

GOING BEYOND RESEARCH

A key issues paper raising discussion points related to dissemination, utilisation and impact of reproductive and sexual health research

Drawn from a two-day meeting of researchers and policymakers

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Background

Demographic and behavioural research into the determinants of fertility, reproductive health, and more recently sexual behaviour, as well as clinical trials research for testing new medical and behavioural interventions to improve reproductive health, have long been supported by international donors such as DfID, USAID and WHO. Another area of research, known as applied, operations or health-services research, which focuses on generating information to improve reproductive health policies and programmes, is becoming an increasingly important element in health and population research.

This paper highlights the key issues arising from a meeting that reviewed how this more service-focussed type of research is being implemented, with a particular concentration on the utilisation, communication and evaluation of such research. The goal of the meeting was to provide a forum for exchanging experiences relevant to these issues so that researchers, as well as those involved in policymaking and in funding research, can gain a better understanding of key issues. In addition, the meeting also provided the opportunity for those directly involved with such research programmes to consider strategies for strengthening the communication, utilisation and evaluation of their own research programmes, as well as for increasing communication and collaboration between research programmes.

The UK Department for International Development (DfID) has supported demographic and medical research into fertility and reproductive health issues over a number of years. More recently, it has introduced a number of five-year “Research Work and New Knowledge”

programmes, three of which are directly concerned with undertaking applied research to improve reproductive and sexual health through influencing policies and programmes:

- ‘Sexual and Reproductive Health: Policy and Practice’ (implemented by the Centre for Population Studies (CPS), London School of Hygiene and Tropical Medicine, in collaboration with the Nuffield Institute of Health at Leeds University).
- ‘Safe Passages to Adulthood’ (implemented by the Centre for Sexual Health Research (CSHR) at the University of Southampton, in collaboration with CPS and the Thomas Coram Research Unit, Institute of Education, University of London).
- ‘Opportunities and Choices’ (implemented by the Department of Social Statistics at the University of Southampton, through the “U.K. Research Consortium” which includes Marie Stopes International, the London School of Economics, as well as other departments in the University of Southampton).

The United States Agency for International Development (USAID) has supported demographic and health surveys (through Macro International) for twenty years that have produced data allowing analysis of fertility determinants, consequences and transition. More recently, it has introduced a research programme that focuses on improving the methodology for evaluating reproductive health programmes (the EVALUATION programme). Of relevance to this meeting, USAID has also supported a programme of operations research (OR) for over 25 years, initially to strengthen family planning services and, since the International Conference on Population and Development (ICPD) in 1994, the wider range of reproductive health services. The Population Council, through its five-year ‘Frontiers in Reproductive Health’ programme (FRONTIERS), implements USAID’s operations research programme. USAID also supports the Population Council’s ‘HORIZONS’ OR programme for strengthening responses to the HIV/AIDS epidemic.

The World Health Organisation (WHO), through its Special Programme on Human Reproduction in the Division of Reproductive Health and Research (RHR), has supported a programme of biomedical, social science, epidemiological and operations research for three decades across a wide range of reproductive health care services. This programme supports and organises collaborative studies on fertility regulating agents, multi-centred research teams addressing similar topics, and supports individual researchers undertaking studies on a major fertility, reproductive and sexual themes.

There are many similarities between these research programmes in terms of the range of topics addressed, but often quite different approaches are used to undertake and disseminate the research. This is in terms of both the research paradigms and methods used, and of the organisational structures and relationships established between the many actors involved. These actors include the UK/US-based researchers themselves, their researcher counterparts in the countries where the research is undertaken, the users of the knowledge generated (i.e. those making decisions concerning reproductive and sexual health programmes and policy in service programmes), and the donor agencies.

Research that seeks to generate knowledge for improving service programmes and policies is based implicitly on an expectation that decisions concerning the design, implementation and evaluation of reproductive health services should be based, or at least draw on, empirical evidence of what works and what does not work. This expectation can be seen throughout the field of health care – for example, in the promotion of “Evidence Based Medicine” through to “Evidence Based Policy, of “better / best practices” by USAID and UNAIDS , of ‘data for decision-making’, etc. While it is acknowledged and understood that decisions concerning reproductive health policies, as well as standards and guidelines for service delivery protocols, are always going to be influenced by other factors (such as political realities, the experience and technical expertise of the individual decision-maker, personal morality, resource availability, etc.), these concepts all reflect a desire on the part of researchers and donors to assist decision-makers to incorporate evidence derived from research when making decisions.

Communicating the results of research effectively to those responsible for implementing and funding service delivery and enhancing the likelihood that, once communicated, the results will be used, are therefore essential elements of any applied research programme. How best to go beyond the research study itself to communicate research results, and to work with service delivery organisations so that they can actually use the results to improve their programmes, continues to challenge all of these research programmes.

There exists a large body of literature on research utilisation generally, which provides theoretical bases and practical guidance on ways in which research can influence the policy

process. Less is known about how research can influence health service programme design and implementation. Consequently, much of the meeting was spent reviewing ways in which research has been undertaken so that use of the results is facilitated, with a particular focus on researchers communicating the results to decision-makers and donors.

