop the analyses further.

6.2 Quantitative Analyses

The section is divided into a number of sub-sections which reflect the key indicators on which the progress of the Centre over the first 18 months of its opening is to be evaluated. These include; client numbers; family planning client numbers; CYPs; income to cost recovery;

The section comprises a series of descriptive analyses of these indices. Where appropriate, moving averages are used to smooth the time series and hence to display trends. However, the raw data are also displayed so as to be able to identify fluctuations associated with particular months, for example Ramadan.

While a brief interpretation of some of these trends is provided in this section, the fuller interpretation is reserved for later sections when these results will be integrated with the qualitative data from the monthly reports and the interviews with key actors.

6.2.1 Client Numbers

Table 6.1 includes both the raw client numbers and, to smooth out fluctuations, a three month moving average. The data reveal that whilst overall client numbers showed an upward trend, this was not spectacular. The period December 1998-January 1999 was the holy month of Ramadan and this is reflected in the decrease in client numbers during this period. Table 6.1 also shows family planning client numbers and these show a small but steady rise, although as a proportion of overall client numbers they remained low. Indeed MSI would expect a programme to have achieved a family planning client ratio of at least 25%, 18 months into a Centre's opening. Black considers this to be achievable if the Centre team are motivated. One might expect this figure to be slightly lower in the context of Yemen where the CPR remains low and where, as highlighted in section 6.8 below, the Centre first had to achieve a high level of institutional sustainability.

Table 6.1 Client Numbers by reasons for attending the Centre

Month/year	Total client numbers ¹	Three month moving average (Total Clients)	FP client numbers	FP/client ratio (%)	Three month moving average (FP Clients)
June 1998	172		11	6.4	
July	227	210	14	6.2	15
August	232	240	20	8.6	16
September	261	281	14	5.4	18
October	351	325	21	6.0	16
November	363	330	13	3.6	16
December	275	239	13	4.7	14
January 1999	78	162	16	20.5	17
February	133	134	22	16.5	22
March	191	305	28	14.7	26
April	592	469	29	4.9	30
May	625	550	33	5.3	40
June	434	507	58	13.4	52
July	461	461	65	14.0	55
August	490	458	41	8.5	49
September	425	446	41	9.6	42
October	424	447	44	10.4	45
November	393		51	13.0	-

1 see footnotes to Table 6.2 for explanations of the components of Total Client Numbers

Table 6.2 breaks down the client numbers by reasons for attending the Centre. The table concentrates on reproductive health related reasons but also includes data on all visits to the Centre for services. These 'service' data are categorised by those who attended the Centre for Hepatitis B vaccinations (column (9)) as part of an MoH campaign (described later in this Chapter), and 'others' (column (10)). The latter include all pharmacy and laboratory service use together with other vaccinations and occasional visits for other services. It should be noted that these 'other' service numbers do not necessarily reflect individual clients as some clients may have had more than one service on a particular visit. The uptake of reproductive health services presented in Table 6.2 provides an overview of the Centre's progress in the provision of reproductive health and family planning services and includes the high numbers of clients treated for STIs. Data were missing for January – May 1999 for gynaecological, general medical and services for children under the age of five. Nonetheless it is possible to see underlying trends in the uptake of these services.

Antenatal client numbers rose significantly during the reporting period and by the end of the first year of the Centre's opening they had increased by 300%. The increase in the number of antenatal clients however is not reflected in a lagged increase in the number of deliveries.

The Centre commenced obstetrics in November 1998 and initially stipulated that only those women who had attended the Centre for antenatal visits would be allowed to deliver in the Centre. The number of deliveries remained extremely low, however, and in an attempt to increase them the Centre changed its policy in March 1999, allowing any woman to deliver in the Centre providing she had a record of antenatal attendance at a health facility. This change of policy did not contribute to an increase in the number of deliveries which remained very low.

The number of women attending for general gynaecological services fluctuated during the reporting period. Overall, the number was low as a proportion of total client numbers and did not show any significant increase during the reporting period.

The number of clients attending the Centre for STI treatment increased markedly during the first three months of the Centre's opening. With the exception of a four month period over Ramadan these numbers were maintained over the period. Over the period, STI clients accounted for around 20% of overall client numbers.

A comparison of the number of clients attending for general medical services during the first six months of the Centre's opening and the last six month period considered in this thesis show that while the number of clients attending for general medical services initially increased, in the last six months of the period they decreased markedly. This trend may reflect the Centre's initial drive (and MSI's approach when opening a Centre) to encourage as many people as possible to attend the Centre regardless of the services they request. The MSI model would then be expecting a decline in the number of clients attending for general medical services and an increase in the number of clients attending for reproductive health and family planning services. However, although for a limited number of programmes worldwide the income generated from general medical services represents a significant proportion of overall Centre income, at the same time these programmes would expect a commensurate increase in reproductive health and family planning numbers.

The number of visits by children under the age of five fluctuated during the reporting period and did not reveal any upward or downward trend.

In April 1999, as part of the MoH's Expanded Programme of Immunisation (EPI) strategy, the MSI Centre was designated by the MoH as a vaccination Centre for its Hepatitis B campaign. The campaign was to be continued into the year 2000, although, from November 1999, the number of vaccines distribution by the MoH to designated health Centres reduced significantly. The number of clients attending for the Hepatitis B vaccine was large in the months following April 1999 and it was hoped by the Centre Manager that this would have an impact in increasing the overall number of clients

attending the Centre. Whilst overall client numbers did increase from April 1999 it is difficult to attribute this to the Hepatitis B campaign.

6.2.2 Family Planning Client Numbers

Family planning client numbers have been calculated using data recording the actual number of clients who received a method of family planning from the Centre. They do not include, for example, clients who attended the Centre for removal of an IUD which have been included in the 'gynaecological' numbers. Similarly, family planning client numbers reflect the number of clients who received a method of family planning, and not the number of services received. For example if a woman received three cycles of the pill this is counted as one client visit. An analysis of the CYPs provided will give an indication of the quantum of the services provided.

The major family planning methods provided by the Centre were:

- IUD
- Injectables
- Oral contraceptives
- Foam tablets
- Condoms

Table 6.3 shows that overall in the period between June 1998 and November 1999 the pill was the most commonly requested method (63%); condoms were requested by 24%; foam tablets 12%; IUD 7%; and injectables 3%. It should be noted that three clients (representing 1% of family planning client numbers) received advice from the Centre regarding diaphragms. The diaphragms had been purchased privately by clients who subsequently brought them to the

Table 6.2 Client Numbers by Reproductive Health Related Reasons for attending the Centre

Month / year	FP client numbers (1)	Antenatal (2)	Deliveries (3)	Gyn ^{3,4} (4)	STIs (5)	Adult medical ^{3,5} (6)	U5 ³ (7)	Total client nos. ¹ (8)	Hep B (9)	Other ² (10)
June 1998	11	23	0	39	1	49	49	172		216
July	14	29	0	88	3	49	44	227		100 ⁸
August	20	24	0	20	88	48	32	232		205
September	14	32	0	14	79	76	46	261		206
October	21	42	0	45	103	84	56	351		238
November	13	53	2	35	98	92	70	363		271
December	13	67	0	37	41	61	56	275		158
January 1999	16	42	2	3	15	-	-	78 ⁷		387 ⁷
February	22	61	2	23	25	-	-	133 ⁷		394 ⁷
March	28	87	3	17	56			191 ⁷		747 ⁷
April	29	102	1	22	108	330 ³		592	156	402
May	33	95	1	21	148	327		625	1003	421
June	58	95	0	44	90	69	78	434		301
July	65	107	3	67	92	70	57	461	2837	436
August	41	122	3	61	120	74	69	490	1885	438
September	41	118	4	57	92	63	50	425	944	440
October	44	125	3	50	91	49	62	424	454	498
November	51	84	3	55	91	59	50	393	33	413

See next page for footnotes

Footnotes to Table 6.2

1 Total Client Numbers equals sum of columns 1-7.

2 'other' includes all pharmacy and laboratory use, together with other vaccinations and occasional visits for other services. These numbers do not necessarily reflect individual clients as some clients may have had more than one service.

3 Data could not be disaggregated for January-May 1999 for gynaecological (other than those described in footnote 4), adult medical and services for children under aged 5. In January to March 1999 these have been included in column (10) others and in April and May they have been displayed in the Adult Medical column.

4 Includes family planning check ups, IUD removal and general gynaecological cases.

5 includes children aged 6-12.

Centre to receive instruction on their insertion and use. For the purpose of this analysis, they have been included in these data. The data are included in Table 6.3.

Table 6.3 Percentage of family planning clients by method : MSI Sana'a Centre : June 1998-November 1999

Method	Number of clients	Percentage (%)
Pill	284	53
Condoms	130	24
Foam Tablets	65	12
IUD	36	7
Injectables	16	3
Diaphragm	3	0.6
Total	534	100

Table 6.4 breaks down the monthly uptake of individual methods of family planning. A total of 284 women received the pill over the period. The policy of the Centre was to offer women three cycles of the pill at each visit. The Centre Manager reports however that some women did not purchase more than one cycle of the pill at any one visit due to their poor economic situation. In a subsequent interview she noted however that when the Centre reduced the price of one month's supply by only YR10 (around £0.05) clients tended to purchase additional supplies which highlights the high elasticity of demand in a poor society. Whilst client numbers increased slowly for the first nine months Table 6.4 shows that thereafter there were marked increases.

Just thirty six women attended the Centre for IUD insertion during the period. For the period June 1998 – December 1998 inclusive there were only four IUD insertions. Table 6.4 also indicates that the number of insertions increased from

Table 6.4: Family Planning Client numbers and CYPs : MSI Sana'a Centre : June 1988 – November 1999

Month/year	FP client numbers	IUD	Depo provera	Pill	Condom	Foam tablets	CYP's
June 1998	11	0	0	3	6	2	1.4
July	14	0	1	4	9	0	1.0
August	20	1	2	5	7	5	7.7
September	14	1	0	6	4	3	7.3
October	21	2	0	7	9	3	14.0
November	13 *	0	1	4	2	3	5.0
December	13	0	0	6	3	4	2.0
January 1999	16	1	0	9	6	0	7.0
February	22	5	0	6	4	7	28.0
March	28	0	0	19	5	4	4.0
April	29	2	1	12	8	6	12.0
May	33	4	3	16	5	5	24.0
June	58	4	1	37	12	4	26.0
July	65	6	1	33	21	4	38.0
August	41	2	0	30	7	2	15.0
September	41	3	2	27	5	4	23.0
October	44	0	1	33	7	3	7.0
November	51	5	3	27	10	6	35.0

* 3 diaphragms

February 1999. It should be noted that the number of IUD insertions does not reflect the number of clients requesting an IUD. The Centre Manager reports that examination of a number of women attending the Centre requesting an IUD revealed that the women had an STI and it was therefore necessary to treat the infection before an IUD could be inserted. The Centre Manager does not report how many of these women subsequently returned for IUD insertion.

The injectable, depo provera, had only recently been re-licensed in Yemen at the time of the Centre's opening and its availability, therefore, was extremely limited. In addition the previous withdrawal of the method had prompted widespread concern regarding its side effects. It is felt that these factors are reflected in the low numbers of clients requesting the method. It should additionally be noted that this method is not popular in many Middle Eastern countries as it can suppress menstruation.

The total number of clients attending for condoms during the period was 130. It should be noted that the Centre offered both male and female condoms in its method mix and was the first Centre to introduce female condoms into Yemen. The Centre Manager notes that male clients would normally purchase 30 condoms per visit while female clients would purchase an average of two condoms. The Centre Manager attributes the lower uptake of the female condom to two factors; firstly, its cost at YR 120 (around £0.55) per piece (male condoms were sold for YR 2.5 – around £0.01) and secondly 'the fear of using something new.'

Finally, foam tablets were distributed very rarely and, when they were, they were chosen primarily by younger women.

**Table 6.5 Comparison of Client Numbers with STI and IUD Clients : MSI Sana'a Centre :
June 1998 – November 1999**

Month/year	Total Client Numbers ¹	STI clients	IUD removals	IUD insertion
June 1998	172	1	-	-
July	227	3	2	-
August	232	88	3	1
September	261	79	1	1
October	351	103	5	2
November	363	98	1	-
December	275	41	2	-
January 1999	78	15	-	1
February	133	25	3	5
March	191	56	1	-
April	592	108	5	2
May	625	148	2	4
June	434	90	4	4
July	461	92	5	6
August	490	120	1	2
September	425	92	6	3
October	424	91	3	-
November	393	91	2	5

1 see footnotes to Table 6.2 for the components of Total Client Numbers

Table 6.5 includes both the number of women who had IUDs inserted and removed with the number of STI clients and overall client numbers. It shows that a total of 46 women had IUDs removed. The Centre Manager reports that the majority of these IUD removals were necessary due to the fact that these women had STIs. She notes that these women had had IUDs inserted in other Centres, despite the presence of an STI and reports that this is a common problem in Yemen due both to a lack of family planning counselling and for financial reasons on the part of the practitioner. In such cases, the women have usually tolerated the pain for a few months before seeking removal of the IUD. No data are available regarding the uptake of alternative methods of family planning by these women.

It should be noted that only a small minority requested removal of an IUD either because they wanted to become pregnant or because they sought an alternative method of family planning.

6.2.3 Income to cost recovery

Table 6.6 highlights the overall progress of the Centre towards financial sustainability. The numbers of services provided by the laboratory and pharmacy are also included in Table 6.6 as these were established to aid cost recovery and help guarantee quality of service delivery. The potential for this was described in Chapter 4.

Overall, income to cost recovery was fairly static during the first six months of the Centre's opening. The significant increase in income to cost recovery witnessed from May 1999 reflects the income generated from the large numbers of clients attending the Centre for the Hepatitis B vaccine.

Hepatitis B vaccinations generated the most income, followed by the pharmacy and the laboratory. It was felt by the Centre Manager that both the pharmacy and the laboratory had underperformed. This was despite the fact that the Centre's percentage mark-up on pharmaceuticals remained constant at 20% throughout the period as a result of an MoH

Table 6.6 Income to Cost Recovery : MSI Sana'a Centre : June 1998 – November 1999

Month/year	Income to cost (%)	Services	
		Laboratory	Pharmacy
June 1998	8.6	118	83
July	9.5	100	-
August	7.8	91	111
September	8.0	98	108
October	8.0	100	138
November	9.0	107	120
December	8.0	59	30
January 1999	9.0	-	94
February	11.0	-	119
March	10.0	-	147
April	13.0	152	164
May	19.0	197	156
June	30.0	120	181
July	38.0	201	155
August	41.0	141	209
September	41.0	221	182
October	41.0	217	189
November	39.0	164	191

directive regarding private pharmacies which limited the pharmacy's potential to generate greater income. There was a high profit margin in obstetrics, but these were limited in number and therefore did not contribute significantly to overall client income. It should be remembered that these were intended as a major income generator but this did not prove successful as will be discussed later in this chapter. Similarly IUD insertions also represented a good source of income, but again numbers remained limited although this can, in part, be attributed to the high incidence of STIs.

6.3 Qualitative Analysis

This section analyses the qualitative information provided by the Centre Manager in each monthly report. The qualitative data are intended to complement the quantitative data and, in so doing, aim to provide a descriptive insight into the development of the programme. The section is divided into the following sub-sections; Centre personnel; clients; cost-recovery; external influences and external collaboration. Where appropriate, cross reference is made to the quantitative data.

6.3.1 Centre Personnel

The recruitment of the Centre team was undertaken by the Centre Manager during April and May, 1998 and prior to the opening of the Centre on 1 June 1998. The recruitment of the Centre Manager and an in-country consultant was undertaken by MSI's Arab World Senior Programmes Manager (see Chapter 4 for a detailed description of the recruitment process). The following personnel were initially recruited:

- Centre Manager
- Consultant
- Midwife
- Two health educators (one male/one female)
- Receptionist
- Cleaner
- Two guards

All Centre personnel, with the exception of the Centre Manager, a midwife and the consultant, were Yemeni. A second midwife was recruited in September 1998 and a third in June 1999.

The following sub-sections provide a detailed insight into the development of the staffing structure and its impact on the overall performance of the Centre. The first subsection discusses the Centre Manager before moving on to consider the remainder of the Centre team. This latter section focuses initially on the impact of different staffing structures on the development of quality of service provision. It then describes the impact of staffing on other aspects of the management and organisation of the Centre.

6.3.1.1 Centre Manager

In line with MSI's philosophy of multi-skilling and multi-tasking, the Centre Manager was also the Centre doctor and, in addition, was responsible for the project finances. It was agreed between the Centre Manager and MSI's Arab World Senior Programmes Manager that when the client caseload rose to a level which would make it untenable for her to maintain quality of care then the staffing structure would be reassessed with a view to a sessional doctor being recruited to assist with the delivery of services and to allow the Centre Manager more time to focus on managerial issues, whilst also maintaining a service delivery role, although on a more limited basis.

The monthly reports indicate that responsibility for implementing and managing the Centre on a daily basis, in addition to the provision of services, limited the Centre Manager's capacity initially to develop and effectively to implement a marketing and promotional strategy for the Centre within the local community. There are two interpretations for this a) that MSI's philosophy of multi-skilling and multi-tasking does not work or that b) this individual, despite other qualities, was not well suited to taking forward the many prongs of Centre development required by someone under the MSI

model. It should be noted that as referred to in Chapter 4, she was appointed as a Centre Manager and not a Country Director and perhaps that decision was borne out by her subsequent management style. Her own scepticism of her ability to undertake the work (see Chapter 4) should also be noted.

In analysing the role of the Centre Manager it is important first to provide background to the decision to employ a Centre doctor in a full time role. In many MSI programmes the input of a doctor is limited to specialised procedures such as laproscopic sterilisation. Whilst such procedures were not available in MSI's Sana'a Centre, there exists a perception and culture in Yemen, as in many Middle Eastern countries where the status of nurses and paramedical staff is low, that only a doctor can properly diagnose an ailment and, therefore, people want to be seen by a doctor. Whilst this 'culture' does not fit into the MSI model of paramedicalisation of service provision, the Centre Manager felt that it was important, for the following reasons, that people had access to the services of a doctor, particularly in the initial months of the Centre opening:

- the concept of cost recovery in Yemen was very new. MSI was the first NGO to charge for services and, therefore, in order to encourage people to pay for the services offered by the Centre MSI had to promote a 'value added approach'. The Centre would not attract clients if people had to pay, for example, for the services of a midwife.
- there exists a lack of confidence in the public healthcare system and the poor attitude of medical personnel towards clients is a primary reason for a low utilisation of public sector services. Many Yemenis perceive, therefore, that services provided by an expatriate would be of a higher quality. Thus the Centre Manager, as an Iraqi, felt that this would encourage people to come to the Centre. This point is highlighted in the following statement by the Centre Manager when she had to attend a conference:

'I got a Yemeni doctor to sit in place of me but she didn't show up. The next day I got a different Yemeni doctor to sit in place of me but the client's complained about

the way she treated them and then she left early. These causes led to a decrease in the client numbers.' (p. 1 November 1998, Monthly Report; MSI, 1998b).

The Centre Manager was, however, conscious of the need to encourage clients, as appropriate, to seek the services of other team members. The Centre Manager therefore undertook ongoing training and close supervision of her Yemeni team members in order to ensure that high quality service provision was being developed and maintained.

In the initial months of the opening of the Centre the Centre Manager was seeing many clients. However, conflicting demands on her time meant that, at times, clients would be kept waiting, or her ability to oversee the efficient running of the Centre was reduced and therefore a danger existed that the high standards aspired to by MSI were at times being jeopardised due to the pressure of multi-skilling and multi-tasking, encouraged, of course, by MSI. In addition, the intensive training and ongoing supervision of fellow team members placed additional pressures on the Centre Manager's time.

A request by the Centre Manager about six months into the opening of the Centre that an additional doctor be retained by the project in order to alleviate some of the pressures on her time, was rejected by MSI. MSI argued that the Centre team was already large, client numbers were relatively low, and that little progress had been made towards financial sustainability.

MSI did agree to the recruitment of an additional doctor in the early part of 1999. The Centre Manager reports that MSI's approval stemmed from a number of reasons: i) because she was going to undertake a number of reproductive health and family planning training courses for public sector doctors and nurses in the Centre; ii) an increased client load and related administrative tasks; and iii) a need to participate in activities external to the Centre and which were important to the long-term sustainability of the Centre.

The new doctor joined the team on 1 May 1999 and as a result the Centre Manager wrote:

'I have much more time for external relations now, and can meet others and have discussions in a much more relaxed state than having to rush the meeting because the clients are waiting.' (p.2, May 1999, *Monthly Report; MSI, 1999a*)

Invitations to meetings had often been refused due to the conflicts between management, marketing and delivery of services. This had been observed by local officials and was seen badly both because MSI was not represented and because the Centre was not fully staffed if the Centre Manager did leave the Centre to attend meetings.

6.3.1.2 The staffing structure and its impact on quality of care

A key issue with regard to staffing is the manner in which the staffing structure is able to deliver quality reproductive healthcare at an efficient cost. As has been described previously, the initial staffing complement was relatively generous in contrast with many MSI programmes, largely to reflect the need to establish quality of care and therefore to promote cost recovery. This section discusses the interaction between the staffing structure, the maintenance of quality of care and increasing client numbers.

Initially it was believed by the Centre Manager that quality of service delivery was dependent upon an esprit de corps among the Centre team. In the initial few months, therefore, the Centre Manager adopted an inclusive approach in the management of the Centre in order to develop a sense of team spirit. To do this she initiated weekly team meetings, which were an entirely new concept for the team. The Centre Manager reported that, initially, staff were reluctant to speak at the meetings, but in time these clearly served as a forum which provoked lively discussion and debate and served as an opportunity for team members to express their views in an open and transparent way.

Overall, the major difficulty encountered by the Centre Manager in the first few months was ensuring that the staff maintained a high standard of quality of care and did not revert to old practices. The Centre Manager provides two examples; first:

'The.....problem, which I feared would develop, and was always on the look out for, did develop and we had to be very strict about it, and it was that our staff, being all Yemeni, wanted to carry on the bad working habits they had acquired from their previous working places, one of which was having breakfast at work. Of course this is very natural here because time is valuable for only a few. I am happy to say that they finally realized how important it was not to waste precious time.' (p.5, July 1998, Monthly Report; MSI, 1998c);

and second:

'The other problem was that after having a staff meeting and agreeing on doing certain jobs, the next day no changes would happen. I would have to keep on supervising that the changes were taking place. This also took up the time, but of course it had to be done, and with patience.' (p.5, July 1998, Monthly Report; MSI, 1998c).

The problem of ensuring that team members maintained high standards of service provision is a recurrent theme in the reports, highlighting the intensive supervision and monitoring of the Centre team which the Centre Manager was required to undertake in order to maintain quality. Despite ongoing training, agreed in conjunction with individual team members, there existed a tendency by all staff members, when not closely supervised, to revert to working practices which the Centre Manager did not consider acceptable to the quality of care aspired to by MSI.

At the end of September 1998 the team's six month probationary period ended. With the exception of the receptionist and the Yemeni midwife, all team members had their one year contracts confirmed⁶. The Centre Manager extended the probationary periods of the receptionist and the midwife for a further two month period as she felt that they were not carrying out their work to an acceptable standard. The following statement provided by the Centre Manager in respect to the Yemeni midwife provides a further example of the exhaustive efforts required in order to develop staff to provide quality services:

⁶ It should be noted that the pharmacist left to emigrate in September 1998 and a new one was recruited to commence in November 1998. In addition the Sudanese midwife left for personal reasons

'Many times I would find many clients in the midwife's room and I told her many times to enter them in, one by one, but she continued chaotically. She was also not filling in the antenatal forms properly and not fully examining the women. I found discrepancies between the information I had collected from the women and the information she collected from the same client. This was due to the presence of so many women in her room, that she couldn't concentrate on what she was doing and also when there are many women together in one room and sensitive questions are asked concerning reproductive health, of course, no one will answer honestly, as they will be too shy to answer in front of other women, especially if they are relatives. This was all discussed with her, but still she did not take the discussions seriously. Not because she was stubborn but because, in their work in the hospitals, these issues are not really taken into consideration, and they are never assessed at work, so she was just used to carrying out the work in thismanner.' (p.7, September 1998, Monthly Report; MSI, 1998d).

Commenting in respect to both the Yemeni midwife and the receptionist, the Centre Manager explained why she persisted in her efforts to encourage and ensure high standards of service provision:

'You may be wondering why I agree to go through all this effort to correct them, and not just replace them. The reason is that any other replacement would have the same attitude, so it is better to tire yourself once, and improve skills of the employees you already have and teach them to be accurate, than to keep on changing employees.' (p.7, September 1998, Monthly Report; MSI, 1998d).

Regarding the receptionist, the Centre Manager reported that she failed to improve. As a result she was given one month's notice in November 1998:

'Our receptionist was given a letter of termination of her contract as many complaints were coming from the clients concerning her efficiency.....so she was given one month's notice (p.5, November 1998, Monthly Report; MSI, 1998b).

The Centre Manager adds:

'She was not accurate in the fees she used to take from clients, nor was she accurate in the amount she wrote in the receipts. This led to discrepancy and to suspicions from the client's side (and some complained) and from my side. We had given her a written warning concerning this subject in September 1998 (...as she had not taken fees from some of the clients), but she continued making mistakes, which lead to the termination of her contract. (p.4, December 1998, Monthly Report; MSI, 1998e).

Also in December 1998, the Centre Manager commented that the firing of the receptionist for failure to improve her working practice came as a shock both to the receptionist and to the Centre team. The Centre Manager reported that, in Yemen,

working practices are never reviewed, assessed or questioned and there is no motivation therefore to improve one's quality of work. Although their reactions were short lived, the Centre Manager reported that the reaction of team members was divided between those who felt she had been unduly harsh and had reacted in a culturally inappropriate manner and others who felt their position in the Centre team was also under threat. The Centre Manager reported that she was conscious that team members may have felt alienated by her actions and therefore she sought to reassure them and to justify her action in a number of subsequent staff meetings.

The Centre Manager did not seek to advertise the position of receptionist immediately, as following discussion with MSI London it was felt that the client load of both the pharmacist and the laboratory technician did not occupy them on a full time basis. In line with the philosophy of multi-skilling and multi-tasking, the Centre Manager decided they would share in covering the position of the receptionist until such time as an increased client load made this arrangement untenable. This continued until the beginning of March, 1999 when:

'the clients began to increase to a level that both the pharmacist and the lab technician began to get delayed from their actual jobs and to prevent deterioration in quality of performance and to reduce the waiting time of clients, we hired a receptionist in the first half of March.' (p.14 January/February 1999, Monthly Report; MSI, 1999b).

The maintenance of quality was also affected if the Centre Manager was absent. For example following a visit to MSI, London the Centre Manager reports;

'As for staff meetings, they resumed when I returned from England, although I had a separate staff meeting with the midwives as I felt after returning from England, that their performance was not up to the standards I would want to find in a Centre like ours; it had deteriorated and they had become more careless during the period of my visit.....They were both told to improve their performance.....it is sad to have to keep on their backs, but if that's the only way to keep up their good performance, that's the way it will be.' (p.14, January/February 1999, Monthly Report; MSI, 1999b).

The Centre Manager was also experiencing continuing problems with a sessional doctor, brought in to cover for her visit to London and to assist in the preparation for and in her absence on a second visit to MSI London in April 1999. Despite interviewing for a replacement, the Centre Manager was unsuccessful in finding a suitable alternative.

Upon the Centre Manager's return from London, clients complained to her that they did not like the attitude of the doctor and Centre team members reported that during the Centre Manager's absence the doctor had been leaving early, resulting in clients having to be turned away. It was crucial for the successful development of the Centre that the reputation of its doctors for delivering high quality services was maintained amongst the local community.

In May 1999 the Centre Manager appointed a Yemeni doctor on a permanent basis. The reasons behind the decision to recruit a second doctor are discussed in sub-section 6.3.2

The fact that the new doctor was Yemeni prompted a negative reaction from the remainder of the Centre team. The Centre Manager writes:

'When our staff heard that I had selected a Yemeni doctor, they didn't like the idea. I collected them all and told them thatit would be all our responsibilities to give her our full support so the community would trust her and accept her as a new doctor in the Centre. This was especially important for the receptionist as she would be the first one to be asked about who the doctor was and to my surprise sherefused and said that she had her own experiences concerning Yemeni doctors.' (p.3, April 1999, Monthly Report; MSI, 1999c).

The negative reaction of the Centre team to the appointment of a Yemeni doctor reflects the general mistrust and lack of confidence amongst the population as a whole in the services provided by local doctors throughout the public sector. In addition, the attitude of doctors towards other health professionals and clients is generally very poor and the Centre Manager reports that the staff felt that both the quality of her work and her attitude towards them would be poor.

The Centre Manager reassured the Centre team that she would train the doctor and that she would personally introduce her to existing and new clients in order to develop their confidence in her ability to deliver services to the same level of care to that which they had come to expect from the Centre Manager herself.

The Centre Manager adds:

'she has one point which is on her side, which is that she does not have the administrative responsibilities I have and this is an advantage to the clients.' (pgs 3-4 April 1999, *Monthly Report; MSI, 1999c*).

Subsequent monthly reports highlight the intensive training and supervision that the Centre Manager undertook with the new doctor. The reports also underline the time the Centre Manager spent in initially seeing clients with the new doctor in an effort to facilitate acceptance of the doctor within the local community.

The new Centre Doctor did not eliminate all problems. Whilst a number of these problems relate specifically to cultural issues and are therefore discussed in detail in the next section other problems arose from the attitude of the doctor to clients. The Centre Manager reports that clients began to complain about the attitude of the doctor and a number insisted on being seen by her. The Centre Manager comments:

'This of course is angering and tiring and frustrating, so I told the doctor that she was still under probation and that she had better improve her performance.' (p.3, July 1999, *Monthly Report; MSI, 1999d*).

The Centre Manager notes however that she was aware that the personnel that she had recruited were representative of some of the best qualified and experienced personnel and as a result, it was therefore necessary to persevere in trying to upgrade their existing skills. The Centre Manager notes that the alternative, which would be to recruit expatriates, would have brought a different set of problems; namely difficulties in retaining expatriate staff once they have been trained and increased salary costs and would also have fallen outwith the MSI model (it is also questionable how long the MoH would have tolerated a Centre employing a high number of expatriates). The Centre Manager also points out a number of other benefits of recruiting local personnel: these include an inherent knowledge of the local community; and, potentially, the ability to ensure continuity of care. The Centre Manager comments:

'The nationals just need upgrading and patience.' (p.4, July 1999, *Monthly Report; MSI, 1999d*).

Despite continuing efforts on the part of the Centre Manager to train staff and to try to nurture an atmosphere whereby individual staff members would deliver quality services and with a reasonable degree of autonomy, ongoing supervision by the Centre Manager appeared to be the only way to ensure quality of care.

The Centre Manager provides further examples of the failure of Centre staff to improve the quality of their work. Another example is provided by the Centre Manager's report of the new receptionist:

'After training our receptionist for one whole month and following up on her daily for another whole month.....she loused everything up and changed the coding and so changed all the accounts and my books no longer correlated with hers. I am now once again in charge of the accounts.' (p.6, May 1999 Monthly Report; MSI, 1999a).

Again, the Centre Manager reports the continuing efforts she made to try to encourage staff to adopt improved working practices in order to sustain quality of service delivery:

'At the beginning our new doctor did not really agree to some of the points, and kept on trying to keep to her method of diagnosis and treatment, but as time went by, she began accepting. It is hard, but persistence gives good results. One of her problems was abuse of antibiotics as this is very common here.' (p.2, June 1999, Monthly Report; MSI, 1999e).

In July 1999 the Centre Manager reports how one of the midwives seriously jeopardised the reputation of the Centre by delivering a woman in her home rather than encouraging her to deliver in the Centre.

'I found out that one of our midwives was encouraging some of our antenatal clients to deliver at home. We had sent mystery clients to them last month when I started suspecting it, and this month it was confirmed. The delivery, as they say, took place on a Friday (which is a local holiday here) and we hadn't been open on Fridays. So.....now we will open for deliveries on Fridays....' (p.2, July 1999, Monthly Report; MSI, 1999d)

It should be noted that it was not that the midwife believed that the women should deliver at home, but it was for her own personal benefit. The Centre Manager provides another example related to this incident:

'the family had not wanted an episiotomy.....and the midwife did not open an episiotomy, and the labour was prolonged and difficult, which led to a cephalhematoma.' (p. 1, March 1999 Monthly Report; MSI, 1999f).

The Centre Manager adds that the woman:

'had had a history of four years infertility. Imagine such a woman delivering at home. Why are we open and why do we hire midwives if they do more harm than good. Why do we talk hours about good quality reproductive health, if our own midwives stab us in our backs for the sake of extra money ?' (p.1 March 1999 Monthly Report; MSI,1999f)

There were further problems with the new doctor. In August 1999 the Centre Manager's concern at the decrease in family planning client numbers prompted her to discuss this with the remainder of the Centre team. This was attributed to the fact that the new doctor categorised many of the clients erroneously. In addition a cross check by the Centre Manager revealed that a number of STI clients were treated for urinary tract infections.

In summary the delivery of quality care proved extremely difficult because of the resistance of the staff to engage in changing work practices.

The section now turns to a description of the action taken by the Centre Manager to improve the continuity of quality of care by introducing a Deputy Manager.

During the latter part of 1999, an increasing amount of the Centre Manager's time was being taken up with the establishment of a second MSI Centre. The new Centre was to be set up in the south of Yemen and as a result of the considerable distance and time involved in travelling to the new location, the Centre Manager was increasingly required to be absent from the Sana'a Centre for several days at a time. In order to try and ensure the efficient running of the Centre during her absences, the Centre Manager appointed the pharmacist as Deputy Manager in December, 1999. The Centre Manager reports:

'I spoke with Eman concerning her new role and she agreed. I also spoke with the staff and explained the new situations which would start taking place during December and they all agreed. All seemed happy that Eman would be the Centre manager and agreed to help and support her.' (p.6, October 1999, Monthly Report; MSI,1999g).

A number of problems arose soon after: firstly, the pharmacist's attitude to managing staff was dictatorial rather than participative and tensions erupted among the Centre team; secondly, she began to neglect her role as pharmacist and as a result client's

began to complain about being kept waiting. This problem became exacerbated as a result of a visit from MSI London in September, 1999 after which MSI London asked for the arrangement to be formalised and the now Deputy Manager to be paid a higher salary. This may have been an inappropriate reaction from MSI to a request from the now Deputy Manager. The Centre Manager reports:;

'Itold her that, if choosing her to be the deputy manager meant that we were going to lose out in the pharmacy, then maybe we had made the wrong decision and should reconsider. Thisdid the trick and she has been in her pharmacy at all times, but I don't know what happens when I leave the Centre for outside chores.' (p.6, October 1999, *Monthly Report; MSI, 1999g*).

A further example relates to the attitude of the pharmacist over the handling of a complaint by a bereaved father. The Centre Manager reports:

'.... he explained that he had come to our Centre because of the good reputation of the Centre, but the result was that he had lost his baby because of our Yemeni staff in a British organisation. Of course this is a very sensitive issue and one must tackle it very cautiously.' (p.7, October 1999, *Monthly Report; MSI, 1999g*).

The Centre Manager defused the situation by explaining clearly the position and, indeed, the man subsequently asked for family planning. In contrast the Centre Manager reports that the pharmacist, who had initially seen the man, responded to him in an aggressive manner.

The Centre Manager concludes:

'.....she has changed in such a short time and I wondered; Is this due to her affinity(i.e. her membership of the Islah Party).....? Is she being pushed ?' (p.7, October 1999, *Monthly Report; MSI, 1999g*).

These examples highlight the small human resource base capable of undertaking this level of managerial responsibility. The Centre Manager should not therefore have been surprised at the pharmacist's inability to perform as she had not recruited a Deputy Manager from this small managerial skill base. It also highlights issues surrounding the Centre Manager's ability. For example it is clear that she should have trained the pharmacist better in management style and, indeed, she may have been ill advised to

have made this choice. Hence the Centre Manager's ability to choose deputies efficiently is questioned.

It should be remembered that two health educators were recruited and this section now considers the success of their role which was to establish a programme of community based health education and outreach services in selected urban and peri-urban areas, accessible to the Centre. In addition a number of Centre based health education initiatives were also planned. Whilst the overall aim of the health education programme was to raise community awareness as to the benefits of preventive healthcare, it was intended that in doing so, the health education programme would serve as a referral mechanism for the Centre and thereby contribute to an increase in overall client numbers.

A review of the monthly reports reveals that whilst it took the Centre some time to implement health education activities, once underway they did not contribute significantly to an increase in client numbers. From an analysis of the monthly reports it appears that the failure of the health education programme can be attributed to three main factors: the need for the Centre initially to gain the trust and confidence of the local communities; the Centre Manager's lack of experience in developing and managing a health education programme; and the mistake of starting activities in rural areas as opposed to the immediate environs of the Centre. The first point is highlighted in a number of examples provided by the Centre Manager:

'We put an outreach programme, but may not be able to follow it as planned; it depends on many factors; the village leader, the condition of the villagers. Also we are planning to charge for our services, so we will see how the people will accept it and evaluate the situation. We may need to make lots of changes.' (p.3, August 1998, *Monthly Report; MSI, 1998f*).

In September, 1998 the Centre Manager reports that implementation of the programme was further delayed due to tribal disputes. A third example highlights very clearly the need for the Centre first to gain the acceptance of the local community:

'The other problem was that the villagers were not ready as had been planned with their leaders and some were wary of the services and they may have a right in that as last

year one of the NGOs here gave vaccination services in their outreach programme and instead of injecting the children with vaccinations they had brought vials of insulin by mistake and the team hadn't realised and many children died. So they were worried(p.8, September 1998, Monthly Report; MSI, 1998d).

To turn to the Centre Manager's lack of experience in the development and management of a programme of health education. It was soon clear to MSI London that this area was not being developed as it should have been. MSI London pushed for the programme to be operationalised but it became apparent that there was neither the will nor the ability to run this programme effectively.

As a result of these factors, the contracts of the two health educators were not renewed and the Centre put on hold plans to implement community based health education initiatives.

To conclude, this section has demonstrated the immense difficulty and huge management skilled required in changing local work practices so as to be able to deliver quality family planning and reproductive health programmes in addition to the difficulties of operationalising outreach activities in a conservative programming environment.

6.3.2 The impact of culture on quality of care

The cultural context in which a project is implemented presents a number of challenges to managers. In Yemen these challenges manifested themselves in a number of ways: firstly, the impact of cultural norms and values on the ability of the Centre to deliver quality services; secondly, the need to implement the project in a culturally sensitive and appropriate manner which would not prevent the project from achieving its stated goals and objectives; and thirdly, reconciling MSI's philosophy of challenging cultural norms and values in operationalising the delivery of reproductive healthcare. This section describes a number of tensions which developed between the MSI model and the realities of delivering reproductive healthcare in urban Sana'a.

One of the major difficulties was that normal working practices in Yemen were not commensurate with an MSI quality of care model. In particular Yemenis are often used to working in an environment which does not encourage effective time management, in which staff have poor motivation and in which there is very little, if any, supervision. The following three examples illustrate these characteristics.

In the first two months of the Centre's opening the Centre Manager experienced problems with two staff members; the first, in June 1998, was with one of the guards who on numerous occasions left his post for no good reasons. This is characteristic of many Yemenis who would not feel it necessary to be in the workplace when not directly supervised.

In November 1998, further problems developed with the guard who, as a result, was given three written warnings. It was made clear to the guard that any further offence would result in his instant dismissal. The attitude of this guard had worried the Centre Manager even prior to the opening of the Centre. She did not feel he displayed any loyalty to the organisation or a willingness to interact with other team members despite extensive efforts on her part to encourage this.

At the end of January 1999, the guard was fired. The incident which prompted his dismissal was that during a visit by the Centre Manager to London, along with two accomplices, he burgled the Centre, stealing most of the equipment and furniture. He and his two accomplices were discovered and put into jail. The police recovered the stolen equipment and furniture, although when the Centre Manager went to the police compound to arrange collection of the items, the police informed her that she would have to 'buy back the items'. The Centre Manager refused to do this. The Centre Manager reported to MSI London that because an international organisation had been targeted, the police felt it would be easy to elicit money from them. The Centre Manager informed the MoH about the actions of the police and following intervention from the Minister of Health and Abdul Ghani, all the stolen items were returned to the

Centre. The incident highlighted a number of issues, for example the problems of the recruitment of staff and the attitude of the police to an international organisation.