Greater attention is now being paid within many donor agencies to evaluating the ‘benefits’ derived from their research programmes, be it in terms of knowledge generated, interventions developed and tested, services strengthened, or health improved. This interest stems not only from wanting to know more about the effects and impact that their research is having, but also from the increasing requirement from their own paymasters to provide evidence of the ‘payback’ that is being generated through investing public funds in health research. Consequently, it has become increasingly important for those receiving research funding, as well as those allocating funding for research, to justify reproductive health research programmes within the larger context of health and population development assistance. Measuring and evaluating the benefits gained from any type of research is notoriously difficult, as is determining what constitutes a successful programme of research. Equally problematic are the related issues of judging the quality of a research study, and the relationship between the quality of research and its influence on decision-making.

A brief summary of the meeting and the presentations made are given elsewhere on this website (DAY 1 AND DAY 2). The remainder of this paper presents the key issues raised and discussed at the meeting, organised in relation to the three main groups of stakeholders with an interest in improving the transfer of research into policy:

- Those responsible for service programmes and policy whose decisions that could benefit from being informed by research.
- Those who undertake the research that is intended to inform and influence the decision-makers.
- Those who fund the research, and who often fund also service programmes.

Decision-makers

Who are the decision-makers?

There is a large range of actors who are in a position to implement research findings, or are in a position to reflect on current healthcare policies and practices in the light of new research. These decision-makers exist at a variety of levels in the reproductive health sector, ranging from the international to clinic levels. In developing countries, health ministry officials and politicians are key influences on wide-ranging national and state level health policy at the macro level, and ministry officials can be seen as the most readily identifiable policy-makers. A country's health system also consists of service administrators at every level, and of health practitioners from chief surgeon to nurse assistants, who also influence policies at regional, district and clinic levels via changes in service protocols or service delivery practices. These lower levels of policy imperatives are often referred to as 'micro' levels of decision-making.

While discussing the role of decision-makers in the transfer of research-generated information to policy, an awareness of the level at which these changes might occur is crucial. In many cases, decision-makers at the macro-level may be very amenable to using research, often from international sources, and this is reflected in national policy changes, however these changes may not be translated or incorporated at the micro-level in terms of district or clinic policies and procedures (Mehrotra).

Apart from this vertical spectrum of actors, there is also a breadth of decision-makers in different sub-sectors. For example, private providers and those linked to international NGOs or religious charities commonly make up an important component of healthcare choice for those with reproductive healthcare needs. In addition, international agencies such as WHO, and also bilateral development agencies such as DFID and USAID are also very powerful decision-makers at another level, often strongly influencing policies by working with health ministries from poorer countries to improve healthcare and health outcomes.

Engendering an evidence-based culture among decision-makers

Clearly this is a diverse group of decision-makers that have a wide range of information needs, which to some extent are contingent on the policy context. However, there are some

broad points that may apply to most of the groups of policymakers. A commonly expressed view is that decision-makers in general need to be operating in an ‘evidence-based culture’, or in other words, an environment where decisions concerning service provision are made on the basis of evidence which points to a likely improvement in health outcome. The realisation of this ideal would clearly take on a different shape according to the level, type and sub-sector of each policymaker. For example, ‘research findings’ from hospital audits aimed at improvements in both medical outcome and client satisfaction can be based on prior evidence (and sometimes on previous randomised controlled trials), whereas public health spending and organisation might be based on results from routinely collected (or specially commissioned) surveys.

What is evidence?

Although the idea of an evidence-based culture is attractive, and has many proponents, it begs the question of what actually counts as evidence. Apart from the importance of quality evidence, which is principally associated with the rigorous application of research methods, there is the more contested aspect of choice of research methods, or even more fundamentally, choice of approach or research paradigm. In reproductive and sexual health research alone, which spans medical, social science, public health and health services research as well as action research and participatory research, there are actively policed disciplinary boundaries to be navigated.

These different types of research methodologies and the various paradigms from which the work is carried out can strongly influence the findings from the research. This variety in turn has implications for the applicability and acceptability of the research, and its uptake by decision-makers. For instance, a research project focussing specifically on female genital mutilation using an ethnographic approach may provide a considerably different set of results from a broad-based public health survey approach. Hence no results from a research project are value free and every piece of data is produced according to the beliefs, interests and agenda of the individual researcher or institution.

Apart from the differences in approach apparent between quantitative and qualitative paradigms, there are also fundamental differences between descriptive research, hypothesis-

driven research (such as operations and clinical trials research), demographic research and clinical approaches. All of these approaches produce influential findings, but the proponents of each can be sceptical of alternative paradigms, and these divisions are sometimes apparent among policymakers as well as among researchers themselves. This is more likely where policy-makers are former researchers who have crossed the policy divide, but more commonly decision makers have little appreciation of different approaches and disciplines in research. Indeed, the very concept of research can be misunderstood and this misunderstanding can hamper effective communication. The niceties of cutting edge research techniques can be lost on a busy policy maker or practitioner. Despite this, engendering an evidence-based culture amongst decision-makers is a desirable and feasible goal.