A second problem developed in July 1998 when one of the female staff members misunderstood the intentions of one of the male staff members, and vice versa. Again this kind of behaviour is very common in Yemen. The Centre Manager discussed the issue between the two and it ended forthwith.

A third incident in August 1998 further highlights the impact of cultural norms and values on the behaviour and attitude of Centre team members to each other. The Centre Manager notes:

'We met one problem this month and it was related to one of our male staff, who originally is from the village, and villagers are much more simpler than city people, especially city women, who will make an issue out of something very simple, and that is what happened. This young man tried to help a female client by paying her fees for her, but some of our female staff. owing to the culture here in Yemen, started accusing him of many things, some of which were very harsh. This led to problems at work of course because they all have to work together, and being tribal people, it had to be solved immediately before it grew, so, it was solved peacefully and the female staff realised their mistake.' (p.3, August 1998, *Monthly Report: MSI, 1998f*).

The Centre Manager's point regarding the need to resolve the misunderstanding immediately is key. If the problem had been allowed to escalate and involve people outside of the Centre it could potentially have resulted in an aggressive dispute between tribes with serious consequences for the Centre. The fact that the Centre Manager was able to deal with it so swiftly reflects her ability to deal with such a sensitive situation. It is worth noting that had the Centre Manager been Yemeni, such a situation may have been very difficult to contain within the boundaries of the workplace.

Another cultural issue concerned the replacement doctor, specifically her management of clients and her management and treatment of STI cases. The Centre Manager reports:

'She was not dealing with the contacts nor treating them. She was giving our pregnant women treatment for STIs without a clinical examination (as here in Yemen, their university teachers teach them not to touch a pregnant woman nor examine her

vaginally. This is a precautionary method here because of the tribal set up and because if for any odd reason the pregnant woman develops bleeding after her visit to the doctor, the tribe will cause problems for the Centre and the doctor they had visited....) (page 3, July 1999, Monthly Report; MSI, 1999d).

This latter point highlights the influence of culture on the delivery of reproductive healthcare services. The Centre Manager acknowledges that whilst changes in working practices are necessary in order to improve the quality of services, it is also important to recognise the limitations to which one (particularly an international organisation) can challenge existing practices in a traditional tribal society. To go beyond this would jeopardise the existence of the project.

The next issue concerned the laboratory technician who persistently asked to be able to take time off to study during working hours. It should be noted that she did offer to bring in a replacement, but equally, it would not be possible to quality assure a temporary replacement. Then the laboratory technician began to take unauthorised time off and the pharmacist intensified her efforts to persuade the Centre Manager to allow the laboratory technician to study and arrange cover.

The Centre Manager reports:

'I told her (the laboratory technician) that she would be fired on the spot next time I found out she had left like that. I also wrote to the whole staff claiming that no "time off" was to be taken as a few hours a day, but that if anyone had to do some work outside the Centre, they might as well take the whole day off. They all received copies, and one week later Sahar (the laboratory technician) phoned me up at home at night asking if she could take one hour off the next day...' (November 1999, Monthly Reports; MSI, 1999h)

The following day the Centre Manager notes that the pharmacist made it very clear that she disapproved of the action she had taken. Commenting on this the Centre Manager adds:

'I had been realising this very close link between both Sahar and Emam for the past few months and started to search for the reason, and found out that both had affinity with Islah, which to me is no problem if it does not affect their attitude at work as they are very reasonable people, to be honest but I feel that this may start developing into something else and before they were both very quiet at their work, but now are

beginning to prove something, especially after I spoke with Eman concerning her new role as Centre Manager.' (p.5, November 1999, Monthly Report; MSI, 1999h)

The issue of the conflict between quality delivery and membership of the Islah Party will be discussed later.

There was also a problem in changing work practices in respect of the newly appointed Yemeni doctor. In commenting on the attitude of the doctor the Centre Manager describes the following:

'Yemeni doctors have this pride in themselves that they feel that they know it all....."We know what's best for us", or "This is the way we do it here" and even if she is convinced that the new way is more beneficial to her community, she will still persist on doing it their way. She has also told me "we Yemenis do not like foreigners ruling us," meaning that the post I had should be for a Yemeni. (p.3 March 1999 Monthly Report; MSI, 1999f).

The Centre Manager adds that:

'it's not actually responsibility they want, but the position.' (p.3, March 1999 Monthly Report; MSI, 1999f)

6.3.3 In-country Consultant

The consultant was recruited on a 12 month contract to provide 16 hours consultancy input per month. It was agreed that the Centre Manager would determine in which areas she required support and deal directly with the consultant in determining the scope and timing of her inputs.

A review of the monthly reports reveals that the input of the consultant did not contribute in the manner which had originally been envisaged. The Centre Manager reports:

'it was an extra cost to the Centre, and it led to delaying some of the activities.....because she wanted to be informed about what was going on.....at the end to make things faster I began carrying out many of the activities without getting back to her, as sometimes we would agree to something (MSI London and I) and then she would not think it was such a good idea, and we would end up having lots of meetings to discuss the subject....and at the end, it really didn't make much of a difference.' (p.6, March, 1999 Monthly Report; MSI, 1999f)

It appears from the monthly reports that the inputs of the consultant were determined on an ad hoc basis and were not necessarily relevant to the Centre's overall objectives. The consultant appears to have been under utilised, and in addition lacking the technical expertise required to provide all round support to the Centre Manager although she was eminently qualified in the non-medical aspects of service delivery in Yemen.

6.3.4 Summary

In summary, this section has described the many personnel problems which impacted on the delivery of quality reproductive health in Sana'a. Many of these revolve around an unwillingness to develop new skills and working practices and it is very clear that in selecting personnel much emphasis needs to be placed on flexibility and the acceptance of new working practices. This puts an important focus also on management both in making effective selection decisions and on dynamic management over time. The importance of the latter is demonstrated fully by the speed with which standards dropped as soon as a close day to day management regime was relaxed. The analysis also demonstrated that, perhaps, the Centre Manager, for all her undoubted qualities lacked the management skills properly to organise and manage the Centre – thus identifying a clear need for proper management training. Finally, as many authors (for example Ahlborg and Diamond, 1996) have noted, it is absolutely essential to consider cultural factors in the delivery of reproductive health. In the context of the MSI model the experience demonstrates, perhaps, that as Axby argued (see Chapter 3) the concept of multi-skilling and multi-tasking does not work at a senior managerial level and therefore, one needs a Country Director.

6.4 Clients

This section provides a qualitative interpretation of the trends in client numbers described in Section 6.2. As described there, client numbers rose by around 235% between June 1998 and November 1999. The Centre Manager reports that 99% of

clients who attended the Centre were Yemeni and lived in the areas surrounding the Centre. Around 95% of the Centre's clients were women and children. The socioeconomic profile of the majority of clients was low to middle income.

The first topic to be considered is the issue of charging for services. In the first month of opening, the Centre faced some resistance from the local community regarding a) the levying of fees for services and b) the level of fees for services. The Centre Manager wrote:

'It seems that the whole area surrounding our Centre were expecting to have absolutely free services from Marie Stopes, as they had been told by some of the officials here that the Centre would provide all services free of charge. So one can expect their disappointment at the beginning.' (p.4 June 1998 Monthly Report; MSI, 1998g).

Similarly the level of fees set by the Centre attracted initial criticism from the MoH and the Sana'a Health Office, both of whom felt that for comparable services, the Centre should not be charging more than public sector health facilities. The MoH were concerned that the level of fees would make the Centre's services inaccessible for many. MSI's view was that if client numbers did not rise then the Centre could revise its pricing structure, but that an initial period of time was needed to monitor uptake of its services and MSI sought to reassure both the MoH and Sana'a Health Office regarding this. In order to ensure however that the cost of services was not a barrier to uptake, MSI planned to introduce a subsidised treatment fund (STF). However, the Centre Manager felt that subsidised treatment should not be introduced initially and that it should be phased in. She believed that, in the context of Yemen, if subsidised treatment was available from the beginning the whole community would expect to receive subsidised treatment. Therefore she felt it would be better first to establish a client load. The Centre Manager attempted to introduce a STF in January 1999 and this is described in Section 6.5.3.

Despite the problems over fees, initial client feedback, highlighted in the monthly reports of June and July 1998, suggested that the Centre very quickly began to develop a reputation among the community for quality of care; the Centre Manager noted:

'The people are now accepting the fact that they have to pay money for the services, are happy with the quality of care and the quality of our services and tell us different stories of how they have been treated in other facilities.' (p.4, June 1998, Monthly Report; MSI, 1998g).

To turn to family planning numbers, these increased steadily during the reporting period, although as a percentage of overall client numbers, family planning clients remained low. The Centre Manager attributed this to a number of factors, which included:

- a preference by clients to purchase a limited number of family planning commodities at any one time. Clients were reluctant for example, to purchase a three month supply of oral contraceptives, preferring to take only one month's supply. The Centre Manager attributed this to the poor financial situation of the majority of Yemenis;
- high level of genital infections, which meant that for the majority of clients who attended the Centre requesting an IUD, their infection had to be treated first. The Centre Manager writes :
'..there is such a high prevalence of genital infections, due to lack of personal hygiene and negligence. People need to have more education concerning sexual health.' (p.1, July 1998, Monthly Report; MSI, 1998c).
- that this reflected the low CPR rate nationally.

The Centre Manager points out, however, that although the increase in family planning client numbers was small, these figures must be interpreted in the context of Yemen. Commenting on the percentage increase in family planning clients from June 1998 to May 1999 the Centre Manager reports;

'I know it is only a small rise, but it reflects a big change in attitude in relation to a general acceptance by the community in Sana'a to receiving FP services from a British organisation. You may not be able to appreciate the significance of this achievement as FP is such a sensitive issue here and one of the main causes why the Centre still attracts criticism.' (p.1, May 1999, Monthly Report; MSI, 1999a).

Another important area in the mission of the Centre was general reproductive healthcare. Clients attending for such services as antenatal care did increase, a significant achievement given the low numbers of women seeking antenatal care nationally (YDMCHS, 1997). The number of non-Yemeni antenatal clients also increased following the appointment of a second midwife (of Sudanese nationality) who joined the Centre team in September 1998. The Centre Manager writes:

'Our antenatal client numbers increased and this increase took place after the new midwife joined us. Many Sudanese women have now begun to attend our Centre regularly, as they would prefer to have a Centre which can deal with their circumcision, rather than attending the hospitals where staff make derogatory remarks about the fact they are circumcised.' (p.1, September 1998, *Monthly Report*; MSI, 1998d).

Another major area of development is services to deal with STI and other genital infections. The Centre Manager commented that this was to be expected:

'As for our non FP services, they are higher than our FP services, and this is understandable in a country like Yemen. Personal hygiene is lacking in almost all aspects of daily life, this, in addition to the low local income and the high prices of medical services, has all led to the high prevalence of communicable diseases, and infectious diseases, and people therefore seek medical care only after they can no longer tolerate the symptoms. Lack of general education in the community is also a very important factor here.' (October 1998, *Monthly Reports*, MSI, 1998h).

The number of clients attending the Centre who were diagnosed as having an STI initially surprised the Centre and these numbers continued to rise throughout the period. In July 1998, 41% of all new clients were diagnosed as having an STI. The Centre Manager was aware of the sensitivity of this area, but equally felt if a woman, diagnosed as having an STI, was accompanied by her husband to the Centre, then her husband should be counselled on this subject. She writes:

'The most difficult part is that the husband refuses to be treated with his wife, and it takes lots of counselling to explain to the husband of the necessity of him being treated with his wife. We have been successful in convincing the majority, but to many men, this is a new subject, because none of the Yemeni doctors ask for the husband to be counselled or even think that the husband should be treated and many men tell me, "This is the first time we are told this". So we need to stress on reproductive healthcare, but it must be done tactfully, with respect to the culture of the country.' (p.1, September 1998, *Monthly Report*; MSI, 1998d).

The Centre Manager also reports difficulties in dealing with clients who have genital infections due to the high cost of laboratory tests, which result in many clients refusing to have the necessary laboratory tests done. As a result it proved very difficult for the Centre to document the specific STI that a client had and therefore diagnosis had to be made based on the doctor's clinical judgement and in accordance with WHO guidelines regarding the symptomatic diagnosis and management of STIs.

The Centre Manager also comments on the issue of female genital mutilation:

'Another problem faced with the people coming from the coast of Africa and residing here in Yemen is the problem of female circumcision. This is a must in the Somali and the Sudanese and the Egyptian cultures, and many of these women are now marrying into the Yemeni families, so this is very quietly creeping into Yemen. Of course it is not allowed legally, but it is being done secretly and we are in our Centre receiving Yemeni women whose mothers are, for instance, Sudanese and who are circumcised. This of course leads to a higher incidence of STIs and urinary tract infections in these women. It also leads to complications at marriage and at childbirth.' (p.1, September 1998, *Monthly Report; MSI, 1998d*).

While it is clear from the above that there are a number of problems it is essential that services are delivered in a culturally appropriate way. The Centre Manager appreciated this, commenting:

'Increasing the general awareness of the community on reproductive health care. This is not going to be done easily as it is a very sensitive subject and such issues are not discussed openly here, so it needs to be tackled in a way which respects the culture and the traditions of the Yemeni community.' (p.6, September 1998, *Monthly Report; MSI, 1998d*).

As will be apparent from the above, an important co-factor in the delivery of reproductive healthcare in Yemen is the poor level of general healthcare. This is illustrated through the following case studies:

Case study 1. *'...in general we receive many cases that have been mismanaged in other Centres. An example is of a woman who had been seen by maybe five different doctors (some gynecologists) and who was diagnosed as only having genital infections and was treated many times for infection. Her main complaint was recurrent abortion as she had been married for four years and had had three miscarriages during this period. The doctors told her that the cause was the genital infections, and when she came to us it was immediately obvious that there was another problem as, upon*

carrying out an abdominal examination, it was obvious that she had a pelvic mass which had reached the level of her umbilicus, and from carrying out a bimanual exam it was obvious that the mass was related to the uterus....How on earth these doctors didn't realize the mass ? She was then referred to the hospital who operated on her and found a gigantic fibroid in her uterus which had completely obliterated the uterine cavity. This is one example and we receive others.' (pgs.6/7, September 1998, Monthly Report; MSI, 1998d).

This second case study reflects the impact of traditional behaviour on the reproductive health of women:

Case Study 2. *'We get many interesting cases; one was a young female aged around 15-16 years who presented with about six months missed period. She was unmarried and the family were worried about the cause of the delayed period. Upon examination, she had a huge soft cystic mass coming out of the pelvis and had reached up to her umbilicus. From carrying out further check up, it was obvious that she was not pregnant, but to the family that's all they want to know. So off she went back to the village, with the mass in her pelvis and they refused further investigations. To them, the mass and the amenorrhea was not a problem since it was not pregnancy.' (p.7, September 1998, Monthly Report; MSI, 1998d)*

The first of these case studies reflects the widespread criticism echoed throughout the population regarding the attitude and treatment received from many doctors. As a result, a general mistrust exists towards many in the medical profession. One consequence of this is the strengthening of the role of traditional care providers, as discussed in Chapter 2. Many women also take up the advice of family members, even if this can at times contradict that which has been given by a doctor.

The second case study highlights the impact of traditional tribal norms on a woman's reproductive health and hence the potential for the care of any reproductive health problems that she may have.

In summary this section has demonstrated again the importance of culturally appropriate delivery of reproductive healthcare. In Yemen one could not expect to increase numbers without taking into account the state of the economy, the lack of autonomy of women and the tribal nature of the community.

6.5 Cost Recovery

An essential part of the case study of the MSI model provided in this thesis is the extent to which financial sustainability is being achieved. The thesis is considering the first 18 months of the Centre's operations and this section provides some qualitative enhancement to the data provided in Section 6.2. The following factors which impacted on financial sustainability and, in particular, income to cost recovery; pricing; and subsidised treatment are discussed.

6.5.1 Income to Cost Recovery

Overall income to cost recovery grew steadily during the period. In the first 11 months this growth was relatively small but increased markedly from April 1999 due to large numbers of clients seeking the Hepatitis B vaccine. It is noted that, as the Centre started to limit the number of clients for this service, income to cost recovery dropped a little in November 1999 which perhaps brings into question the long term financial sustainability of the increase as a result of Hepatitis B.

6.5.2 Pricing

The level of fees set by the Centre attracted criticism from a number of areas; the local community, who were used to receiving services free of charge from NGO's; and the local committee who had informed the community that the Centre would be providing high quality reproductive health services free of charge. As a result, the Centre Manager reports, local expectations of the Centre were very high.

The level of the Centre's fees were generally higher than those found in public sector health facilities but were much lower than private sector prices. In comparison to those

NGOs that did charge for services, the Centre Manager reports that the Centre's prices were slightly higher than most, but not all. The Centre Manager reports that with the exception of laboratory services, fees for services remained static throughout the period, despite the devaluation of the rial and the increase in fees throughout the private sector.

The Centre Manager notes that the increase in fees for laboratory services did not result in a reduction of client numbers. As for other services, the Centre Manager reports that the Centre changed its pricing structure rather than its level of fees in an attempt to increase client numbers. For example the Centre reduced the cost of antenatal and family planning services, but charged an additional fee for these clients if they were also referred to the doctor. Before these clients had been seen by the doctor free of charge. The Centre Manager reports that the pricing structure for these services was changed for a number of reasons; firstly, to improve acceptability within the local community; secondly, to improve the reputation of the Centre by charging an additional fee to be seen by the doctor; thirdly, to increase the income generated by the doctor.

The Centre Manager reports that the Centre's action:

'had a positive affect from all aspects; on the community and on the officials (everyone stopped complaining) and on the staff members themselves.' (p.2, March 1999, *Monthly Report; MSI, 1999f*).

With regard to the MoH and the Sana'a District Health Office, the Centre Manager reports that the MoH accepted the fees set by the Centre following the adjustment to the pricing structure and upon the proviso that client numbers continued to rise. The Sana'a District Health Office continued to maintain that the Centre's prices were too high, but following a meeting with MSI's Arab World Senior Programmes Manager they agreed to the situation in light of the MoH's approval.

These points highlight the overall context within which the Centre was trying to achieve cost recovery and the Centre Manager reports that the close scrutiny of the Centre's prices restricted the income generating potential of the Centre. With reference to the pharmacy the Centre Manager reports:

'to improve the pharmacy income, one needs to sell for higher prices and not abide to the 20% profit (margin), but because we are always under inspection for prices, we could not do that.' (p.4, March 1999, Monthly Report; MSI, 1999f)

In addition the Centre Manager highlights the sensitivity of income to cost recovery with regard to the individual service provider. The Centre Manager reports that the Centre witnessed a substantial decline in the number of clients purchasing drugs from the pharmacy when the Centre introduced a Yemeni doctor. The Centre Manager reports: *'when we changed from an Iraqi doctor (myself) to a Yemeni, clients stopped buying the drugs, and would take the prescription to other sources to make sure whether the diagnosis and treatment were correct, and that lost us many clients from the pharmacy. There was a lack of trust in her management.'* (p.4, March 1999, Monthly Report; MSI, 1999f).

To turn to obstetrics. This had been introduced as part of the Centre's method mix as it was felt that it could potentially underpin the financial sustainability of the Centre. The Centre Manager reports that this did not happen for a number of reasons:

- the Centre did not operate a 24 hour service (the Centre Manager reports this as being the main reason);
- proximity of the Centre to a nearby hospital providing obstetrics;
- disloyalty of two staff members; first, the Sudanese midwife who delivered one of the Centre's clients at home; and second, one of the guard's who told clients phoning up to come for delivery that the midwife was not available;
- reluctance of some women to deliver in a Centre which was not equipped to deal with more complicated cases (the Centre had established a referral system with the nearby hospital for emergency cases).

In analysing the above, one might conclude that had the Centre researched the potential for obstetrics better a number of the above obstacles would have been overcome and as a result the Centre could either have addressed these issues or revised its decision to introduce this service. One perhaps should question the extent to which the Centre was basing its expectations regarding obstetrics on the success of

other MSI programmes in generating substantial income from obstetrics and on the enthusiasm of the MoH that there would be a demand.

6.6.3 Subsidised Treatment Fund

In January 1999 the Centre made some attempts to offer subsidised treatment to the community. The Centre Manager reports:

'the reason why we began it was that we were under tremendous pressure concerning our pricing.....although we had been open for six months we were still receiving complaints concerning our pricing from all sectors...of ...neighbourhood leaders, community, Sana'a health office and scattered people from the MoH and the committees (Al-Wafaa). So we felt that by starting this service.....the poor would be able to receive our services and those who were complaining about prices would no longer have anything to complain about.' (p.1, March 1999, Monthly Report, MSI, 1999f).

The Centre began by giving ten subsidised treatment cards to the Al-Wafaa Charity Committee for them to distribute to needy individuals or families. The card entitled the holder to be examined for YR30 (around £0.14) instead of the standard fee of YR200 (around £0.90). The Al-Wafaa Charity Committee failed to respond to the Centre's gesture or to refer any clients to them for subsidised treatment.

In a renewed attempt to offer subsidised treatment the Centre Manager reports that they agreed that as most of the complaints came from the neighbourhood leaders and the community they would invite the community leaders to the Centre to involve them in

the provision of subsidised treatment. All 14 neighbourhood leaders in the Centre's two target areas were invited, eight turned up at the Centre. The Centre Manager reports: *'we discussed our services with them and what we wanted to do for the poor in the area and that we would need their help to identify the poor, and they showed genuine agreement and it was agreed that we would pass out a total of ten cards to each Aqil and these would be returned to the Aqil once they were collected from the clients. We*

discussed our pricing and what the discount for the poor would be. We agreed on this all and they seemed very happy with it.' (p. 1 March 1999, Monthly Report; MSI, 1999f).

Again, however, the Centre failed to receive a response or any clients through this gesture. In light of a lack of response the Centre Manager writes:

'it seems there is a general agreement not to cooperate as these 'leaders' have no personal benefit from the Centre (if you get my point)...' (p. 15, January/February, 1999, Monthly Report; MSI, 1999b).

The Centre Manager reports that by the end of January 1999 only two clients had been referred from one of the Aqils.

In a renewed attempt to promote the existence of a subsidised treatment fund (STF) the Centre Manager took the decision to place a weekly advertisement in a local newspaper. As well as promoting the Centre and its services the purpose of the advertisements was also to inform readers that ten subsidised treatment cards had been given by the Centre to each of the neighbourhood leaders in the area so as to provide subsidised treatment to the poor. The Centre Manager writes:

'This will get the poor at their doors asking for the cards.' (p. 15, January/February 1999, Monthly Report; MSI, 1999b).

In February 1999 the Centre Manager reports that the Centre did begin to receive a few referrals from a number of the Aqils. The Centre Manager reports, *'they started sending individual cases, but, they were all wealthy people!!!.....they all turned out to be relatives or close friends of the Aqil, like his wife, or daughter in law or his children, or even relatives of rich people in the committees, which was irritating, because the poor would actually come to the Centre asking us to reduce the fees for them and when we would ask from which area they were from, then tell them to go to the Aqil to get the card, they would refuse claiming that they could not get the card without paying money for it.'* (p. 1. March 1999, Monthly Report; MSI, 1999f).

The Centre Manager persevered in trying to encourage the involvement of the Aqils but then writes:

'This whole process continued until around mid March (1999), and then I got in touch with the Sana'a Health Office Director and discussed the situation with him, and he helped a lot and guided me to a school principal who had many girls from the local poor families enrolled in her school and we met and the same agreement we had made with

the Aqils was made with her and we started in April.' (p. 1 March 1999, Monthly Report; MSI, 1999f).

The Centre Manager notes that the system worked extremely well:

'She was honest and sincere in whom she sent, so that's when it went right. So to make it work you need a contact from within the community who actually cares to serve the community involved, and you can never find them without trying out different people and different ways and you may make mistakes at the beginning but at the end either you realise that it is just a waste of time and effort or you find the right person to deal with.' (p. 1 March 1999, Monthly Report; MSI, 1999f).

The impact of the STF on client numbers was limited and averaged around five clients a month for the first three months and thereafter began to subside. The Centre Manager attributes the low number of clients seeking subsidised treatment to the fact that while services were offered at a reduced price, the cost of drugs remained the same for all clients. The Centre Manager reports that she wrote to a number of drug companies regarding the Centre's STF and asked if they might donate small amounts of drugs to the Centre, which they could distribute free of charge to poor clients. The Centre Manager notes however that no one responded.

6.6 External Influences

This section draws together a number of the external factors which impacted on the delivery of reproductive healthcare at the Centre. In the initial months, the Centre Manager faced repeated attempts by some members of the community to interfere in the running of the Centre. Such actions ended following the intervention of Muhammed Duwaid who brought his political influence to bear. It should be noted that in making this intervention Duwaid was, perhaps, not reflecting his own personal views but, rather, was reacting to political exigencies elsewhere.

These attempts to intervene in the running of the Centre highlighted a number of issues:

- i. local community leaders, although agreeable to the establishment of the Centre had promoted it as providing services free of charge. This was done in order to

improve political credibility and community standing. The Centre Manager found herself repeatedly explaining to members of the community that although MSI was an NGO it operated a policy of cost recovery in order to ensure the ongoing sustainability of reproductive health services.

- ii. political parties tried to involve themselves in the running of the organisation in order to take credit for its implementation. Again the Centre Manager had to make it clear that MSI was an autonomous and apolitical organisation;

In addition to the above, the Centre Manager also faced a number of diverse problems during the initial stages of the Centre's opening and its and ongoing development.

These included:

- i. attempts by the Islah party to discredit the Centre through statements suggesting that it was not appropriate for an international organisation to be providing family planning services to Yemeni people. These accusations were not unexpected. The Islah Party funded a maternity hospital in urban Sana'a and was undoubtedly worried that the MSI Centre might result in a decrease in its client numbers.
- ii. a lack of willingness on the part of the YFCA to cooperate with the Centre. UNFPA for example, as a main supplier of contraceptives to both the Yemeni MoH and the YFCA had assured MSI that it could obtain a specific type of IUD from those it donated to the YFCA. The YFCA refused in the initial stages to supply the MSI Centre with these commodities, perceiving the presence of the MSI programme in Yemen as a threat and hence, potentially a barrier to gaining donor funding.
- iii. concern by Abdul Ghani regarding the level of fees charged by the Centre. Dr Nagiba felt that the charges levied by the Centre were too high and were reflected in the low client numbers experienced in the first few months. Dr

Nagiba's concerns had to be handled sensitively by MSI's Centre Manager; on the one hand MSI needed the ongoing support of the MoH, on the other hand the Centre Manager was acutely aware of the need to achieve cost recovery and of the close monitoring by MSI London to ensure that the project remained focused on this objective. With the support of MSI London, the Centre Manager did not reduce the fee levels. The Centre Manager did, however, seek the involvement of MSI's Arab World Senior Programmes Manager in reassuring Abdul Ghani, that MSI would, as appropriate, adjust fees for various services if it was felt that the charges initially set were prohibitive to the uptake of services by the project's target beneficiaries.

- iv. a general lack of acceptance from the community in the initial days of the Centre's opening due in part to the expectations raised by local community leaders. The Centre Manager notes however that whilst initially the Centre faced a problem of 'unmet expectations' that with time:
'the people started accepting the fact that they have to pay for their services, especially when they realized that the prices were almost similar to government prices, but the quality of care was much better than that received at the government level'. (August 1998, Monthly Report; MSI, 1998f).
- v. There was also great concern from the MoH that the Centre may be providing abortion. The Centre Manager was often concerned that some clients were 'mystery clients' sent by the MoH to check on the Centre. Prior to the opening of the Centre, Abdul Ghani had repeatedly sought reassurances from MSI's Arab World Senior Programmes Manager that MSI would not be providing abortions in its Centre. Abdul Ghani was aware that MSI provided this service at many of its Centres throughout the world and these included countries where it is illegal.
- vi. There were also accusations that the Centre was established in order to encourage people to convert to Christianity. The Centre Manager believed that these rumours stemmed from supporters of the Islah Party. Repeated approaches to members of the Centre team by supporters of the Islah Party to

promote this theory meant that the Centre Manager had to reassure the Centre team that MSI had no such agenda. The Centre Manager writes:

'I explained (to the Centre team).....that all the services provided by MSI here in Yemen, were only those services that were culturally accepted here and that the religion was taken into consideration and that none of our services were against the Yemeni culture or religion.' (p.9, September 1998, Monthly Report; MSI, 1998d).

In another such incident the Centre Manager reports:

'A man came up to the Imam of the mosque my husband prays in (the Imam is my husband's friend and his wife attends our Centre.....). The man told the Imam to beware of going to MSI's Centre 'because this organisation had come to Yemen to spread Christianity. The Imam gave him a good piece of his mind and asked him to bring proof of what he was saying.' (p.5, May 1999, Monthly Report; MSI, 1999a).

However the Centre Manager acted very appropriately to reassure staff members of the acceptability of MSI's intentions. In a society such as Yemen 'reputation' is crucial. If the reputation of the Centre had fallen into disrepute the consequences would have been disastrous; the recruitment of staff would have been very difficult and the majority of people would have been deterred from seeking its services. In Middle Eastern societies and particularly one as conservative as Yemen, reputation, both on a personal and institutional level is vitally important. Once a person's or an organisation's reputation has been tarnished it is virtually impossible to regain the esteem in which one may have previously been held. Middle Eastern society is very unforgiving in such circumstances and this is particularly true in a country like Yemen where the majority of news is spread by word of mouth.

There are two points which should be emphasised with reference to the above points. The first is, as in many countries which are the recipients of a high level of donor aid, a donor mentality has developed. Yemenis are therefore used to receiving free services from foreign organisations. Secondly, the point regarding the reaction of local community leaders to the issue of charging for services is an important one in the context of Yemen (and is indeed applicable to other Middle Eastern countries). The

agreement which one may feel has been reached at the end of a business meeting (or similar discussion) often does not hold and in trying to reach an understanding or agreement it may be necessary to present one's 'argument' or viewpoint many times and over the course of a period of time and often involving a third party in order to informally reinforce a point of view.

During the development of the Sana'a Centre, MSI's Arab World Senior Programmes Manager discovered on a number of occasions that the basis of agreements reached during a visit to Yemen, had during her absence, been changed or misinterpreted. In the context of Yemen, an agreement can sometimes be reached with relative ease because there exists a hidden agenda. The hidden agenda can often be the expectation of some form of payment or employment position in exchange for agreement. However, it would be culturally unacceptable to make this intention known during initial discussions. It should be emphasised that if these discussions were to take place between two Yemeni parties then such expectations would be silently acknowledged and met. Yemenis therefore can enter into negotiations with a foreign organisations with similar expectations regarding the outcome.

Furthermore many foreign organisations in Yemen employ what is locally referred to as a 'fixer.' A fixer is someone (who without exception would be male) retained by an organisation to deal primarily with bureaucratic procedures (for example; attainment of government agreements, importation of goods, etc). At one point during the set up of its Sana'a Centre MSI investigated the idea of retaining a fixer in order to assist the Centre Manager. The Centre Manager identified and briefed a local person. It quickly transpired however that the fixer's involvement was actually going to lengthen the process and that the fixer was going to pay a number of people along the way in order to complete the process. MSI's Arab World Senior Programmes Manager decided that the arrangement should be terminated immediately for two main reasons; firstly, it quickly became apparent that MSI's Arab World Senior Programmes Manager had more senior contacts than the fixer and would therefore be able to assist the Centre Manager with external issues a lot more effectively and efficiently even from a London

base; secondly, the involvement of a fixer and his inevitable entourage of paid helpers invited the potential for greater attempts at interfering in the running of the Centre.

This section has highlighted the level of external interference experienced by the Centre. It should be questioned how the Centre managed this interference. In the main by tact and cultural awareness it was possible to ameliorate the damage. However it is not possible fully to evaluate the extent to which these external factors did impact on people's decision to use the Centre.

6.7 External Collaboration

MSI was active in trying to establish collaborative links with other organisations. A number of initiatives were initiated by MSI's Arab World Senior Programmes Manager and the Centre Manager, while others developed from approaches made to the Centre Manager. In all but one case, MSI's receptiveness for collaboration was reciprocated. An analysis of references to collaboration in the monthly reports is summarised below under organisational headings;

6.7.1 The Ministry of Health

In June 1998, one month into the opening of the Centre, the Centre Manager acknowledged the generous support of the MoH towards the MSI Centre. The Centre Manager notes the donation of medical equipment, family planning commodities, drugs and vaccines to the Centre. The Centre Manager adds:

'They have also asked us to give them monthly reports on STD patients and supplied us with books and posters and pamphlets' regarding STDs.

'They have also agreed to print our leaflet for a price cheaper than printers. They have also offered to accompany our Health Educators in their outreach activities to give it a more official backup.....They are now also assisting us in getting the female condoms out of the airport, so they have been a real good support for our project.....'(p.2, June 1998, Monthly Report; MSI, 1998g).

In September 1998, the Centre Manager reports that the Director of the National Aids Programme at the MoH has asked for the Centre's cooperation in participating in

research into the incidence of STIs in Yemen. A number of initiatives developed from this; i) the Centre completed monthly reports supplied by the MoH regarding the number of STI cases seen each month; ii) the MoH equipped the Centre's laboratory with the necessary equipment in order to enable the Centre to diagnose particular types of STIs. The MoH trained the Centre's laboratory technician in the use of the specialised diagnostic equipment.

Throughout the reporting period the Centre Manager also records that Centre personnel attended a number of STI training course run by the MoH and the WHO. In addition, the Centre Manager attended a number of national conferences at which she was invited to present the work of MSI in the diagnosis and management of STI cases.

Throughout the period reported on, MSI supported the MoH in the development of its immunisation programme. The MSI Sana'a Centre was designated a permanent vaccination post during the MoH's various immunisation campaigns, in addition to the Centre providing immunisations on an ongoing basis in line with MoH policy.

In June 1999 the Centre Manager reports that the MSI Centre was selected for inclusion in a UNAIDS project. The Centre Manager notes:

'We had a meeting with the UN Agencies and the Minister of Health and the WHO Representative here in Sana'a concerning this issue and a project which will start in August (1999) concerning HIV and men and women here in Yemen. This shows their trust in our organisation.' (p.2, June 1999, *Monthly Report; MSI, 1999e*).

6.7.2 Yemeni Family Care Association (YFCA)

Prior to the opening of MSI's Sana'a Centre, MSI's Arab World Senior Programmes Manager had made repeated attempts to establish a working relationship with the YFCA. These efforts had not been reciprocated and the Director of the YFCA made it clear that he viewed the establishment of MSI's programme in Yemen as potentially diverting donor funding from the YFCA to MSI. Upon the opening of its Sana'a Centre,

the Centre Manager continued the efforts initiated by MSI's Arab World Senior Programmes Manager. In her June 1998 report she writes:

'We have tried to cooperate in a friendly manner with the Yemeni F/P Association, but they are keeping their borders. It will take them a while to actually accept our presence.' (p.2, June 1998, Monthly Report; MSI, 1998g).

The attitude of the YFCA is understandable. They are one of the oldest and largest NGOs in Yemen and their role in the provision of reproductive healthcare services has continued unchallenged. Their nervousness towards the establishment of MSI in Yemen was undoubtedly compounded by the high level of support which this had attracted.

In September 1998 however the Centre Manager writes:

'We got a list of FP leaflets which were produced here in Yemen by the John Snow Organisation, and which were very nice leaflets. The Yemeni FP Association gave them to us, and this is the first gesture from their side to cooperate with us. We welcomed it and thanked them and they offered to give us more when our supply finished. They also asked if we would agree to distribute their magazine in our Centre to clients and as a gesture of goodwill in return, I agreed.' (p.4, September 1998, Monthly Report; MSI, 1998d).

6.7.3 Proctor & Gamble

During the initial development of the Sana'a Centre, MSI's Arab World Senior Programmes Manager had explored ways in which the two organisations could collaborate. These initiatives had developed from informal discussions held between MSI's Arab World Senior Programmes Manager and Proctor and Gamble's Country Representative.

Proctor and Gamble had developed a range of products which were aimed at low income women and their families. These products included sanitary towels, soap and disposable nappies. Proctor and Gamble approached MSI to ask if they might promote their products in their Centre. The approach suggested by Proctor and Gamble was that MSI would distribute free samples of its products to clients, as appropriate. Clients

would then be able to source these products at an affordable price in the local markets. In addition, Proctor and Gamble offered to provide training to the Centre team in the use of its products and more broadly on general health education issues and agreed to MSI Centre team members participating in Proctor and Gamble's national programme of health education. This initiative would involve designated MSI team members accompanying a Proctor and Gamble team to rural areas throughout Yemen. As Proctor and Gamble were already implementing such a strategy with the MoH, MSI's Arab World Senior Programmes Manager felt it represented an enormous opportunity for a number of reasons: i) both were targeting low income women and their families; ii) free samples would be popular with women; and iii) there would be potential for training of the Centre team

Proctor and Gamble did supply the Centre with samples of their products for free distribution and this proved extremely popular with clients. However attempts by Proctor and Gamble to collaborate in health education initiatives did not materialise due to a lack of response from the Centre Manager.

In December 1998, Proctor and Gamble also asked the Centre Manager if she would agree to stock their products in the Centre's pharmacy. The Centre Manager agreed because clients had been specifically asking for their products and because she felt it presented an opportunity to generate additional income.

An analysis of the monthly reports and discussions with the Centre Manager reveal however that the collaboration between Proctor and Gamble and MSI's Sana'a Centre did not develop as MSI's Arab World Senior Programmes Manager had originally visualised and agreed with Proctor and Gamble's Country Representative. The potential opportunities represented by collaboration were lost due to two main reasons:

- i) the Centre Manager did not have the time to pursue this opportunity because of her many roles within the project;

- ii) a lack of willingness on the part of the Centre Manager. This can be attributed to the fact that the Centre Manager had spent a lot of time embroiled in external attempts to interfere in the running of the Centre and as a result was reluctant to establish collaborative links with an external and (to her) unknown organisation.

6.8 Conclusion

This chapter has so far described the trends over time in a number of key performance indicators as well as providing qualitative evidence on a number of factors which influence the performance and sustainability of the Centre. This conclusion section aims to address the specific question posed in Chapter 1 and which is central to this thesis namely whether the Centre established itself in a way in which it is likely to be able to become sustainable in the medium term and in the long-term hopefully to be able to provide the sort of cross subsidisation that follows the MSI model. In so doing it also addresses the question of the extent to which the MSI model has worked in Yemen and has potential transferability elsewhere.

This question requires a careful discussion of the sustainability of the Centre. It is defined that sustainability occurs as a result of establishing both institutional and financial bases from which to develop. Therefore, in evaluating the success of the MSI model in the establishment of the Centre, this section will address both these aspects of sustainability. After discussing both institutional and financial sustainability, the section will end with a summary subsection.

6.8.1 Institutional Sustainability

Institutional sustainability has been defined in Chapter 3. The needs of that definition require the acceptance by and partnership with external organisations and stakeholders as well as the development of an indigenous human resource base from which a long-term, high quality delivery of reproductive health can be made. In the context of this case study this means that relationships needed to be forged at a number of levels:

- at a **macro** level with the MoH;
- at a **meso** level with community leaders;
- at a **micro** level with the local community and with the available pool of Yemeni personnel.

This section will describe each of these levels in turn.

i) Ministry of Health

There is no doubt that long term institutional sustainability has been established with the MoH. A key issue in the development of this relationship was the Minister himself. This chapter has demonstrated that the election win of the GPC was pivotal in speeding up the establishment of an MSI programme in Yemen. In assessing the long-term sustainability of the Centre, however, the question arises of how sustainable is this relationship under a) a ministry led by the GPC and b) by another party. This thesis will look at this question under three scenarios:

1. *A GPC led MoH under the current Minister of Health*

MSI's relationship with the current Minister of Health has remained extremely strong. From the outset discussions were held and these continued to be held with the Minister so that his views could be integrated into the project design. It was essential therefore to deliver a Centre commensurate with those discussions, and as a result the Minister also had some ownership of the programme. As a result of this relationship, MSI has implemented a number of successful initiatives in collaboration with the MoH; these include: reproductive health and family planning training for public sector nurses and doctors; designation as an official vaccination post during EPI campaigns and inclusion in a national programme for monitoring the incidence of STIs.

Under the current minister, it can be unequivocally stated that MSI has achieved institutional sustainability and in a manner that will continue in the long-term.