Barriers to developing an evidence-based culture among decision-makers

Apart from the problem of competing research paradigms, there are also various other barriers to the establishment of evidence-based principles among decision-makers. The criticisms from macro-level policymakers such as health ministry officials generally focus on the lack of conciseness and the inappropriate channelling of research results as a barrier to the acceptance of research. Results from research are often couched in turgid academic literary styles or simply too technical for the implications of the findings to be clear to decision-makers, unfamiliar with this style of report. Reports produced are also often too long to be read by the decisions makers, or conversely the key findings are limited to an executive summary, which misses out the detail and contextual elements of the research findings. Extensive interviewing of a wide range of policymakers has revealed that these problems are widespread.

Timing is also crucial for policymakers, who may have other priorities to balance with the release of research findings. Many donors now recommend the identification of stakeholders at the outset so that the timing and direction of the research process can be taken into account within existing political decision-making structures. Health personnel themselves point to a general lack of access to research results (expensive journal subscriptions, lack of web links etc) as well as to prescriptive and hierarchical working structures that do not reward change, whether evidence based or not. Macro-level policymaking can sometimes be more easily influenced by research than the actual improvement of service provision, as the example in PANEL 1 demonstrates).

PANEL 1

Impact of Reproductive Health Research in India

CONTEXT

- RH research is an integral component of welfare policy in India
- National level surveys are conducted at regular intervals
- Population Research Centres have been established to provide an objective assessment of policy

IMPACT

- Priorities have been effectively set up at national level using current research findings
- However, research has contributed much less to improving service delivery

BARRIERS

- Top down approach to health policy making
- National level policymaking emphasised but service delivery is the responsibility of state governments
- Programme outcomes and targets have been highlighted but not programme processes
- Service providers are not involved in research activities

ISSUES

- Research capacity needs to be developed at state level and lower levels of service delivery
- Change from target-based to community needs based approach requires a concomitant change in research strategy

Decision-makers and their relationship with advocates or mediators

An understanding of the flow of institutional policymaking and the process by which decisions are made functional is key to the effective transition of evidence into practice. The suggestion that research is only sought to shore up policy decisions that are already established (see discussion, Safe Passages LINK) is debilitating to the research community, undermining their independence, but wariness about this potential aspect of knowledge transfer is probably realistic in policy contexts which have no evidence-based component. Academic debate over competing interpretations of the same research results is part of a healthy debate over policy formulation.

However, the links between decision-makers and their information providers are not a simple process that involves the research community on one side and themselves on the other, bridged only by the communication of research findings to their policy audiences. A range of other actors, some of which are advocates for a particular moral or policy position, often mediates this relationship. Indeed, some advocates are also researchers themselves, which can affect the legitimacy of findings produced by or in collaboration with such groups (see the example from Pakistan of the NGO, PAHVNA, which carried out research to advocate that adolescent reproductive health become part of the Government health priority agenda).

Other mediators, such as communications experts, either working independently or as part of large organisations (e.g. the Alan Guttmacher Institute's policy unit on reproductive health), may be seen as more independent, although it is increasingly acknowledged that the values of researchers and mediators should be known in advance of any communication that is received by policymakers.

The role of mediators in research communication is a key subject for debate. Mediators can have a very powerful role, for example, as used widely in Latin America for the promotion of women's health and rights. Researchers increasingly use professional communicators to transfer messages. For example, the use of journalists in Nepal (see PANEL 2), or advertising and public relations to communicate behaviour change messages that have been refined by focus group analysis and market research.

PANEL 2

Translating research into abortion policy in Nepal

CONTEXT

- Abortion-related mortality is at a high level in Nepal
- Induced abortion is a criminal act for which women and service providers are imprisoned

RESEARCH CONDUCTED (selection)

- Identifying determinants of abortion in urban Nepal (1994)
- Opinion polls (1996)
- Study of imprisoned women (1998)
- Perceptions of safe and unsafe abortion among service providers (1999)
- Managing abortion-related complications in hospitals (2000)
- Investigation into the role of private pharmacists (2001)

CHANNELS OF COMMUNICATION

- Printed e.g. posters, brochures, advertisements, banners, articles
- Press e.g. press conferences, journalists' forums
- Electronic e.g. website, radio broadcasts
- Community e.g. street dramas, NGO empowerment, educational workshops

MEDIATORS

- Journalists
- Lawyers
- NGOs
- Women's groups
- Schoolteachers
- Community health providers
- Pharmacists

Do decision-makers need to develop a research capacity?

The emergence of mediators as an important aspect of the research into policy process can be seen as growing out of a problematic relationship between decision-makers and researchers (see Townsend). This has evolved from researchers' lack of understanding of the policy context, and policymakers' lack of appreciation of the subtleties of describing a complex reality, which simplified research results only partially reveal. Some policymakers are in a position to minimise the need for mediators by developing their own research capacity or by interacting directly with the researchers themselves. These steps would reassure those observing the decision-making process that policy is not made for purely political reasons, but draws also from empirical evidence.