2. *A GPC led MoH under a new Minister of Health*

The Minister's political ownership of the project has carried through to key officials within the MoH and with whom MSI has subsequently developed strong relations.

There exists therefore a strong level of acceptance of MSI throughout the MoH. Given MSI's strong political and institutional base, a change of minister, within a GPC party led MoH, would be unlikely to have an adverse affect on the continued development of the Centre.

3. A Ministry of Health under a change of party leadership

Whilst one can only speculate, it is not felt that a change of political leadership within the MoH, to Islah, the only potential alternative party, would in the long-term impact negatively on the development of the Sana'a Centre although it is likely that there would not be such close links with a Ministry in which both health sector reforms and reproductive health were perhaps not so central to the agenda. The Centre has developed institutional sustainability through offering a broad mix of services and method of delivery which do not challenge the traditional or cultural norms of the programming environment. In this it has not conformed slavishly to the MSI model and hence, it is reasonable to assume that the Centre would not be perceived to impact negatively on an Islah Party led MoH.

It should also be noted that whilst the leadership within the MoH is aligned to the GPC party, at other levels throughout the MoH, allegiance to the Islah Party remains. In the development of its programme and in subsequent collaborative initiatives with the MoH, MSI has developed a successful network of relationships with individuals throughout the MoH, regardless of their political affiliation. This in turn has contributed to the institutional sustainability of the programme and in the long-term would also make the programme less vulnerable to changes in the political leadership.

In summary, institutional sustainability at the macro level exists but this has been at the expense of one of the tenets of the MSI model, namely through having a very broad range of services and, in essence, through not challenging local culture. Indeed it is

argued that, had one done so, the MoH would not have permitted the Centre to develop.

ii) Community Leaders

It is acknowledged that while support was initially forthcoming from community leaders during the project design stage, in the initial months of the Centre's opening these relationships deteriorated. This chapter has demonstrated that this was due to the expectations of community leaders a) that a huge amount of political credence would be got from the community if they were perceived to be involved in delivering free reproductive health; and b) that the potential existed for money to be received from MSI in exchange for their ongoing political support and endorsement of the Centre. Two questions arise from this: firstly, were the perceptions wrong; and secondly, was MSI to blame in raising these perceptions?

The perception by community leaders that they stood to benefit from an association with the project should and indeed was, anticipated by MSI. MSI appreciated that it would be culturally insensitive to involve community leaders at the project design stage but then to go on and develop the project in a highly autonomous manner. MSI had therefore discussed with community leaders two opportunities for collaboration; firstly, their involvement in identifying clients in need of subsidised treatment; and secondly, community based health education initiatives.

MSI did not introduce a STF initially, as explained in section 6.5 of this chapter. When the Centre Manager did introduce subsidised treatment in collaboration with the local community leaders, as described in section 6.5 this failed. It appears that the community leaders were unwilling to cooperate for two main reasons, firstly; the initiative brought them no personal gain and, secondly; it did not improve their political standing. The one outcome from the Centre's attempts to introduce a STF was that criticism from the community leaders regarding the Centre's prices stopped.

An analysis of the monthly reports highlights that only a small number of community leaders were forthcoming in referring clients to the Centre. The Centre Manager comments in retrospect that:

'the introduction of our Centre through Al-Wafaa Committee was wrong even before we came, as they had told the whole community that our services would be free of charge, so there were very high expectations for very good quality services which would be free of charge.' (email interview, 2000)

In summary, it is clearly important that one involves local leaders. However, it is also the case that one must beware of the potential problems that may accrue if the local leaders interpret the message incorrectly.

iii) Community

Initially the community did not accept the Centre and it appears this was for political rather than religious reasons. In particular the fact that a foreign organisation was delivering reproductive health, which is still to many in Yemen a sensitive area. The Centre Manager reports:

'These two combinations rose lots of eyebrows, no matter what the level of education the person had. Their main problem was that the British had come to sterilise the Muslims to reduce their numbers. This affected our Centre tremendously.' (August 1999, Monthly Report; MSI, 1999)

Although the Centre was not able to work with local community leaders to gain the community's acceptance this acceptance was forthcoming. This was primarily achieved by the high quality of the services provided by the Centre and the reputation that the Centre Manager personally developed in her role as the Centre doctor. In addition, the reassurance provided by the Centre Manager to the Centre team that MSI's intentions were genuine assisted in the dissemination of information throughout the local community.

Overall client numbers and those for specific reproductive healthcare services rose steadily during the period and it is evident from the qualitative data presented in this chapter that discussions with and feedback from clients demonstrated that the Centre

had developed a reputation for the delivery of high quality reproductive healthcare. Given this, it can be assumed that the Centre had developed institutional sustainability amongst the local community. In addition, whilst MSI may have felt that family planning client numbers remained low, the Centre Manager points out that in the context of Yemen, the increase achieved by the Centre was significant and contributed to underpinning community acceptance and thus the institutional sustainability of the Centre.

iv. Centre Team

There are a number of issues associated with staffing which impacted on the ability of the Centre to achieve long-term sustainability. These include: a) the leadership of the Centre; b) the need for a change in the working practices of the Centre team; and c) the available pool of alternative staff.

A crucial factor is the leadership of the Centre by both the Centre Manager and the deputy manager. An overwhelming theme running through the data presented in this Chapter has been that the Centre Manager experienced difficulties with the multi-skilling and multi-tasking required of her role and that the deputy manager managed personnel in an insensitive manner, particularly in an environment where one was trying to change working cultures.

These points raise a number of issues: firstly, whether multi-skilling and multi-tasking was a problem for this particular manager or whether this approach was not appropriate a) in the establishment of a new country programme; b) where the manager was also one of the key service providers, or c) where the existing working culture was such that the Centre Manager was required to micro manage the team in order to ensure both the efficient running of the Centre and the quality of service provision.

An analysis of the monthly reports highlights that multi-skilling and multi-tasking limited the capacity of the Centre Manager fully to develop the Centre. The data reported in this Chapter show that the following key areas which were not rigorously pursued

impacted negatively on the development of the Centre: marketing and promotional activities; community and Centre based health education initiatives; STF development. These factors may have contributed to the initial animosity from the community and to the low uptake of a number of key services, namely, obstetrics and family planning.

This Chapter describes earlier how the reputation of the Centre doctor was crucial to the successful development of the Centre. One may ask whether it was realistic of MSI, therefore, to expect multi-skilling and multi-tasking to work when the Centre Manager is one of the key service providers. Section 4.4.1 refers to the Centre Managers scepticism at her ability to undertake both roles.

With regard to the Centre Manager also being a key service provider, the data presented in this chapter do highlight the difficulties she experienced in trying to undertake both roles efficiently. The Centre Manager clearly experienced difficulties in prioritising between attending to clients and managerial tasks and there were clearly occasions when it was not possible to perform both functions effectively.

The data (particularly in the context of Yemen where the reputation of the doctor is so key) also raise the question of whether it might have been more effective if the Centre Manager had identified a permanent doctor at an earlier stage in order for the doctor to be trained to an acceptable standard before assuming a key service provider role. Such a decision is clearly a trade between providing a ‘perfect’ service and cost.

The Centre Manager notes a general perception in Yemen that, as an NGO, it is more professional to have a doctor separate from a manager – it should be noted that such a statement would be characteristic of many environments. She states:

‘As for the differences it would have made for the development of the Centre, if we had had a doctor from the beginning, one could have trained up to our standards properly and gradually and one whom the clients would have trusted from the beginning and could have built up sturdy relations with. The way it was done was wrong as MSI refused to get a doctor and this led to getting a temporary doctor each time I was out and each doctor had a different view and didn’t really care for the quality of care they

were giving as they didn't feel they belonged there which led to a general feeling on the community's side that the organisation didn't care to provide good quality services to the community but just to be there and take their money. This lost us many clients and some began phoning to my house and asking if they could come to see me at home and when I refused they stopped coming to the Centre as a whole. This was wrong. (p.4, March 1999, Monthly Report; MSI, 1999f)

The Centre Manager's emphasis on the reputation of the doctor is extremely important:

'....in countries like Yemen, a midwives opinion is not respected like a doctor's opinion. If we only had midwives, many clients would not come because there are so many places which provide services like ours, and more expensive, but then they would be willing to pay more for a more professional opinion, while now, they are receiving both those services and for an acceptable price.' (p.3 March 1999, Monthly Report; MSI, 1999f).

It is perhaps fair to conclude that, in a society such as Yemen where there is a great need for a doctor to deliver the services, particularly as it aims to develop a good reputation, it is difficult to expect multi-tasking to work at the top of the organisation. Therefore one must question the extent to which this part of the MSI model has worked and this will be discussed further in Chapter 7.

This chapter has also described in detail the difficulties encountered by the Centre Manager in her efforts first, through training and supervision, to evoke a change in the working practices of the Centre team and second, to maintain a high standard of service delivery. Staff were inculcated in their existing working practices and their attitude to work similarly reflected local norms. These factors required the Centre Manager to micro manage her team and in so doing undoubtedly impacted negatively on her ability to develop and implement a more strategic agenda in order to achieve the project's wider objectives.

In collaboration with the MoH, the Centre undertook family planning training of a number of doctors and nurses working in the public health sector. Whilst the number of courses and participants was small and therefore its impact limited, the Centre had had an impact on the pool of personnel able to deliver reproductive health and family planning services and in so doing had perhaps contributed to the long-term

sustainability of these services in Yemen. In addition, it is possible that, indirectly, the training contributed to the sustainability of the Centre in that there would exist an improved pool of potential recruits when there was a need for new staff.

The difficulties experienced by the Centre in developing a community based programme of health education have been highlighted earlier in this Chapter. The obstacles faced reflect the initial concerns of the community regarding the delivery of reproductive health by an international organisation. The establishment of a community based programme of health education was a necessity for achieving institutional sustainability. However the difficulties experienced in implementing the programme again emphasize the need for MSI first to gain the trust and acceptance of the local community. Finally it is important to note that the ability of the Centre to achieve institutional sustainability, is inextricably linked to its ability to achieve financial sustainability. The section below examines the progress of the Centre towards income to cost recovery and in so doing highlights the impact of institutional sustainability on service delivery.

6.8.2 Financial Sustainability

The MSI model of financial sustainability is built around a model of a limited range of reproductive health and family planning services delivered by a small team, adept at multi-skilling and multi-tasking. Central to the MSI model is the provision of one or two high income generating services which underpin the financial sustainability of a project. In the vast majority of MSI programmes, these services would be abortion and female sterilisation.

The Centre, whilst built on the MSI model and therefore offering a limited range of reproductive health and family planning services, had diversified its method mix in order to maximise its potential for cost-recovery. Three areas were identified:

- pharmacy
- laboratory

- obstetrics

Overall the Centre witnessed a steady increase in income to cost recovery. During the first five months of opening, income to cost recovery was virtually static but increased slowly from November 1998 and markedly from April 1999, although the large increase witnessed from April 1999 can be attributed mainly to the large number of clients attending for the Hepatitis B vaccine.

By November 1999, 17 months into the opening of the Centre, income to cost recovery stood at 39%. This level of cost/recovery is in line with MSI expectations for a project at this stage of development.

Interviews with senior MSI London management revealed that MSI would expect cost recovery to stand at about 40% with a caseload of around 480 clients per month – however if the caseload was around 400 clients per month and cost recovery was significantly less, then MSI would consider there to be something wrong. The relatively high level of cost recovery was from Sept – Nov 1999 inclusive. This suggests that the opportunity presented by the Hepatitis B campaign meant that a reasonable degree of financial sustainability was achieved in the first 17 months of the Centre's opening. However one must question the extent to which this degree of cost recovery will be sustainable once the vaccination programme had ended.

The above issues highlight the importance of high income generating services as a key to the MSI model of sustainability. In MSI programmes which do not provide abortion or sterilisation, Black argues (interview, 1999) that financial sustainability has been achieved through developing a high client caseload for general medical services. Black explains (interview, 1999) that this approach works by driving up the number of clients for general medical services, while at the same time also developing the family planning client caseload. As family planning client numbers increase, fees for general medical services continue to be raised to a point at which client numbers for general medical services start to plateau.

In the case of Yemen, the contribution of the pharmacy, laboratory and obstetrics did not impact on the Centre's income to cost recovery significantly and in the way which was originally envisaged. This can be attributed to a number of factors:

i. Pharmacy

Initial research had highlighted a number of issues: firstly, a lack of availability of drugs in the public health sector as being a major contributory factor to the public bypassing of government health facilities; secondly, a willingness in the culture to pay for drugs. MSI had therefore felt that the inclusion of a pharmacy within the Centre would attract clients as it could ensure the availability, continuity of supply and quality of drugs.

Whilst overall the pharmacy was the most profitable service provided in the Centre, it did not generate the level of income envisaged and which was key to achieving financial sustainability. This can be attributed to a number of factors:

- Close scrutiny by the MoH and the Sana'a Health Office of the Centre's pricing structure which restricted the Centre's autonomy in adjusting its prices in line with market forces;
- Sensitivity of pharmacy clients to the service provider. For example, as previously highlighted pharmacy client numbers decreased when the Centre introduced a Yemeni doctor as many clients did not trust the diagnosis made by the doctor and sought verification of the diagnosis at a pharmacy external to the Centre.
- The socioeconomic profile of many of the Centre's clients who were unable to pay a higher price for drugs.

ii. Laboratory

Initial research by MSI highlighted the poor quality of laboratories throughout Yemen, as described by Browning (1992) in Chapter 2, MSI established a laboratory therefore within the Centre in order to ensure the overall quality of its services. Initial research had also indicated that laboratory services would generate a high level of income and thereby contribute to the financial sustainability of the Centre.

The Centre Manager reports that the uptake of laboratory services was affected by clients' confidence in the doctor. It appears that the Yemeni doctor did not gain the confidence of many clients and as a result they were not willing to spend money on laboratory tests when they did not trust her diagnosis. In addition she did not refer the majority of clients for laboratory tests, the Centre Manager reports, even if they were necessary.

iii. Obstetrics

The Centre included obstetrics in its method mix for a number of reasons:

- a strong perception by the MoH that there existed a demand;
- the success of obstetrics as a 'cash cow' in other MSI programmes

However, obstetrics failed to develop to the extent originally envisaged. The barriers to its uptake are felt to be due to a number of reasons:

- this market did not exist to the extent perceived by the MoH, although an increasing number of women residing in urban areas were seeking delivery in a health facility. This trend had not however developed to a level which would impact on the Centre. It should be noted that the research by Radda Barnen (1994) felt that there was not a great demand for obstetrics delivery in health facilities.
- perhaps more importantly, the Centre first needed to achieve a high degree of institutional sustainability in order to be perceived as culturally acceptable. The

choice of where to deliver is rarely limited to the individual woman and is heavily influenced or indeed decided by her husband and perhaps more influentially by the more senior and older women of the household or extended family.

However, having introduced obstetrics, an analysis of the data highlights that the management and marketing of the service was weak. As has been shown in other MSI programmes, the service needs to be available on a 24 hour basis. In Sana'a it was not and this has been cited as one major reason for the low uptake. Discussions with clients also highlighted that women felt that the Centre was not equipped to deal with more complicated cases. The Centre was, it is true, not equipped to deal with these cases, but it had established a referral system with a nearby government hospital in the event of an emergency. The fact that women expressed their concern regarding the Centre's ability to deliver safe, quality obstetrics is more a reflection of the weak marketing undertaken by the Centre regarding this service.

iv. Staffing size

The staffing level of the Centre was higher than most MSI programmes, although this was in part due to the fact that the Centre was offering a more diverse range of services (e.g. pharmacy, laboratory). The level of staffing, in contrast to the client numbers undoubtedly limited the capacity of the Centre to achieve a higher level of income to cost recovery. In retrospect it is therefore felt that the Centre should not have initially employed two health educators or a receptionist. As discussed earlier, health education initiatives should have been introduced at a later stage in the Centre's development

In light of the above it is clear that the modest income to cost recovery performance was in part the result of too many staff. In addition one might ask whether, had the Centre marketed itself appropriately within the local community and if the Centre Manager had spent more time on the strategic development of the Centre, through establishing partnerships and improved marketing rather than spending a lot of time on the micro-

management of Centre personnel, client numbers might have risen to a greater extent and this would have been reflected in greater income to cost recovery.

Second, it is also clear that the second doctor brought in to assist the Centre Manager had a negative influence on financial sustainability in a number of ways. The direct influence was on client numbers both because of her personality and because of the Yemeni preference for an expatriate doctor. Indirectly, the relatively poor consultations led to a reduction in uptake of other services such as the pharmacy and laboratory.

v. Centre Monitoring

An important feature of the MSI model is the need for proper use of management information systems. While the MSI financial reporting systems require such data to be routinely reported, it does not require some important data and, crucially, there is little monitoring of the use of the data. For example one might have expected the Centre Manager to have monitored the financial progress of each of the components of the Centre – while this may have happened to an extent it is not clear that any policy emanated from such information. For example, it would not be enough simply to monitor the pharmacy without additionally taking into account the non-income generating components of expenditure. Again, a careful monitoring of each of the components could have led to an identification of products which could have been marketed effectively such as a broader range of IUDs.

6.8.3 Summary

This Chapter has described the trends in client numbers, uptake of individual services and the Centre's progress in income to cost recovery. In so doing, the Chapter has highlighted the extent to which the programming environment and MSI's expectations impacted on the overall performance of the Centre and the extent to which the MSI model, described in Chapter 3 can be replicated in Yemen. This subsection provides a summary of the conclusions discussed in the previous two subsections.

The reconciliation of a corporate model and expectations with local cultural and political considerations is a standard problem facing all programmes in their early development. However in a country such as Yemen, developing a Centre such as that described here also requires an acceptance of the enormous level of political sensitivity. MSI's unique relationship with the Minister of Health had placed the project fully within the nexus of Yemen's senior political hierarchy. The implication for the Centre was that it had to tread a fine line of maintaining its political credibility while also retaining a high degree of operational autonomy. This operational autonomy was crucial to the development of the Centre in order to enable it to develop family planning and reproductive healthcare which would facilitate the Centre's acceptance by the local community and hence cement institutional sustainability. In so doing these factors would contribute to ensuring the long-term sustainability of the Centre in the event of a change of political leadership either at national or ministerial level within the MoH. It is fair to say that the Centre achieved this level of institutional sustainability.

Within the question of financial sustainability the answer is that certainly there had been gains in client numbers but the lack of success with the three services identified as having high income generating potential: obstetrics, pharmacy and laboratory means that there has been a lack of a major cash earning service and this has had a major impact on the long term financial sustainability of the Centre. It is clear that there needs to be an urgent focus on the service mix so as to ensure an improved income to cash ratio.

There were clearly a number of staffing problems in the early months. Many of these were simply settling in issues. However the major problems concerned the lack of success of some of the multi-skilling which is central to the MSI model and which impacted both on the focus of the Centre and on the extent to which the management was able to develop quality service delivery, also central to the MSI model. These issues will be developed further in Chapter 7 which will provide an overall assessment of the MSI model in the context of Yemen.

7. Conclusions

7.1 Overview

This final Chapter first provides an overview of the major results of the thesis and then addresses the major aims of the thesis: a) the extent to which an MSI Centre could be set up in Yemen within the framework of the MSI model; and b) given that an MSI Centre had been set up in Sana'a, to assess the extent to which the achievements of the Centre over its first 17 months were commensurate with what would be expected within the MSI model for a programme at this stage in its development. In addition, a brief discussion is provided as to what inferences can be made from this thesis regarding the extent to which the MSI model is transferable.

The Chapter concludes by presenting a number of further research questions which, while beyond the scope of this thesis, have emerged as a result of this thesis and would provide a more detailed insight into the broader picture presented through this case study.

To start with a summary of the major results of the previous chapters, Chapter 2 provided an overview of reproductive health indicators in Yemen and the political and social arena in which reproductive healthcare is being delivered. In so doing, it highlighted that Yemen is at the lowest end of the spectrum with regard to reproductive health, and that this is a function of the country's political, socioeconomic and cultural situation. Of particular importance has been the political instability which has had far reaching consequences for the country economically, politically and socially. The situation has been exacerbated by one of the world's highest population growth rates.

Lack of funding and a weak health infrastructure have led to low utilisation of health services by much of the population. The poor quality of services and the attitude of service providers have also clearly been barriers to the uptake of services. Chapter 2

highlighted that the task of obtaining good healthcare is typically left to the individual, often at considerable expense.

Poor reproductive health indicators are exacerbated within Yemen by high inequalities in reproductive health between women with different socioeconomic and demographic characteristics. High levels of fertility have also been maintained by strong traditional, religious and cultural norms such as the powerful influence of men and the extended family on women's lives, in particular decision making. In Yemen also, the impact of Islam on both the uptake and delivery of reproductive healthcare services cannot be overlooked. Myths and misconceptions regarding modern methods of contraception and a desire to protect cultural traditions remain strong.

All these factors have meant that the delivery of reproductive health services has been extremely problematic. In short, there have been neither cultural, governmental nor institutional factors supporting a reduction in fertility and these issues highlight that culture, together with low educational levels and lack of women's autonomy, predicate against significant improvements in reproductive healthcare.

The election of the GPC in 1997 and the adoption by the National Population Council (NPC) of a policy that a reduction in rates of population growth was highly desirable, prompted a number of initiatives designed to facilitate the delivery of improved reproductive healthcare. The MoH's Health Sector Reform programme, in particular, intends to facilitate an improvement in reproductive healthcare services through a number of highly focused and targeted actions which include the introduction of cost sharing initiatives and a recognition of the role that NGOs can play in augmenting government services and initiatives. Whilst many may argue that the Health Sector Reforms are ambitious, they do represent an expression of the political determination on the part of the Government to address the issues raised by Yemen's high population growth and their effect on social and economic development at the family and state levels.

On a broader level, Chapter 2 highlighted the literature which indicated the determination of women to safeguard their traditions in the area of reproductive health. The challenge is the reconciliation of introducing modern reproductive healthcare practices with a sensitivity to the concerns women, in particular, display for preserving their reproductive health within a traditional and cultural context. Chapter 2, therefore, emphasises the need for reproductive healthcare and family planning programmes to be grounded in a respect for cultural values whilst at the same time embracing the need for significant reform in order effectively to address the reproductive health needs of the population.

Next, Chapter 3 described the conceptual framework within which MSI believes it is possible to deliver sustainable reproductive healthcare and family planning programmes anywhere in the world. The definition of the MSI model as developed by this thesis is: the delivery of low cost, high quality, locally managed and sustainable family planning and reproductive healthcare services. High family planning client numbers and cost recovery are central criteria to a successful MSI programme which measures its success through the extent of financial and institutional sustainability. Institutional sustainability is defined as having the organisational structure to support effective planning and management, to establish a sustainable and renewable client base, and to deliver high quality services. Part of this involves good relationships with both central and local government together with the local community while financial sustainability is concerned with cost recovery. The following features are key to the MSI model: small teams, featuring multi-skilling and multi-tasking; paramedicalisation of delivery; local staff; a limited range of services, which typically include high income generating services, primarily abortion, sterilisation and a limited range of curative services; autonomy; and a (relevant and timely) effective management information system to enable effective monitoring and evaluation.

In describing the contextual framework within which MSI's Sana'a Centre was established, Chapter 3 also highlighted the challenge for MSI's overseas programmes

in reconciling MSI expectations (regarding implementation and adherence to a global framework of service delivery) within diverse cultural and socioeconomic environments.

The following chapter describes the process involved in the development of MSI's programme in Yemen with the overall aim of assessing the extent to which the MSI model is transportable to Yemen. As highlighted in Chapter 4, the development of MSI's Yemen programme took place in an organisational climate in which MSI's senior management recognised that its most successful programmes had been financially underpinned by the delivery of abortion which enabled high CYP numbers and cost recovery – both essential to the MSI model. At the same time, it was recognised by MSI's Arab World Team that it would not be possible, due to religious and cultural sensitivity, to include abortion within the Yemen programme. A number of other components, not mainstream within MSI programmes, were however included in the service mix as it was judged, in the context of Yemen, that these services represented the potential to generate significant income.

Within Yemen, the impact of the political and cultural environment in which MSI's programme was established was important and thus highlighted the challenge of reconciling MSI's requirements and expectations with local expectations. Chapter 4 highlighted the influence of the high level political links established between MSI and the Minister of Health. This relationship, while facilitating MSI's entry into Yemen, also demonstrated the need for the project to maintain operational autonomy (as outlined in Chapter 3) in order to develop institutional sustainability, crucial to the long-term sustainability of the project, and to reduce the project's vulnerability in the event of a change in the political environment and more specifically a change of political leadership within the MoH. Chapter 4 also pointed out the challenge of implementing an established model in a new and different programming environment, inculcated in traditional working practices and attitudes.

Chapter 5 provided an analysis of a survey undertaken by MSI in a poor area of urban Sana'a, adjacent to its Centre. An analysis of a second data source, YDMCHS (1997),

was used as a comparator for the MSI Sana'a survey data and, in so doing, placed the results of the MSI Sana'a survey in a national context. The MSI Sana'a survey data provided an insight into perceived barriers to uptake of services, for example, cultural and traditional aspects; past and current methods of family planning used in the community; and perceptions of various key health indicators. The data were used to inform decisions regarding the range of services to be provided and the optimum strategy with which to deliver them. A comparison of the MSI Sana'a data with selected data from YDMCHS (1997) highlighted those areas where MSI Sana'a respondents reflected national trends and conversely highlighted the uniqueness of the survey respondents. The limitations of the comparison are however acknowledged. In comparing the results of the two surveys, the MSI data are limited to two districts of urban Sana'a, while the YDMCHS (1997) includes data from all governorates of Yemen at both urban and rural level. Where appropriate a comparison has also been made between the MSI data and the YDMCHS (1997) urban sample, but it is acknowledged that, even so, the YDMCHS (1997) urban data will reflect respondents with more diversified backgrounds and socioeconomic characteristics as it is a national urban sample.

The development of MSI's Sana'a Centre over the first 17 months was described in Chapter 6, drawing on both a quantitative and qualitative analysis of data collected by the Centre on a monthly basis, in addition to interviews with key stakeholders. The Chapter highlights the trends in overall client numbers and in the uptake of individual services and the Centre's progress in income to cost recovery, in addition to the development of institutional sustainability. With regard to financial sustainability, Chapter 6 revealed that whilst the Centre witnessed a steady increase in client numbers the small numbers of obstetrics cases meant that there was a lack of a major cash earning service and that this could have a major impact on the long term financial sustainability of the Centre.

Within the Centre, Chapter 6 highlighted the impact of staffing problems, in particular with regard to a) multi-skilling and multi-tasking; and b) responsiveness to improving

working practices, both of which are central to the MSI model and the impact of these problems on the Manager's ability to oversee the delivery of high quality services, also central to the MSI model, whilst also developing the Centre strategically. These issues will be developed further below and in so doing will provide an overall assessment of the MSI model in the context of Yemen.

7.2 The performance of the MSI model in urban Sana'a

The MSI model presented the MoH in Yemen with an entirely new approach to the delivery of reproductive healthcare and family planning. The immense need for reproductive healthcare in Yemen, together with the favourable political will to improve reproductive healthcare and family planning services, including their delivery through international organisations, meant that the timing of MSI's proposed intervention was optimum and compatible with the priorities of the MoH. However, there were a number of crucial features of the programming environment which were incompatible with the implementation of the criteria central to the MSI model. These are now discussed. In so doing it is important to emphasise that the MSI model has developed within an organisational culture which encourages innovation. In developing a new country programme in Yemen, MSI was attempting to implement this model in a deeply conservative programming environment where, as described in Chapter 3 and Chapter 6, innovation is often perceived as a threat to existing norms and practices, rather than a contribution to improved quality of care.

MSI's Arab World Team had attempted to replicate in Yemen an established model, within an organisational climate intolerant to cultural and religious barriers to the uptake of reproductive healthcare services, with less than optimum funding and further financially constrained by a service mix lacking the standard MSI high income generating components of abortion and sterilisation which are central to the 'classical' MSI model of cost recovery. This case study is thus a hard test of the MSI model. There were two overall aims of the thesis and these are now discussed:

The concept of **multi-skilling and multi-tasking** was very innovative in Yemen. While superficially extremely attractive as a means of keeping staffing costs low, MSI, in Yemen, was attempting to develop an innovative concept with personnel drawn from an extremely limited human resource base, the majority of whom, with the exception of the Centre Manager, had been recruited from the public sector. This is an environment, in Yemen, typically overstaffed by poorly trained and motivated personnel, with little or no supervision. Existing working practices are therefore rarely challenged. Flexibility and a willingness to accept new working practices are not therefore an inherent part of either Yemeni culture or working practice. For multi-skilling and multi-tasking to work would require medium term staff development. Having said that, multi-skilling and multi-tasking did work in some ways, for example by the driver doubling as the Centre accountant. However it did not work so well at the head of MSI Sana'a as the Centre Manager had difficulty with the contrasting tasks of developing the Centre and, as the doctor, ensuring the high quality of service necessary to develop a continued client base.

This thesis has also highlighted the existence of a perception and culture in Yemen, as in many Middle Eastern countries where the status of nurses and paramedical staff is low, that only a doctor can properly diagnose an ailment and, therefore, people want to be seen by a doctor. This 'culture' does not fit into the MSI model of **paramedicalisation** of service provision. In addition, the concept of cost recovery in Yemen was very new. MSI was the first NGO to charge for services and, therefore, in order to encourage people to pay for the services offered by the Centre, MSI had to promote a 'value added' approach. The Centre would not attract clients if people had to pay, for example, for the services of a midwife.

To turn to **quality of care**, in the thesis it is clear that the general lack of confidence in the public healthcare system and the poor attitude of medical personnel towards clients is a primary reason for a low utilisation of public sector services. Many Yemenis perceive that services provided by an expatriate would be of a higher quality. As an

international NGO in Yemen, MSI had undoubtedly immediately raised local expectations regarding the quality of its services. However, to follow the MSI model, MSI had to overcome the issue that by charging for services the public would need to be convinced that there would be improved reproductive health and family planning services yet it would be delivered by local personnel whose service delivery skills were perceived to be of a lower quality.

In both these areas there is no easy solution. An immediate solution would be to import expatriate staff. However this would not be a long term solution as one needs to develop staff capability and a local base to deliver high quality services. The conclusion must be that the long term staff development of local staff is the optimum strategy.

One of the major difficulties in this was that normal working practices in Yemen were not commensurate with an MSI quality of care model. In particular Yemenis are often used to working in an environment which does not encourage effective time management, in which staff have poor motivation and in which there is very little, if any, supervision, as a result of which existing working practices are very rarely challenged. Again the only strategy is long term staff development.

With regard to the mix of **services** to be delivered, Yemen's poor health indicators and the poor quality of health services in Yemen in general led to MSI initially coming under pressure from the local community and to some extent from the staff themselves, to provide a broad range of medical services ranging from dental care to a broad range of curative services. Both MSI and the MoH however reiterated the importance of maintaining the Centre's focus on the delivery of reproductive health and family planning services. The challenge for MSI Sana'a, however, was to identify a mix of services which (through delivery in a culturally acceptable way) would: a) serve to meet the reproductive healthcare and family planning needs of the community; and b) enable the Centre to achieve a high degree of cost recovery. In addition, as the concept of cost recovery was new for both the MoH and the local population, MSI Sana'a also had to reconcile three further factors: a) the willingness and ability of the local population to

pay for services; b) the development of a pricing structure that would enable the Centre in the medium to long term to achieve financial sustainability; and c) to overcome an inherent donor mentality both within the MoH and within the local community towards international organisations.

Next, the development of MSI's programme in Yemen was assisted by the support of the now Minister of Health and, as a result, the programme was inextricably linked to Yemen's senior political hierarchy. The implication for MSI Sana'a was that it had to tread a fine line of maintaining its political credibility while also retaining a high degree of operational **autonomy**. This operational autonomy was crucial to the development of the Centre. First, to enable it to develop high quality reproductive healthcare which would then be able to gain acceptance in the community and hence cement institutional sustainability and; secondly to contribute to the long term sustainability of the Centre in the event of a change of political leadership either at the national or even at the ministerial level within the MoH. In addition, gaining community acceptance is essential to achieving a high degree of financial sustainability. The review of this questions will come after the discussion of the second question.

To turn to the second question, the following paragraphs assess the extent to which the achievements of the Centre over its first 17 months of opening were commensurate with MSI's expectations for a programme at this stage of its development. In so doing, this section highlights a number of the tensions that developed between the MSI model and the realities of delivering reproductive healthcare in urban Sana'a.

First, it is fair to say that MSI's Sana'a Centre was successful in achieving institutional sustainability, the attainment of which is almost essential for long term sustainability and financial self reliance. To achieve a satisfactory degree of institutional sustainability in Yemen it was essential at that moment in time to involve the central government. In the process of developing such a political relationship, one could argue that certain aspects of the MSI model were sacrificed: these included, some loss of autonomy to pursue a market-led strategy (manifested through the restriction on pricing); a delay in the

introduction of obstetrics; arguably, a degree of overstaffing. However, overall one would say that the patience and painstaking political work of MSI's Arab World Team was crucial both to the entry of MSI into Yemen and to the development of institutional sustainability.

In a discussion regarding MSI's attainment of institutional sustainability it is also necessary to consider the relationship between the Centre and local community leaders. In the long term the liaison initiated between MSI and local community leaders resulted in very little support from community leaders for the Centre. One might argue that this was because the process by which MSI sought to gain their support was not undertaken in a manner compatible with local expectations, for example, there was no direct financial remuneration to the community leaders.

Although the community leaders did very little for the Centre, if MSI had not sought their support and agreement for the Centre then it is possible that the leaders could have made life extremely difficult for the Centre. One might argue, therefore, that in the short term a number of problems, such as inherent expectations that MSI would seek to reward the community leaders financially for their support, needed to be overcome. However, in the longer term, liaison with community leaders could strengthen the institutional sustainability of the Centre.

With regard to **financial sustainability**, the level of financial sustainability which the Centre had achieved was commensurate with MSI expectations for a project at that stage in its development. However much of this was due to the short term impact of the Hepatitis B campaign. The project's market research and advice received regarding the income generating opportunity represented by obstetrics were clearly weak however. Whilst the MoH delayed the Centre's introduction of obstetrics, preferring first to assess the uptake and acceptability of its services, this did not alter the fact that obstetrics failed to display the potential as a key income generating service, as originally envisaged by MSI and the Director of MCH/FP at the MoH. One reason for this could be that the Centre was not open for 24 hours per day. It is therefore clear that an

urgent review of the Centre's service mix and for obstetrics, mode of delivery, is necessary in order to ensure improved income to cost recovery.

Within the MSI model, the Centre's family planning client ratio remained low and whilst the organisation had not anticipated an enormous initial uptake, there clearly existed a degree of dissatisfaction amongst MSI's senior management regarding the comparatively low family planning numbers. It is important to remember that it was pointed out in Chapter 4 that, at the beginning of the decision to move into programming in the Arab World MSI's senior management team was informed that this would of necessity involve a broader range of services than would normally be the case under the MSI model. One could therefore, argue, that the performance is probably acceptable for the programming environment.

To turn to the **management** of the Centre, the management clearly struggled to meet all the conflicting demands of project management and high standards of service delivery. This raises the question as to whether it was appropriate to expect a Centre Manager also to play a key service provision role, particularly in the context of Yemen where the reputation of the doctor was so key to the success of the project and hence to MSI's reputation. One might argue that, in line with other MSI programmes, MSI should have employed a Country Director and a doctor on a sessional basis. In Yemen however, the paramedicalisation of service delivery so praised by MSI was not possible. Whilst the appointment of an experienced manager as Country Director in addition to a full time Centre doctor would have been optimum, the financial status of MSI's Yemen programme did not permit an investment in a staffing structure which, it could be argued, may have resulted in more timely intervention regarding staffing problems; external factors and adjustments to the service mix. Whilst one might argue, therefore, that MSI should have taken a longer term view regarding the development of the Sana'a Centre the responsiveness of the donor community to funding a reproductive healthcare programme in Yemen, was primarily, in light of a recent history of political instability, not forthcoming. One would conclude that, as noted in the interview with Helen Axby described in Chapter 3, a national programme really requires a national director and

one would normally make such a post an important part of a funding package. However, given the choice of doing nothing or, in the case of a country like Yemen with huge need, making a start one would probably choose the latter.

In summary, the Centre succeeded in developing a sound political base and institutional sustainability and a satisfactory degree of financial sustainability. In so doing it sacrificed a number of principles central to the MSI model – namely paramedicalisation and the focus on a limited range of services. One might argue therefore that either MSI should not have gone into Yemen or MSI model is too rigid. Perhaps the final answer is that in the short term, some aspects of the MSI model had to be sacrificed in order both to ensure the Centre's cultural and political acceptability and to serve the prevailing needs of the local community, but that in the longer-term, (whilst not abortion) the development of higher income generating services, together with improved working practices may enable the Centre to incorporate those elements central to the MSI model. In conclusion there appears no reason why MSI's Sana'a Centre should not successfully provide high quality reproductive healthcare services, whilst not (in the short-medium term) displaying high CYPs or income to cost ratios.

7.3 Viability of replicating the MSI model globally

The aim of this section is to use the data from this case study to assess briefly the potential for replicating the MSI model globally. Any such assessment must consider the viability of replicating the model in a diverse range of socioeconomic, cultural and geographical environments.

MSI projects have traditionally needed large centres of population to ensure cost-recovery. As in Yemen, the majority of MSI projects are located in urban areas of high population density, where the cash economy is prevalent and where good transport and communication links are evident. In such areas, women are more likely to have access to cash as opposed to their counterparts in rural areas who will likely exist in a more subsistence economy. MSI's ability to establish individually sustainable rural based

Centres is clearly limited if they attempt to apply the income to cost indicator as the primary means of evaluating an individual Centre's success or impact.

It should be remembered that the MSI philosophy includes a stated commitment to the use of segmented markets to allow surplus-producing services or projects to cross subsidise those which are unable to meet their costs in full. The model in conclusion, does not lend itself to rural communities on the edge/margins of the modern economy with essentially low-income/subsistence populations unless financial planning takes place at the programme (rather than clinic) level and cross-subsidisation is institutionalised.

It is fair to conclude from this thesis that the MSI model can broadly deliver genuinely high quality services at relatively low cost to those who can afford to pay and who have social and physical access to their services. In this context one should note that MSI national programmes claim to serve a broad range of clients from a broad range of income groups, rather than exclusively the poorest clients. As Black has stated: "*It is essential to recognise, when aiming for sustainability, that optimum community benefit can often be achieved without the need to focus exclusively on the poorest sectors.*" (Black, interview 1998). It is evident however that often, MSI programmes interpret this policy quite differently and are often influenced by donor requirements and/or the amount of funding available. As a result, MSI programmes often make limited provision for those who can afford nothing and MSI believes that "*All sectors are capable of paying at least something*" (Black, interview 1998). The Yemen case study cannot provide evidence on this point other than to say that, indirect evidence from Yemen suggests that there are many very poor people with neither the financial nor cultural access to services.

MSI's belief that projects can and should become financially self-sufficient within a fixed period is central to the MSI model. This principle is reflected in overall goals and project objectives and provides a focus for monthly project monitoring. It is also strongly reflected in MSI's strategic planning process at national level where medium to long-

term strategies tend to reflect identification of income generating opportunities, rather than community needs. Whilst one might question MSI's very strong focus on income to cost recovery, it is important to recognise the importance of achieving financial sustainability if programmes are to ensure a medium to long term presence. The Yemen experience demonstrates that this takes time and that in the case of a conservative programming environment such as Yemen, much market research and effort needs to be put into identifying cash earning activities on which to piggy back family planning.

The focus on CYP output and income to cost recovery as indicators of success mean that the programme's management is encouraged to focus on the individual presenting client, more than on the community. This means that what matters is primarily on what happens to the client on the clinic premises – the number and quality of services provided there. There is an implicit assumption that, as long as the standard of service is high, people will come. In Yemen, while the standard of service was typically high the lack of client numbers could have reflected poor marketing within the community who may have been given misleading information by, say, disaffected community leaders. It is likely that the long term efficacy of a project will be maximised by engaging the local community appropriately and by ongoing awareness of the national setting.