There is a range of possible mechanisms to establish research capacity available to policymakers. Given the pressing need for health research in developing countries, and the fact that most funding and technical assistance comes from richer countries, an unbalanced relationship tends to result (Aggleton) and so the most appropriate mechanism or model for a partnership depends on the existing capacity in a country as well as the needs of decision-makers. From the policymakers' point of view, research capacity can either be 'in-house' so that access to information is relatively direct, or more institutionally distant making by making establishing relationships with existing researchers or using mediators, to access researchers' information. In-house capacity, however, may suffer problems of bias, and a lack of continuity when an organisation's leadership changes. For international decision-making bodies (such as DfID and USAID) the research capacity can be contracted out (as is the case with DfID knowledge programmes and USAID's OR programmes), usually with mediators bridging the institutional gap.

Researchers

Working within an evidence-based culture

For many researchers working (partially or totally) within the context of a research programme that is expected to generate knowledge for informing decision-makers and donors about reproductive and sexual health, there can be several challenges to the way in which research is conventionally undertaken in academic institutions. These include, at a minimum:

- Undertaking research in other countries and in collaboration with other researchers.
- Exchanging experiences and skills with researchers and service personnel in poorer countries.
- Adapting or choosing research approaches appropriate for applied rather than basic research.
- Engaging as directly as possible with the decision-makers who use the evidence produced by research.
- Communicating the research results in an understandable and useable way to different audiences.
- Occasionally working with those using the research findings to assist in their application in drafting policies and improving service delivery protocols.

These challenges were highlighted at many points during the meeting and some of the more important are discussed below.

Relationships with researchers, decision-makers and donors

The nature of the relationship between a UK or US-based research programme and those researchers and decision-makers it works with in poorer countries is critical for a number of reasons. The context in which the research is being undertaken and the nature of the research problem being addressed can only be identified, understood and incorporated in the study with the full involvement of those living in that environment. Moreover, experience shows that engaging the decision-makers in identifying and defining the research problem, and enabling their participation in as much of the ensuing research as is appropriate, greatly increases the likelihood that the study results will be used on completion. This is not only to ensure that their specified needs are being addressed (rather than the researchers’ perception of these needs), but also to reduce the likelihood of the decision-maker being surprised or caught unawares by the results.

Aggleton typified the dominant model by which many UK and US-based research programmes undertake research in poorer countries (see column 1 in PANEL 3). This model is not only likely to create difficulties in correctly defining and addressing problems, but also does not easily build capacity in the poorer countries; it is also unlikely to be sustainable in the longer term. Indeed, given that the research process usually remains firmly under the control of the research programme from the richer country, this relationship has also been

<ul style="list-style-type: none"> • Dominant model • Rich countries identify ‘problems’ • Rich countries send researchers and intervention specialists to poorer ones 	<ul style="list-style-type: none"> • Alternative model • Work collectively to identify ‘problems’ and issues • Frame within local terms • Jointly develop projects and
<p>PANEL 3 <u>Collaborative Research Relationships</u></p>	
<ul style="list-style-type: none"> • Richer countries ‘transfer’ this learning to poorer ones • Poorer countries are invited to participate in further research 	<ul style="list-style-type: none"> • Joint analysis and dissemination • ‘Transfer’ in both directions <p>Source: Aggleton</p>

- Facilitate identification and conceptualisation of issues of concern by local actors/organisations;
- Support development of context specific protocols and approaches;
- Facilitate access to financial and other resources;
- Provide training and support where needed;
- Assist in analysis and international dissemination of findings and best practice.

Another approach to moving closer to the alternative model is to base the research organization's staff in those countries where the research is to be carried out rather than having them based in the UK or US. This approach has been taken by the Population Council's OR programme with full support from USAID and although more costly, experience shows that there is tremendous benefits gained in terms the relevance, applicability and quality of the research undertaken. Furthermore, the vast majority of the programme's researchers are themselves from the country or region. Consequently, they often have greater empathy with local researchers and also better understand the decision-making processes of the national service delivery organisations for which the research is intended than their colleagues.

When funding for research is organised through a programme rather than as a series of discretely funded projects (as is the case with the DfID knowledge programmes and the USAID OR programme) this can also present challenges to the way in which research studies are conceptualised and undertaken, and especially to the relationship between researcher and donor. When a donor develops and offers up for a competitive bid a programme of research, there are necessarily parameters as to the topics that can be addressed and the issues within topics that can be researched. Consequently, it is crucial that the donor and researcher establish a relationship that is also a partnership, as both parties are entering the relationship with expectations of having a strong influence over the research agenda, the expected outcomes, and in some situations, the research approach used.

For university-based researchers in the UK and US particularly, this type of relationship can create tensions, because usually researcher-donor relationships are characterised by high

levels of autonomy and few requirements from the donor. Funding through a research programme is, to some extent, a form of commissioned research, and as such some university researchers may feel their independence to determine which research to do and how to do it compromised ([LINK to Safe Passages report](#)). While this may be less of an issue for non-academic researchers, both donors and researchers need to recognise that this tension may arise, and must be prepared to spend time and effort working towards a mutually agreeable partnership.

In particular, it is crucial that both groups have open discussions at the beginning of the programme, and preferably before the programme grant is awarded, so that researchers and donors alike have a clear understanding of each other's expectations for the five-year relationship. A written document submitted, reviewed and approved without in-depth discussions between the two groups is an insufficient way to establish such an important relationship. All relationships evolve over time and so it is equally important to continually review each other's expectations through regular meetings.