There is a definite need for an understanding of local demand, particularly, for example, the reasons why people are not using the services. This is exacerbated by the management information requirements. The monthly reports are designed - or at least are often perceived by overseas programmes - as satisfying the demands of MSI London rather than to help the programme monitor and evaluate its direction. The MIS reports, analysed in Chapter 6 provide systematic data on which to base rough targets for increased CYPs and income but they do not, systematically, provide data for more long term strategic planning. The extensive textual data provided by the Clinic Manager as analysed in Chapter 6, are not systematic enough to provide fully flexible management information and, indeed, one might expect that different Country Directors

would provide a very heterogeneous set of texts which would not provide for sensible regional or global comparisons.

As a result it is clear that what is needed is an initial and subsequent ongoing analysis of community needs. In saying this, it is important to recognise that the common motivator for most MSI programmes, a 'gap in the market', is not the same as the establishment of a reproductive health need in a target population. However assessing need is not easy – as is evident in Yemen the quantity and quality of (secondary) data available to MSI from national sources is often very limited. Therefore there is a need for ongoing market research both in the community and among clinic clients, specifically their socioeconomic and health status, perceived needs and current and recent family planning practices.

Instead of seeking to gather such data on the needs of clients or communities, MSI encourages its local programmes to concentrate on growth in client numbers and other indicators of activity, which are used to demonstrate that programmes are meeting needs. It is important however in new country programmes that, in order to sustain the development of institutional sustainability the programme researches, addresses and monitors client and community needs.

As well as ensuring that the community's needs are monitored it is essential that the community knows about the opportunities that an MSI programme offers. It is possible that in Yemen the marketing of the Centre could have been better, particularly as there is some evidence of negative marketing from community leaders and, indeed, project personnel. It must be said that effective marketing of services is an important component of sustainability. In many programmes one would conclude that MSI's marketing is effective in that the programmes are able to win large numbers of clients. However, word-of-mouth recommendation by existing clients, as used in Yemen, while an effective way of marketing a project's services in many societies around the world, should also be augmented by other more directed campaigns.

Finally, it can be stated that the MSI model can provide high quality reproductive healthcare services to clients and that the primacy of meeting the client's needs with high quality services is an important criterion for all MSI projects. In addition, the MSI model, with its emphasis on high CYP and income to cost ratio has proved to be highly effective at providing quality reproductive healthcare and family planning services at relatively low cost which demand is high. However, a strong emphasis on these principles means that this MSI model needs a diversified socioeconomic client base to succeed.

Although it is outwith the scope of this thesis it is important perhaps to note that one should question the extent to which a successful reproductive healthcare and family planning programme should show high CYP or income to cost ratios in a programming environment such as Yemen where reproductive health understanding is in its infancy.

7.4 Further areas of research

Finally, as a result of the research undertaken for this thesis, a number of further research questions have emerged which would provide a more detailed insight into a number of areas within the broader picture presented through this case study. These are listed below.

First, it should be remembered that a full assessment of the impact of the Centre can only be undertaken after some time. The design of the survey in Chapter 5 was so that a second survey could take place in late 2000 or 2001. Research associated with such a survey would help also to evaluate attitudes and reproductive health practices (2-3 years) after the MSI Sana'a Centre opened.

The thesis has focussed on one Centre in one Middle Eastern country. A comparison of the development of MSI's Sana'a Centre with that of another MSI programme in the Middle East would be extremely instructive to help to evaluate the generalisability of the findings in this thesis.

A departure from the MSI model in this Centre was the appointment of an expatriate doctor. Comparisons with a totally indigenous staff would be interesting. Finally there is a clear need for research a) on the socioeconomic group that MSI's Sana'a Centre was serving and on strategies to target the poorest of the poor; and b) on the impact on client numbers if the Centre was to offer subsidised treatment to a wider number of people and for a broad range of reproductive healthcare and family planning services. There is also a great need for research on subsidised treatment funds.

Finally an examination of whether the Centre was augmenting the services provided by the public sector or whether the Centre was serving those people who may have previously sought private sector services would be of great use to health service providers in Yemen.

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Appendix One

Couple Years of Protection (CYPs) as an indicator of programme performance.

Family planning organisations need quantitative and qualitative measures of programme performance to assist them in making policy decisions, for monitoring and evaluation of programme performance and to assist in the allocation of resources both at the macro and micro levels.

Since the 1970's, the CYP index has been widely used as a quantitative measure of family planning programme outputs. Simple counts of acceptors and types and quantities of contraceptives distributed do not provide a summary picture of overall programme achievement. Moreover, since different project, areas, clinics or other subdivisions may offer different mixes of contraceptive methods, their overall comparative achievement cannot be obtained by counts of types and quantities of contraceptives distributed.

CYP is a method of measuring the overall output of a programme in terms of contraceptive protection time achieved, defined as 'CYP achievement index'. It gives an indication of the contraceptive protection time provided by each contraceptive method. One CYP represents 12 couple-months of protection, which, for example, could mean one couple practising for 12 months or 12 couples practising for one month.

The major advantages of using CYP as a performance indicator are listed below;

- an ability to compare the results of different services offering a variety of contraceptive methods;
- they are based upon quantities of contraceptives, which are often the most readily available and reliable data collected by a programme;
- easy to calculate;

- saving in time and money in monitoring programme output as there is no requirement for expensive surveys or other techniques to determine changes in contraceptive use;
- guidance to managers on future requirements of contraceptive supplies based on service delivery targets;
- a base for the analysis of the method mix offered by the programme.
- useful for assessing total programme output and cost-effectiveness, such as cost per CYP achieved, as well as for comparisons over time, or between different areas and programmes.

On the other hand, the shortcomings of CYPs as a performance indicator are recognised throughout the family planning community. Some of these shortcomings are now summarised:

- CYP calculations should ideally be based on the volume of contraceptives issued to acceptors (and presumably used by them). Wastage however is a key problem, especially for expendable methods. It is difficult to measure the actual wastage and misuse (particularly with pills and condoms). This is taken into account to an extent in the CYP factors which are used, however, as one cannot count wastage exactly, the CYP may overestimate the impact a programme believes it may be making.
- CYP figures do not take into account that there would still be some use of contraception in the absence of the programme (a 'substitution effect').
- CYP figures do not incorporate data on fecundity
- CYP figures can be heavily weighted by sterilisation; this method confers a much longer period of protection. However, a crucial factor in the impact of sterilisation is the average age of female clients and partner of vasectomy clients; higher average age may mean less impact. Any comparison must therefore take this fact into consideration

- programmes may report ‘referral’ cases without actually determining whether clients have actually received these services.

CYPs may not be used to compare overall performance of two organisations because of the difference in programme emphasis from organisation to organisation or, as in the case of MSI, region to region. Those programmes with a major emphasis on IEC and very little clinic service delivery may score low on CYP, which would not necessarily mean poor performance. On the other hand, those reporting large numbers of sterilisations or abortions may score high on CYPs without necessarily having a high performance. It is suggested that when comparing programmes purely on the basis of CYP achievement, relative programme priorities must be considered before reaching any conclusion. Only those with similar programme characteristics or similar projects may be compared in terms of CYP achievement. Within MSI’s Arab world region, for example, programmes do not currently offer sterilisation or abortion— a comparison therefore of Yemen’s CYP output with a programme such as Ethiopia which is currently focused on providing abortions would not provide any useful basis for comparison.

In the absence however of a better and simpler measure, CYPs, have because of their relative simplicity, been recognised as an important tool from which to measure programme performance and output.

It must be noted that CYP is only one of the measures of family planning output. Other measures like number of acceptors, cost per acceptor, etc. may be used depending on the purpose of each assessment.

2. How to Calculate CYPs and Why

The calculation of conversion factors for CYPs has been the subject of much discussion. Those commonly used are discussed below. However, there have in recent years been a number of critiques of some of these conversion factors, e.g.

Stover et al, (1995); Griffiths, Diamond and Chapman, (2000), but these critiques have not yet been widely adopted.

2.1 Condom

The use of these methods is related to coital frequency. It has been estimated that worldwide there is a coital frequency of 100 per year per couple. It shall be noted that these figures are extreme guesses and come from early survey data when women reported that they had sex around two times per week. Regular condom users will use 100 condoms per year for effective protection for a year. This means that if on average 100 condoms are needed for effective protection against pregnancy of a couple for one year, then one condom would protect for $1/100$ or 0.01 years. Note that some commentators believe this should be discounted to a larger value to account for condom breakage or wastage.

2.2 Oral Contraceptives

Oral contraceptives have a pre-determined span of use at 28 days per cycle. There are thirteen 28 day menstrual cycles in a year and therefore 13 cycles would be needed to protect a couple from pregnancy for one year. However not every cycle of pills distributed is used, and therefore there is a level of wastage. Hence, the calculation needed to determine one year of protection is 14 cycles for one year. Oral contraceptive CYPs are therefore calculated as:

$$\text{Number of cycles distributed} = 1/14 = 0.0714$$

This is the average length of protection one cycle confers or the fraction of a year that will be protected by the cycle.

2.3 Injectables

Injectable hormones confer a defined period of protection. The conversion factor is the number of months one injection is said to protect a couple from pregnancy. For injections offering three months protection the factor used will be:

Number of injections given x 3/12 = 0.25

For injections of 2 months the figure will be:

Number of injections given x 2/12 = 0.1667

2.4 IUD

It is estimated that on average an IUD is used for 5 years. Therefore the factor to be used will be 5.

2.5 Gyne-fix IUD

MSI has adopted a figure of 8 CYPs per GyneFix IUD. No other organisation has a value for Gynefix as it is, as yet, not widely used.

2.6 Norplant

The Norplant figure of five CYPs does not take into account the removal rate which varies from country to country in relation to availability of removal services. To take this into account MSI has adopted 3.5 CYPs for Norplant.

2.7 Sterilisation

The conversion factor is based on the estimated average number of years of protection to be achieved which is calculated using the average age of wife of sterilised couple, regardless of who is sterilised. The length of protection is the period between the average age at the time of sterilisation and the onset of menopause adjusted for 'loss'

due to divorce, widowhood and separation. In early studies eg Wishik and Chen, (1973) it has been found that at the time of sterilisation the average age of wife is 31.5, and it is assumed that they spend one year in widowhood, divorced or separated before reaching the age of menopause (45 years). The conversion factor is then: $45-31.5 - 1 = 12.5$. Note that Stover et al (1995) have proposed some alternative strategies for this which take into account the age at sterilisation and an adjustment for childbearing patterns in the country in question using, say, DHS or similar data.

2.8 Diaphragm

A single diaphragm may be used repeatedly, but in the absence of extensive information the conversion factor may be the median duration of use of the device. Some studies (Wishik and Chen 1973) have found that half of acceptors discontinued use after 12 months of use. The conversion factor is therefore:

$$12/12 = 1.$$

3. MSI CYP factors

In the past few years or so a number of MSI programmes have donated large quantities of condoms and, to a lesser extent, pills for free distribution on a mass scale. Whether programmes have charged for the service or given contraceptives away free, they have received the same CYPs. Whilst this may be good fund raising, the problem is that there exists a good deal of scepticism among experts as to the impact of large-scale free distribution programmes. It is generally accepted that the effective use of free commodities is far lower than those for which clients pay. This has also led to some programmes showing huge CYP figures, in some cases, most of which are generated by giving large numbers of products free to clients or pharmacists/hotels/other distributors.

MSI, in order to avoid accusations that it is inflating its CYP figures, recognised the need to build in a discount for 'give-away' contraceptives. In so doing MSI consulted a

number of experts. The general consensus was that MSI should massively discount its CYP factors for contraceptive sdistributed free and on the basis of these consultations, MSI decided to revise the CYP factors for contaceptives distributed free starting in January 1999. The factor now used by MSI for contraceptives distributed free is as follows. Each of the following given away free equates to one CYP:

- 500 condoms;
- 70 cycles of oral contraceptives;
- 750 foam tables;

Table 1 provides a summary of the MSI conversion factors. MSI has now stipulated that programmes should calculate CYPs for products only when the products have been given to clients registered with a static or a mobile clinic or with a CBD worker.

Table 1. Summary of MSI CYP Conversion Factors

<u>Method</u>	<u>CYPs</u>	<u>Conversion Factor</u>
OCs	14	$1/14 = 0.0714$
Free supplies	70	$1/70 = 0.0143$
Condom	100	$1/100 = 0.01$
Free supplies	500	$1/500 = 0.002$
Injectable	Every 3 months	$\frac{1}{4} = 0.25$
	Every 2 months	$\frac{1}{6} = 0.1667$
	Every 1 month	$1/13 = 0.0769$
Foam Tablets		$1/150 = 0.00667$
Diaphragm	1	$= 1.0$
IUD	5	$= 5$
GyneFix	8	$= 8$
Sterilisation	12.5	$= 12.5$
Norplant	3.5	$= 3.5$
Emergency contraception	1	$1/13$

Appendix Two

Questionnaire for Sana'a Survey

بسم الله الرحمن الرحيم

Marie Stopes/Yemen Household Survey on MCH/FP
المسح الاستبيانى لمنظمة ماري ستوبس لخدمات الأمومة والطفولة وتنظيم الأسرة

374

Neighborhood: الحارة Al-Feth Alshamalia
Date: ٢٠٠٨ التاريخ

Survey number: رقم الاستبيان
Interviewer: القائم بالاستبيان

Women no.	الترتيب
Total Women	٢

Respondent: All women between ages 15-45. Begin with female head of household or wife of head of household.

المستجيبات : جميع النساء في الفئات العمرية بين (15-45 سنة) ويفضل البدء بزوجة رب الأسرة .

1. What is your age?
كم عمرك ?

{ if not 15-45, discontinue interview} { إن لم يكن بين 15-45 سنة فانهي الاستبيان }

2. a. Have you ever attended any kind of school or literacy classes?
هل درست في مدرسة أو في صفوف محو الأمية ؟
[] yes [] لا [] no

{ if no - go to Q. n. 3} { إذا كانت الإجابة (لا) اتجهي إلى س. 3 }

b. For how many years did you attend school or literacy classes?
كم سنة درست في المدرسة / أو محو الأمية ؟ _____ سنة (years)

c. What was the highest educational level you attained?
ما هو أعلى مستوى تعليمي حصلت عليه ؟

- [] Literacy classes/ Koran صنوف محو الأمية / معلمة
 [] Primary school المدرسة الابتدائية
 [] Intermediate school المدرسة الإعدادية
 [] High school المدرسة الثانوية
 [] Higher education تعليم عالي

3. Are you currently working for an income? yes [] no []
هل تعمل حالي بعمل يعتبر مصدر الدخل ؟ نعم [] لا []

4. a. What is your marital status?
ما هي حالتك الزوجية ؟

- [] married متزوجة
 [] widowed أرملة
 [] divorced مطلقة
 [] separated منفصلة
 [] single عازبة { go directly to Q. n. 24 } { اتجهي مباشرة إلى س. 24 }
 [] other أخرى

b. How old were you when you first married? years old
 كم كان عمرك عند أول زواج؟ سنه _____ عمرى _____

{if still married – go to Q n. 4c. For all other responses – go to Q n. 5}
 {إذا كنت لا تزالين متزوجة اتجهـي إلى السؤال رقم 4 ، لـجـمـيـع الإـجـابـاتـ الآخـرى اـتجـهـيـ إلىـ السـؤـالـ 5}

c. Did your husband attend school? yes no
 هل حصل زوجك على دراسة في المدرسة؟ [نعم] [لا]

{if no – go to Q n. 4f} {إذا (لا) اتجـهـيـ إلىـ سـ 4}

d. For how many years did he attend school? Years don't know
 كم سنة حضر زوجك المدرسة؟ سنه _____ لا أعرف []

e. What was the highest educational level he attained?
 ما هو أعلى مستوى تعليمي تحصل عليه؟

- [] Literacy classes / Koran صفوف محو الأمية/ معلمه
- [] Primary school المدرسة الإبتدائية
- [] Intermediate school المدرسة الإعدادية
- [] High school المدرسة الثانوية
- [] Higher education تعليم عالي
- [] Don't know لا أعرف

f. Does your husband work? yes no
 هل يعمل زوجك؟ [نعم] [لا]

{if no – go to Q n. 5} {إذا لا اـتجـهـيـ إلىـ سـ 5}

g. What type of work does he do?
 ما نوع العمل الذي يعمله الزوج؟

- [] unskilled labor عامل
- [] skilled labor حرفي
- [] office work عمل مكتبي (في إدارة)
- [] professional work متخصص
- [] other أخرى

h. Is his work: regular irregular (i.e. no regular wage)
 هل عمله: منتظم [] غير منتظم [] (بدون أجر ثابت)

5. Have you ever been pregnant ? Yes No
 هل حملت من قبل؟ [نعم] [لا]

{if no go to Q n. 15} {إذا كان (لا) اـتجـهـيـ إلىـ سـ 15}

I would now like to get a complete pregnancy history, starting with your first pregnancy.
أرغب أن تكلماني الأن عن الحمل والولادات السابقة ابتداءً من الحمل الأول.

Pregnancy History تاريخ الحمل

Pregnancy# الحمل	Years ago قبل كم سنة	Outcome & month of pregnancy event occurred				Present status of livebirth الوضع الحالي للولادات الحية		If alive, present age *	If dead, age at death *	If premature, same day health care?
		MisCarriage إضطراب الحمل	Stillbirth ولادة ميتة (> 7 mo.)	Livebirth ولادة حية جبلية	الجنس	Sex	Alive حي	Dead ميت	إذا كان حيا كم عمر الحالي	إذا كان ميتاً كم العمر عند الوفاة
1		mo. شهر	mo. شهر	mo. شهر	m. f.					yes no نعم لا
2		mo.	mo.	mo.	m. f.					Yes no
3		mo.	mo.	mo.	m. f.					Yes no
4		mo.	mo.	mo.	m. f.					Yes no
5		mo.	mo.	mo.	m. f.					Yes no
6		mo.	mo.	mo.	m. f.					Yes no
7		mo.	mo.	mo.	m. f.					Yes no
8		mo.	mo.	mo.	m. f.					Yes no
9		mo.	mo.	mo.	m. f.					Yes no
10		mo.	mo.	mo.	m. f.					Yes no
11		mo.	Mo.	mo.	m. f.					Yes no
12		mo.	mo.	mo.	m. f.					Yes no
13		mo.	mo.	mo.	m. f.					yes no
14		mo.	mo.	mo.	m. f.					yes no

* If less than 5 years write age in mo. إذا كان أقل من خمس سنوات فيكتب العمر بالأشهر.

6. If any children under 5 years of age have died in the last five years, please describe their symptoms before death.

إذا كان أيها من الأطفال (أقل من خمس سنوات) قد مات في السنوات الخمس الماضية
رجاءً صُف لنا الأعراض المرضية التي حدثت قبل الموت.

- (1) _____

- (2) _____

- (3) _____

7. Reviewing what you've just told me, I see you have-----children under 5 years
استناداً لهذه المعلومات اتضح لي أن لديك _____ أطفال أقل من خمس سنوات.

{Now go to Q n. 13 if no living children under five years of age}
{إذا كان الأطفال الأحياء كلهم فوق سن خمس سنوات}
{الآن اتجه إلى س 13}

a. How many times have you immunized each of your under five year old children?
(Use immunization card if available.)

كم عدد المرات التي لقحت فيها كل طفل من أطفالك الذين هم تحت سن خمس سنوات؟
(استعمل بطاقة التطعيم إن وجدت)

	BCG(1) السل	Polio(3) الشلل	DPT(3) الثلاثي	Measles(1) الحصبة	Card البطاقة
(1) youngest					yes no
(2) second youngest					yes no
(3) third youngest					yes no
(4) fourth youngest					yes no

Interviewer : للباحث

b. Was the immunization complete?
هل أكملت التطعيم لكل الأطفال؟

yes [] no [] unknown []

If no, what is the main reason you did not completely immunize your children?

إذا لا ما هو السبب الرئيسي الذي منعك من تلقيح أطفالك؟ {اتركي هذا السؤال إذا كان التلقيح كاملاً}

[] did not know that more immunizations were necessary
لم أكن أعرف أن إكمال اللقاح ضروري

[] immunization is not important التلقيح غير مهم

[] Can not afford التلقيح غالى التكلفة

[] No convenient facility لا يوجد مكان ملائم للتلقيح

[] Do not like the treatment at the immunization facilities
لا أحب التعامل مع أماكن التلقيح

[] Afraid of health consequences from immunization
أَخَافُ مِنْ أَعْرَاضِ حَانِيَةِ نَتْهَى اللَّاقِ

Other **أُخْرَى**

8. How many times have you taken your under five year old children to be weighed?
كم عدد المرات التي أخذت فيها أطفالك الذين هم دون سن الخامسة من العمر لأخذ وزنهم؟

(1) youngest	الأصغر	_____
(2) second youngest	بعد الأصغر (الثاني)	_____
(3) third youngest	الذي يليه (الثالث)	_____
(4) fourth youngest	الذي يليه (الرابع)	_____

9. Did you breast feed any of your under five year old children?
هل أرضعت أطفالك الذين هم دون السنة الخامسة من العمر رضاعة طبيعية؟

[[نعم yes]] لا no

{إذا كان الجواب (لا) اتجه إلى س 12} {if no – go to Q n. 12}

10. How many months did you continue breast feeding?
كم عدد الأشهر التي استمرت فيها الرضاعة الطبيعية؟

(1) youngest	الأصغر	شهر
(2) second youngest	بعد الأصغر (الثاني)	شهر
(3) third youngest	الذي يليه (الثالث)	شهر
(4) fourth youngest	الذي يليه (الرابع)	شهر

11. For your youngest child, when did you begin breastfeeding?
أينكِ الأصغر متى بدأت له الرضاعة الطبيعية؟

immediately after birth day of birth day 2 day 3 day 4
 [] [] [] [] [] []
 بعد الولادة مباشرة يوم الولادة اليوم الثاني اليوم الثالث اليوم الرابع اليوم الخامس

12. What do you think is the ideal age to begin infant foods? months
ماذا تعتقدن أفضل عمر تبدئن فيه إطعام الطفل؟ شهور

13. When you had your last baby, did you want it at that time, or would you have preferred to have waited for some time?

عند ولادتك لآخر طفل هل أردتني أن يولد في ذلك الوقت أم كنت تفضلين الانتظار إلى وقت آخر؟

- Wanted a child at that time أردت طفل في ذلك الوقت
 Preferred to have waited فضلت أن أنتظر

{for widowed/separated/divorced women - go to Q n. 15}
} اتجه إلى سؤال رقم 15 للمرأة المطلقة ، المنفصلة عن زوجها ، الأرملة {

14. When would you like to have your next baby?

متى ترغبين أن يولد لك الطفل القادم؟

- As soon as possible أقرب وقت ممكن
 Within the next two years خلال السنتين القادمة
 After two years or more بعد سنتين أو أكثر
 Do not want another لا أريد طفلاً آخر
 No preference ليس لدي وقت مفضل

15. a. Do you know of any ways that couples can use to prevent or delay pregnancy?

هل تعرفين أية وسائل ممكن أن يستعملها الزوجان لمنع أو تأخير الحمل؟

[] نعم yes [] لا no

{ if no and previously pregnant - go to Q n. 19} { إذا كان الجواب (لا) وكانت حامل سابقاً اتجه إلى س 19 }

{ if no and never pregnant - go to Q n. 24} { إذا كانت الإجابة (لا) ولم تكوني حامل سابقاً اتجه إلى س 24 }

b. If yes, which methods have you heard of? (check all that apply)
(ضعي علامة على كل ما تعرفيه) إذا كان الجواب (نعم) ، أي الطرق سمعت بها؟

- pill حبوب منع الحمل
 IUD لولب
 injection (depo provera) إبره
 condom عازل ذكري
 diaphragm/foam/jelly عازل مهبل / جيلي
 suppositories تحاميل
 rhythm طريقة الحساب
 withdrawal القذف خارج المهبل
 abstinence الانقطاع عن الممارسة الجنسية
 breast feeding الرضاعة الطبيعية
 other أخرى

c. Where did you learn about such methods? (check all that apply)
 (ضعى علامة على كل ما ينطبق عليك)
 أين تعلمت عن هذه الوسائل؟

- [] government health facility وحدة صحية حكومية
 [] private health facility وحدة صحية خاصة
 [] mother الأم
 [] mother in law أم الزوج
 [] husband الزوج
 [] other family members أفراد العائلة الآخرين
 [] friends / neighbors الصديقات / الجيران
 [] television, radio or newspapers/magazines التلفزيون ، الإذاعة ، الجرائد ، المجلات
 [] other أخرى _____

d. Have you ever used any of the methods you mentioned?
 هل استعملت أيا من الطرق التي ذكرتها؟

[] نعم yes [] لا no

{if yes – go to Q n. 15 f} {إذا كان نعم اتجه إلى س15}

e. What is the main reason you have not used any method to delay or avoid pregnancy?
 ما هو السبب الرئيسي الذي يمنعك من اتخاذ وسيلة لتأخير أو تجنب الحمل؟

- [] Want a child أريد طفل
 [] Lack of knowledge قلة المعرفة
 [] Husband / others opposed رفض الزوج / آخرون
 [] Costs too much التكلفة غالبة
 [] Side effects التأثيرات الجانبية
 [] Health concerns أسباب صحية
 [] Hard to obtain methods صعوبة الحصول على الوسائل
 [] Religion الدين
 [] Opposed to family planning / non Religious reason معارضة لتنظيم الأسرة / لأسباب غير دينية

- [] Fatalistic إراده الله
 [] Infrequent sex الممارسة الجنسية في أوقات متباude
 [] Don't know لا أعرف
 [] other أخرى _____

{go to Q n. 19 pg. 11} {اتجاه إلى السؤال 19 ص 11}

f. If you have used a method, which ones? (circle all that apply)
إذا كنت قد استعملت أية وسيلة ، فأي منها ؟

- [] pill حبوب منع الحمل
[] IUD لولب
[] injection (depo provera) إبره
[] condom عازل ذكري
[] diaphragm/foam/jelly عازل مهلي / جيللي
[] suppositories تحاميل
[] rhythm طريقة الحساب
[] withdrawal القذف خارج المهبل
[] abstinence الانقطاع عن الممارسة الجنسية
[] breast feeding الرضاعة الطبيعية
[] other أخرى

16. a. Are you currently doing anything or using a method of contraception to delay or avoid getting pregnant?

هل تقومين حالياً بعمل أي شيء أو تستعملين أية طريقة لتأخيري أو تتجنبي حصول الحمل ؟

[] نعم yes [] لا no

{إذا كان (نعم) اتجهـي إلى سـ 16c } {C16}

b. What is the main reason you are not doing anything to delay or avoid pregnancy?

ما هي الأسباب الرئيسية التي تمنعك من اتخاذ وسيلة لتأخيري أو تجنب الحمل ؟

- [] Want a child أريد طفلـا
[] Lack of knowledge of how to delay or avoid pregnancy قلة المعرفـة عن كيفية تأخـير أو تجـنب الحمل

- [] Husband /others opposed الزوج ، معارضون آخرون
[] Costs too much التكلفة غالـية
[] Side effects التأثيرـات الجانبـية
[] Health concerns أسبـاب صـحـية
[] Hard to obtain methods صعـوبة الحصول على الوسائل
[] Religion الدين
[] Opposed to family planning معارضـة لتنظيم الأسرـة / لأسبـاب غير دينـية
[] Fatalistic إرـادة الله
[] Infrequent sex الممارـسة الجنسـية في أوقـات متـبـاعدة
[] Don't know لا أعرف
[] other أخرى

{go to Q n. 17} {17} {اتجـهي إلى سـ 17}

- c. What are you doing or using to delay/avoid getting pregnant?
ماذا تفعلين أو ماذا ستفعلن لتأخير أو تجنب الحمل؟

[] pill	حبوب
[] IUD	لولب
[] injection (depo provera)	إبره
[] condom	غازل ذكري
[] diaphragm / foam / jelly	غازل مهيلي / جيلي
[] suppositories	تحاميل
[] rhythm	طريقة الحساب
[] withdrawal	القفز خارج المهبّل
[] abstinence	الانقطاع عن الممارسة الجنسية
[] breast feeding	الرضاعة الطبيعية
[] other	أخرى

- d. Did you feel you had enough information to choose between different methods?

هل تشعرين أن لديك المعلومات الكافية للإختيار بين الوسائل المختلفة؟

17. a. Have you ever gone somewhere (e.g. to a clinic) for family planning services?
هل ذهبت إلى أي مكان لخدمات تنظيم الأسرة؟ (إلى عيادة مثلاً).

yes [] نعم [] no [] لا []

{ if yes - go to Q n. 18 } { إذا كان (نعم) اتجه إلى س 18 }

- b. What is the main reason you have not used any family planning services?
ما هو السبب الرئيسي لعدم استعمالك لخدمات تنظيم الأسرة؟

[] Did not want to use family planning (for any reason)
لم أر غ لاستعمال خدمات تنظيم الأسرة (لأي سبب)

[] Don't know of any facilities offering family planning
لا أعرف بأية أماكن تقدم خدمات تنظيم الأسرة

[] Husband /others opposed الزوج /آخرون معارضون
[] Costs too much التكلفة غالبة

[] Heard of bad experience of others going for family planning
سمعت عن تجربة سيئة لآخرين ذهروا إلى مراكز تنظيم الأسرة

- [] نوعية الخدمات ضعيفة Poor quality of services
- [] أماكن تقديم الخدمات ضعيفة جدا Facilities too far away
- [] قلة المعرفة عن خدمات تنظيم الأسرة Lack of knowledge of family planning
- [] أخرى Other

18. a. Do you know of anywhere close by where family planning services are offered?

هل تعرفين مكان قريب يقدم خدمات تنظيم الأسرة؟

[] نعم yes [] لا no

Name of facilities or service providers (List all you know)

أسماء الوحدات التي تقدم تلك الخدمات (عدي كل التي تعرفينها)

- (1) _____ [] government حكومي [] private خاص
 (2) _____ [] government حكومي [] private خاص
 (3) _____ [] government حكومي [] private خاص
 (4) _____ [] government حكومي [] private خاص

{If never used family planing services go to Q n. 19 }

{إذا لم تستخدمي وسائل تنظيم الأسرة اتجهي إلى س 19 }

- b. Where did you go for family planning services last time? (name facility)
 _____ : أين ذهبت لخدمات تنظيم الأسرة آخر مرة؟

- c. Facility is: government [] حكومي [] private خاص [] cooperative تعاوني [] don't know لا أعرف []

- d. Facility is: hospital [] مستشفى [] clinic/health center [] مركز صحي / عيادة [] other [] أخرى _____

- e. How long does it take you to travel from your home to (name of provider)?
 _____ كم يستغرق من الوقت من منزلك إلى مكان تقديم الخدمة؟ سمة المكان:

دقيقة _____ minutes [] لا أعرف don't know

- f. How do you get there? كيف تصلين إلى هناك؟

[] by vehicle totally / partially كل / بعض الطريق بالسيارة
 [] by foot سيراً على الأقدام

- g. Is the location of (name of facility) suitable for you?

هل الموقع ملائم لك؟ (سم المكان)

[] نعم yes [] لا no (please explain) (رجاءً اشرحِي ذلك)

- h. How would you rate the following aspects of the service/facility you used?
ما هو تقييمك للخدمات التي قدمت لك في الأماكن التي تراجعينها؟

		Excellent ممتاز	Adequate مقبول	Needs Improvement يحتاج إلى تحسين
(1)	Care given by staff	1	2	3
(2)	Quick and efficient service	1	2	3
(3)	Methods explained	1	2	3
(4)	Confidentiality of the service	1	2	3
(5)	Range of methods offered	1	2	3

19. a. And now I would like to ask you about your last pregnancy. How many months into that pregnancy did you know that you were pregnant?
والآن أود أن أسألك حول آخر حمل لك . بعد كم شهر بذلك الحمل عرفت أنك حامل؟

شهور _____ months [لا أستطيع أن أتذكر] can't remember

- b. How did you know that you were pregnant? كيف عرفت بأنك حامل؟

[] Physical examination by a health worker فحص سريري من قبل عاملة صحية
[] Pregnancy test تحليل حمل
[] your own experience تجربتك الخاصة
[] identified by a friend or family member عن طريق صديق أو أحد أفراد العائلة

- c. Did you attend a clinic for antenatal care?
هل راجعت عيادة تقدم خدمات رعاية الأمومة؟

[] نعم yes [] لا no

Name of facility (اسم المكان) _____

{إذا كان (نعم) اتجه إلى س 19 e} {if yes – go to Q n. 19 e}

- d. What was the reason for not attending? (ما هو السبب لعدم ذهابك) _____

{ go to Q n. 20} { اتجه إلى السؤال رقم 20 }

e. What was the reason you went for antenatal care?

لماذا ذهبت لطلب خدمات رعاية الأمومة؟

normal checkups للفحص الدوري

was experiencing a problem كنت أعاني من مشكلة صحية

other أخرى _____

f. How many times did you go for antenatal care in your last pregnancy?

كم مرة راجعت من أجل خدمات الأمومة والطفولة في آخر حمل لك؟

مرات _____ times

g. Were you satisfied with the antenatal care you received?

هل كنت راضية بالرعاية التي حصلت عليها؟

yes نعم

no لا

If no, why not?

{ إذا كانت الإجابة (لا) ، لماذا؟ }

20. a. Where did you deliver your last baby? أين ولدت آخر طفل لك؟

at home or family member's home في البيت أو بيت أحد أفراد العائلة

private health facility مكان صحي خاص

government facility مكان حكومي

other أخرى

b. Ideally, where would you like your next baby to be delivered?

أين ترغبين أن يولد طفلك القادم؟

at home or family member's home في البيت أو بيت أحد أفراد العائلة

private health facility مكان صحي خاص

government facility مكان حكومي

other أخرى

c. Why? _____

21. a. Did you attend a clinic for postnatal care in the 40 days following delivery?

هل راجعت عيادة / مستوصف لتلقي خدمات ما بعد الولادة في الأيام الأربعين بعد الولادة؟

yes نعم

no لا

{ إذا كانت الإجابة (نعم) اتجه إلى س 21c }

b. What was your reason for not attending? لماذا لم تراجعني؟

{ go to Q n. 22 } اتجه إلى س 22 }

c. Name of facility : إسم المكان :

d. What was the reason you went for postnatal care?

لماذا رجعت من أجل خدمات ما بعد الولادة؟

normal checkup of self فحص دوري
 was experiencing a problem كنت أعاني من مشكلة صحية
What? ما هي؟
 other أخرى

e. On what day postpartum did you seek postnatal care?

في أي يوم بعد الولادة رجعت من أجل خدمات ما بعد الولادة؟

Day يوم :

f. Were you satisfied with the postnatal care you received?

هل رضيت عن الخدمات التي قدمت لك؟

[] yes [] لا نعم

If no, why not? { إذا كانت الإجابة (لا) ، لماذا؟ }

22. a. Sometimes, married women experience vaginal symptoms. Have you experienced any of the following?

إن بعض النساء تعاني من بعض المشاكل في جهازهن التناسلي فهل عانيت من إحدى المشاكل التالية؟

itching الحكة
 burning upon urination حرقة عند البول
 odorous discharge إفرازات ذات رائحة كريهة
 painful coitus الألم عند الجماع

[] have not experienced any of these symptoms { go to Q n. 23 }

لم أعاني من أية واحدة من المذكورة أعلاه { اتجه إلى س 23 }

b. When was the last time you experienced any these symptoms?

متى آخر مرة عانيت من هذه الأعراض؟ قبل _____ أشهر months ago

c. At that time, which of these symptoms were present?

في حينها أيها من الأعراض التالية كانت موجودة؟

- [] itching الحكة
[] burning upon urination حرقة عند البول
[] odorous discharge إفرازات ذات رائحة كريهة
[] painful coitus الآلام عند الجماع
[] other أخرى

d. Did you seek treatment at the time?

هل طلبت العون والعلاج في حينها؟ [] نعم yes [] لا no

e. Did the symptoms go away?

هل زالت الأعراض؟ [] نعم yes [] لا no

23. a. Have you ever had trouble getting pregnant i.e infertility or temporary infertility?
هل عانيت بصعوبة في الحصول على حمل (عقم)؟

[] نعم yes [] لا no

{إذا كانت الإجابة (لا) اتجه إلى س 24}

b. Have you gotten pregnant since that time?

هل حصل لديك حمل منذ ذلك الوقت؟ [] نعم yes [] لا no

c. How long did you try to get pregnant?

كم مضى لك وأنت تحاولين الحصول على حمل؟

months
أشهر _____

d. Are you still trying?

هل ما زلت تحاولين؟ [] نعم yes [] لا no

e. Did you seek help for this problem?

هل طلبت المشورة لحل هذه المشكلة؟ [] نعم yes [] لا no

{إذا كانت الإجابة (لا) اتجه إلى س 24}

f. Where did you go for help?

أين ذهبت لطلب المشورة؟ _____

g. Was it successful?

هل نجحت؟ [] نعم yes [] لا no

h. Were you satisfied with the care you received?

هل رضيتك عن الخدمة التي حصلت عليها؟ [] نعم yes [] لا no

24. In the last month how many times have you (or your under 5 y.o. children) visited a health facility for any reason?

في الشهر الأخير كم مرة زرت أنت (أو أحد أطفالك) الذين يبلغ عمرهم دون الخامسة (مؤسسة صحية)؟

0	1	2	3	4	5	6 times
[]	[] مررتين	[] ثالث	[] أربع	[] مررت	[] خمس	[] ست

25. a. How long ago was the last time you (or your children) visited a health facility?

متى كانت آخر زيارة لك (أو لأحد أطفالك) لمؤسسة صحية؟

أسابيع 38 weeks

{if more than 4 weeks ago, terminate interview}

{إذا كانت المدة أكثر من أربعة أسابيع انهي المقابلة}

- b. What was the name of this facility?

ما هو اسم المؤسسة؟ _____

- c. Was the facility: private public cooperative other
هل المؤسسة : خاصة [] حكومية [] تعاونية [] أخرى []

- d. Age of Person visiting facility:

عمر الشخص الذي زار المؤسسة : _____

sex (الجنس): male ذكر [] female أنثى []

- e. What was the reason for the visit? ماذا كان سبب الزيارة؟

- [] illness مرض
- [] immunization تلقيح
- [] well child check up متابعة فحص طبي لطيفي
- [] prenatal care رعاية أمومة
- [] postnatal care رعاية بعد الولادة
- [] normal delivery ولادة طبيعية
- [] abnormal delivery ولادة غير طبيعية
- [] family planning تنظيم أسره
- [] infertility consultation استشارة لأسباب العقم
- [] other. Explain أخرى (شرحها) _____

- f. For this visit, how would you rate the following aspects of the services you received? **بالنسبة لهذه الزيارة ، كيف تقييم الخدمات التي قدمت لك ؟**

		Excellent ممتازة	Acceptable مقبولة	Needs Improvement تحتاج إلى تحسين
(1)	Attitude/care of the staff أسلوب وتعامل العاملين	1	2	3
(2)	Efficiency and speed of service كفاءة وسرعة الخدمات	1	2	3
(3)	Completeness of range of services خدمات شاملة	1	2	3
(4)	Quality of the services نوعية الخدمة	1	2	3
(5)	Affordability of the services التكلفة	1	2	3

- g. If any aspects were less than acceptable, please describe the problem you experienced.
إذا كانت إحدى (أو أكثر) من الخدمات المقدمة أقل من المقبول أرجو توضيحها أدناه

- (1) Attitude/care of the staff
أسلوب وعناية العاملين تجاه المريض _____
- (2) Efficiency & speed of service
كفاءة وسرعة الخدمة _____
- (3) Completeness of range of services
اكتفاء وشمول الخدمات _____
- (4) Quality of the services
نوعية الخدمات _____
- (5) Affordability of the services
التكلفة _____

- h. What was the total cost for the visit including all drugs, tests, and exams?
كم كانت التكلفة الكلية للزيارة ومن ضمنها الأدوية والتحاليل والفحوصات ؟

(ريال يمني) _____ YR لا أعرف [] don't know

26. a. Were you or any of your under five year old children ill in the last four weeks but did not seek treatment?

هل عانيت أو أحد أطفالك دون الخامسة من العمر من علة صحية في الأسابيع الأربع الأخيرة ولم تطلب المشورة الصحية ؟

[] yes [] لا نعم

{إذا كانت الإجابة (لا) فأنهي المقابلة}. {if no - end the interview}.

b. What was the reason for not seeking treatment?

ماذا كان السبب في عدم طلب المشورة الصحية؟

- Illness not serious المرض غير جدي
 Could not afford التكفة غالبة
 Too busy مشغولة جداً (مزدحمة جداً)
 Husband/other refused الزوج / آخر رفض
 Other أخرى

شكراً لتعاونكم ... Thank you for your cooperation.