Communicating research as evidence for decision-makers

The need to develop ways to communicate research findings to end users (be they decision-makers or donors) through channels other than published papers and presentations at conferences has become a pressing priority, particularly for those working in universities. Although these channels remain important and need to be maintained, research programmes have to find ways to reach as directly as possible the decision-makers, including the donor. Given that dissemination of research findings has become such a critical part of the research process, and that non-traditional ways of communicating research findings to a different audience is still somewhat challenging for many university-based researchers, much of the meeting was devoted to reviewing communication strategies that have proven successful. These reviews include an overview of communicating research to policymakers (Ashford), a description of the FRONTIERS programme's communication strategy for east and southern Africa (Wanjiru) and a description of communicating research findings for policy advocacy on abortion in Nepal (Tamang). Some of the key points raised are given in PANEL 4.

Communicating results clearly and effectively to policymakers, service programme staff and donors can require skills that may not be present within a research programme team. Most donors and research programmes have recognised this issue and various approaches have been developed to address this need (see discussion in 'donors' section) so that a research programme has an explicit and funded communications strategy. All of these approaches have sought to augment the role of researchers in the communication process, but experience has shown that researchers must remain involved in the process to ensure that the message received, however much it has been tailored to a particular audience, is accurate and credible.

PANEL 4

Effective communication of research findings

- Communicating research results widely
- Barriers exist to using research on both the research side and the decision-makers side
- Bridging this gap requires understanding the decision making process and information needs of different audiences, involving decision-makers early in the research process, and interpreting and distilling the findings so they are relevant and useable
- Communicating to decision-makers requires strategic planning in advance, using multiple channels, and is a continuous process
- Communication requires a team effort because the variety of skills needed have to be marshalled by the research programme
- Strategic planning for communicating research results involves:
 - Being specific about the objectives
 - Considering multiple channels and formats (documents, presentations, briefings, etc.)
 - Tailoring messages and format to each audience
 - Pre-testing to ascertain appropriateness and effect of message
 - Taking into consideration timing, so that the message has its full effect

Moreover, the use of specialist organisations and individuals to mediate between researchers and those that use their findings needs to be organised carefully to avoid results being used by the mediator in a way that the researcher did not intend. Having the capacity within the programme to plan and carry out the communications activities (as is the case with the FRONTIERS programme) allows more control over to whom and how the results are communicated, but this adds costs beyond the research itself. It does not, however, negate the important roles that external mediating organisations (such as JSI (UK) and PRB) can play. These include disseminating the knowledge generated to an audience wider than the research programmes themselves could reach, synthesising research findings from several studies and programmes, and succinctly presenting key findings in language and formats that are easily understandable and appreciated by different types of decision-makers.

PANEL 5

Promoting the utilisation of research

- Identify key players at different levels in the service / policy organisations and get a clear understanding of their information needs, and of the social and political context in which decisions are made
- Work jointly with them to specify the service or policy problem they face, and engage them directly in designing the study itself so that they understand the choice of approach taken and the research is appropriate for the context in which the study is being implemented
- Maintain end users interest and involvement throughout the study to enhance their anticipation and interest in the results
- Anticipate from the beginning the range of results that may emerge and make sure that the decision-makers would be able to use any of these possibilities
- Research of the highest quality also has the highest credibility so avoid undermining the validity of the information generated
- Involve end users in early analyses of basic data so that they can interpret them from their own perspective as well as having the researchers' perspective
- Include in the research project funds and time for researchers to work with decision-makers after its completion on applying the findings to the actual situation

Maximising utility but maintaining autonomy

One of the major themes underlying the meeting was how the research process can be undertaken so that the knowledge generated is of use to and is likely to be used by decision-makers, including the donor funding the research programme. Different approaches to addressing this issue were presented by Aggleton (reviewing the nature of the relationships between researchers based in rich countries and those they interact with in poor countries by Cáceres (a case study of the role that a national multi-sectoral workshop can play in setting priorities for research on adolescents' sexual and reproductive health in Peru), and by Qazi (a case study of the importance of networking and sensitising key stakeholders prior to undertaking sensitive applied research on adolescents in Pakistan).

These presentations, as well as the small group discussion on the second day, provided many clear and practical guidelines for researchers interested in increasing the likelihood that their

findings will be used by decision-makers. Some of the more pertinent are described in PANEL 5 above. Clearly, each research programme can take these guidelines and others that are relevant to this particular focus or to the wider field of research utilisation, and use them when planning and implementing research studies. However, underlying these guidelines are some inherent difficulties due to the way that many research programmes are set up and function.

For example, much of the knowledge generated through basic research is useful for assisting those responsible for planning the direction of national and international policies, but is less applicable, if at all, for guiding service delivery protocols or other aspects of service programmes themselves. Conversely, some of the information produced from operations research is specific to a particular context, and to generalise beyond that particular population, programme or geographic/administrative area would not be appropriate. Thus the type of research undertaken can place limits on the degree to which it is useful and the level and type of decision-maker who can use it. This aspect of research utilisation needs to be taken into account by both researchers and donors when setting the research agenda, as well as when evaluating a research programme's benefits and impact.

From the point of view of many decision-makers, research (and especially basic research) is notorious for being a slow, drawn out process. A lot of decision-makers who recognize the value of an evidence-based approach to planning their service programmes become frustrated with the time taken to provide the information they are seeking. However, the time needed to produce valid and reliable evidence is often under appreciated, with the result that either decision-makers become disillusioned with research and look for other sources of evidence to guide their planning process, or researchers become tempted to take 'short cuts' or use inappropriate research methods to complete the research more quickly. Both outcomes compromise the utility and credibility of the role that research can play, and so the time needed to produce knowledge that can be directly of use needs to be considered when planning any applied research study. Moreover, this should encourage the development of effective, robust, and credible shorter-term research techniques.

Seeking to make the results from research as useful possible to end users is a laudable principle, but researchers need also to be vigilant in maintaining a critical perspective and remaining independent from the decision-maker, be it a service programme or donor. This need for autonomy is particularly crucial when evaluating programme activities, as few decision-makers are able to be dispassionate about programmes in which they have invested their professional time and credibility. While involving the decision-makers in the design, data collection, analysis, and interpretation of results will increase the likelihood that the findings will be appreciated and used, the possibility of the decision-maker influencing the researcher to bias the research in some way cannot be ignored. Producing information that questions or argues against the status quo can place a researcher in a difficult situation when they have established a close partnership with the decision-maker. Consequently, although good relationships with the end users are to be encouraged, researchers should always ensure there is sufficient 'distance' between them so that they do not compromise their ability to be critical of, or disagree with the decision-maker.

Donors

Any consideration of ways to improve the utility of reproductive and sexual health research would not be complete without including the role of the donor organisations that provide funding for applied research. The reasons why a donor organisation supports research, the mechanisms through which research is supported and used, and how a donor organisation evaluates its research activities all influence the role that research can play in improving reproductive health services and, by extension, reproductive health and behaviour.

Rationale for supporting research

Donors support research into reproductive and sexual health for a range of reasons. Three reasons in particular emerged during this meeting:

- To contribute to knowledge and understanding of the patterns, determinants and consequences of reproductive and sexual behaviour and morbidity in different contexts and among different populations. By supporting basic demographic, epidemiological, sociological, and public health research, donors are able to assist health service

programmes to better identify and understand the health status and behaviour of the populations they serve, and their information and service needs, and to develop and implement context-specific approaches to meet these needs. Historically, this type of research has attracted much support from donors, and there is clearly a need for continuing such support as needs and contexts evolve.

- To develop and test new interventions, be they medical or behavioural, to better prevent and/or manage adverse health outcomes associated with reproduction and sexuality. This type of research usually requires randomised clinical trials or experimental research designs to demonstrate with scientific validity that certain interventions will (or will not) prevent or improve specific conditions. Again, this type of research has proved, and continues to prove, attractive to donors because, when successful, it produces a tangible output that clearly justifies the investment made in the research.
- To assist reproductive health programmes to improve the effectiveness, efficiency and quality with which they provide their services. Known as operations or health systems research, this type of research uses combinations of basic and quasi-experimental methods to understand and diagnose programmatic problems and to test alternative approaches to address these problems. With the increasing complexity of service programmes over the past two decades, improving the way they function and critically appraising their effectiveness in meeting the needs of different populations have become higher priorities for donors and decision-makers.

Clearly, this spectrum of rationales and types of research need to be supported if scientific evidence is to be used when designing and implementing programmatic, behavioural and medical interventions for improving reproductive and sexual health. However, donors vary considerably in terms of their organisational interest and disinterest in certain topics (e.g. research into ‘the poorest of the poor’ is promoted by DfID; funding for abortion research is heavily constrained within USAID), as well as their support for different research approaches and methodologies. The relative ‘weight’ attached to the type of research supported, as measured through allocation of financial and human resources, also varies depending on political and other considerations.

In addition, all three donors reviewed here support capacity-building activities for strengthening research capabilities, among research programme staff as well as among researchers based in poorer countries. There is also some allocation of funds by all three donors to supporting methodological developments by the research programmes (e.g. for better understanding the context of adolescents' behaviour, for studying FGM, etc.).

As with health service decision-makers, donors are increasingly embracing an organisational philosophy of evidenced based decision-making, as is reflected in their procedures for designing and implementing their health and population assistance activities. Consequently, they themselves now have a greater need for results from research that can provide them with empirical evidence of the types of “better practices” that they can support. Moreover, generating research on a particular reproductive or sexual health topic can also enable donors to legitimise and strengthen their justification (to their own funding sources as well as to the programmes they support) for allocating more assistance to these topics.

Donors are now taking a more active role in all aspects of their research funding so that it produces results that are useful to themselves, and by extension, to other agencies and institutions with whom they work and support. This manifests itself in several ways, including: participating in determination of the research topics that are funded so that the results can directly contribute to their own programme development needs; creating mechanisms to better receive and communicate research results; and evaluating more precisely the quality, utility and impact of the research that they fund.

This signifies the need for a much closer partnership between researchers and donors than has been the case in the past. At least three aspects can be identified that need attention from donor organisations for the partnership to flourish.

Technical support to research organisations

Rather than simply being a passive source of funding, for a donor organisation to fulfil an active role in a partnership relationship there are implications for the degree of support that it needs to offer to the research partners, as well as the level of monitoring needed to ensure that

results are produced as agreed. Some examples already exist of organisational models developed by donors to provide this level of support and monitoring. While such a relationship can lead to tensions for researchers accustomed to the relative ‘freedom’ of conventional donor-recipient model, if handled sensitively such a partnership can improve the quality of the research undertaken and enhance the utility of the results produced. This is particularly likely if the donor has staff (or consultants) experienced in research that are able to provide technical support in addition to administrative monitoring and supervision. However, it is also critical that the donor organisation review its staffing and procedural arrangements for supporting and administering a research programme if it is to be able to provide the levels required.

Emphasis on communication and maximising utilisation

If donor organisations are to make greater use themselves, and to promote greater use by others, of the research that they fund, there needs to be greater emphasis on communicating results as well as on supporting other ways for maximising the likelihood that research results can be used. Most donors have realised this need, and have allocated funds to support the creation of mechanisms for improving the communication of findings within their own organisation, as separate entities, and to a lesser extent within the research programmes they support. Three such mechanisms were presented during the meeting.

1. A good example of a communication mechanism ‘internal’ to a donor organization is the Centre for Health Information (CHI) created within DfID’s Health and Population Division. The CHI disseminates research findings on health and population within DfID itself and to those with whom it works most closely.
2. Both USAID and DfID support ‘external’ mechanisms, that is, organisations or programmes that have the explicit mandate to communicate research results produced primarily (but not exclusively) through their own funding as widely as possible to decision-makers, donors and researchers. Such programmes include JSI (UK)’s Centre for Sexual and Reproductive Health and the University of Sussex’s ID21 (both supported by DfID), and the Population Reference Bureau (supported by USAID).
3. Providing funding to research programmes to disseminate their own findings more widely is a more recent approach. The Population Council’s FRONTIERS programme

(supported by USAID) has within it a team of communication specialists based in the US and regional offices that develop and implement national, regional and international dissemination strategies for communicating the programme's findings. DfID is now expecting all of its research programmes to include an explicit communications strategy, funded out of the programme's overall budget.

Appropriate evaluation of research activities

Historically, most donors of reproductive and sexual health research have not been particularly rigorous or systematic in evaluating the research that they fund. This is probably because research is generally of low priority for donor organizations, as well as the difficulties in defining and measuring the quality, process and outcomes of research. While the outputs of research programmes are generally monitored and assessed fairly easily (in terms of quantities of studies completed, reports produced, articles published, and through regular meetings with and reports to the donor), there seems to be mixed success between the programmes in monitoring and assessing the research quality. Peer review is used to varying extents during the development of research protocols and to a lesser extent during the writing of reports, but there seems to be little in place to assess the quality of actual data collection and analysis.

With the increased attention from donors for supporting research that has as its explicit goal the strengthening of health systems and the subsequent improvement in reproductive and/or sexual health (e.g. USAID's operations research programme), there has been an increased interest in evaluating whether this goal has been achieved. Although still difficult to do (see papers by Bertrand and Hall), the shift in focus from primarily process evaluation to more emphasis on impact evaluation has been made already by USAID, is being vigorously pursued by DfID, and is being considered by WHO. Whatever type of evaluation is used, however, it is important for continued good relations between donor and researcher that the expectations for the evaluation be clarified at the onset of the research programme itself, and that the evaluation be constructive rather than punitive.

Another factor influencing the type of evaluation being used by donor organisations is a change in the expectations of the "donor's donor", that is, the ultimate source of their funding

(i.e. the national government for DfID and USAID, and the multilateral donors for WHO). There has been a trend in most governments towards greater accountability for the way in which public funds are spent on health research, and this is now being reflected in the international sector also. There is now an expectation of some form of ‘payback’ or tangible and fairly immediate benefit to be gained from spending public funds on health research. In effect, funding for research is now seen as an investment for which the recipient needs to demonstrate some return.

This expectation is passed on from the donor organisation to the research organisation, as the donor organisation needs to demonstrate to its government paymasters that it has allocated its development funds in the most effective way possible. As a result, more systematic evaluation of measurable research outcomes, as well as greater influence over the identification of the research agenda, have become the means by which donors can hold researchers accountable and can provide justification to their own paymasters of the value of their investment in research.

There are, however, opportunity costs associated with allocating funds for evaluating research, and these can be high given the difficulties in accurately measuring the true benefits of research, and especially of basic research. Indeed, it is important for a donor organisation to be sensitive to the true costs of evaluating the benefits produced by different types of research, and not apply a blanket set of criteria to all research programmes. Clearly, the costs of evaluating research should be in proportion to the costs of the research itself.

The impact of clinical trials is probably the easiest to evaluate as such research either produces or not a clear and beneficial outcome. Operations research is more difficult to assess because of the need to measure the impact of the results on programmatic decisions and on reproductive and sexual health indicators, but ways are being developed to try to do so (as described by Bertrand). The benefits of basic research, however, can be extremely difficult to measure tangibly as there is rarely a linear and direct link between the production of this type of knowledge and its use by decision-makers for improving sexual and reproductive health programmes. Such research is commonly evaluated in terms of conventional academic criteria such as journal articles and citations, which are essentially

measures of output rather than outcome. Methods for evaluating the impact of this type of research on knowledge and understanding of fertility, sexuality and reproductive health need much more attention from donors and evaluation specialists, therefore, if the move towards impact assessment is to be applied in this case.

Balancing relationships

Although the relationship between donors and researchers is clearly (and necessarily) evolving into a closer partnership, the changing nature of the relationship means that it still requires attention on the issues described above if it is to evolve successfully. One consideration to bear in mind as this partnership evolves, however, is whether making this relationship stronger may be to the detriment of the research programmes' ability to establish and maintain partnership relationships with the programme-level decision-makers.

As described above, Aggleton and others have argued that UK and US-based research organisations, with the full support of their donors, should develop non-exploitative partnerships with service organisations and researchers in poorer countries. In an ideal world, a research organisation should strive to achieve such partnerships with both the donors and the decision-makers, but in the real world it is extremely difficult to do so and pay equal attention to each. Given the power differentials between the three groups, it is the researcher-decision maker relationship at the country level that is more likely to suffer if there are conflicts in how the research programme uses its time and resources. Donors have a role to play also, therefore, in supporting and actively encouraging researchers to establish and sustain partnerships with service and research organisations in poorer countries. This can be done in many ways, as described in PANEL 6 below.

PANEL 6

Some methodologies for evaluating the quality and impact of research

- **Case study:** appropriate for learning about good practices and for generating details of lessons learned (see Hall)
- **Systematic review:** a portfolio of projects are assessed on a common set of indicators through interviews with stakeholders and document review (see Bertrand)
- **Occasional assessment:** external team of experts reviews published material, interviews stakeholders, and makes site visits to selected countries (see Shah)
- **Bibliometric assessment:** number, type of publications and citations
- **Continuous reporting of activities and results:** monitors process of research programme
- **Peer review:** donor staff, senior research programme staff and invited experts critically appraise research documents and procedures (e.g. protocol, analysis plan, written report, informed consent / confidentiality procedures).

Summary

The identification of key actors and their roles in the arena of dissemination and utilisation has clarified the dynamics surrounding the process of knowledge transfer. The activities and priorities of decision-makers, researchers and donors are not always consistent with effective information flow. However, the addition of a fourth category of actors; namely mediators, can facilitate the process of dissemination. When mediators are advocates for a particular subgroup or cause, although messages can be very effectively transferred, the impartiality of their position can compromise research quality. Nevertheless, the deployment of mediators is very important if research is to be utilised in a cost effective way. There is a need for new models of mediator groups to be established, and for existing models to be evaluated. Groups of mediators can be independent, or they may be attached to research, policymaker or donor

organisations. Best practice guidelines are now required to bring forward the effective models.

In addition to the analysis of actors and their relationships, the meeting has also highlighted and deconstructed the activities that are necessary for effective research into practice. Using the ‘communication’, ‘utilisation’ and ‘evaluation of impact’ trilogy has focussed attention on the more successful models in each of the three areas. However, the issue of quality in research has also been seen as important, and although the evaluation of quality in research is part of the evaluation process, it is important to see the distinction between evaluating the impact of research and evaluating its quality. Traditional academic checks on the quality of basic research such as conference presentation and peer review and publication have sometimes been found to be remote for donors and policymakers, and there is a view that the process of quality assurance should be more systematic for applied research. However, systems of review are dependent on the research model or approach employed, and researchers will defend their freedom to change the approach, as the research question requires.

Apart from identifying actors and their key activities, this meeting has highlighted important issues associated with relationships between them. Firstly the nature of the relationship between researchers from developed nations and those from countries whose health problems are the subject of research is key to the generation of effective outputs, and there are also important implications for capacity strengthening. Secondly, there is now an increasing focus on reducing policymaker ‘apathy’ to research *per se*, and improving the extent to which they are interested in empirical evidence as a basis for their actions. Clear communications strategies and early involvement of policymakers in the identification of research issues are seen as partial answers to this problem, but more needs to be done to engender an evidence based culture in health policy and programmes internationally. Thirdly, there is a growing realisation that research itself is a misunderstood concept. There is a need to define more accurately the different research approaches and to use universally understood labels for these. Introduction of quality checks and also systematic reviewing of evidence can then be carried out within categories that are widely understood.

In conclusion, large-scale programmes of research into reproductive health issues and services are now well established by most of the larger donor organisations. Because these programmes form a component within the organisations' overall health and population assistance efforts, increasing attention is being paid to structuring the programmes so that the information generated through the research can inform the donor organisations' resource allocation and programme planning decision-making processes as well as those of the poorer countries for which the assistance is intended. Presentations and discussions at this meeting highlighted the many issues surrounding the implementation and evaluation of such research programmes, and it is hoped that this paper will provide a basis for further considerations by the donor and research organisations involved so that the research undertaken is relevant, influential and of the highest quality possible.