

Introduction

The Global Forum believes that a systematic approach to gender issues must be a central part of its strategy for helping correct the 10/90 gap. It is estimated that around 70% of the world's poor are women. The health of these women is often adversely affected not just by their poverty but also by the gender inequalities that continue to divide many of the world's poorest countries. In light of these important realities, the Global Forum is committed to achieving greater gender sensitivity in all its work. This will contribute to the scientific validity and representativeness of research outcomes while at the same time promoting greater progress towards social justice. This briefing document represents one aspect of this 'gender mainstreaming' in the work of the Global Forum.

The aim of the document is to provide a resource for researchers who wish to incorporate gender concerns into their work in systematic and appropriate ways. Part 1 begins with a brief account of the arguments for gender sensitivity in health research especially in the context of poverty and social exclusion. It then goes on to explore the implications of these arguments for the research process itself. Part 2 provides a range of resources for those who wish to explore these issues further. These include articles, books and practical tools, as well as a guide to relevant websites.

Ensuring greater gender sensitivity in health-related research does not mean that this is concerned only with women. Men's health too may be affected in fundamental ways by both their sex and their gender and this is reflected in the analysis which follows. It is also important to emphasize that differences in the health problems of women and men are not related only to their reproductive biology or its social implications. Though these are important, it is also clear that more general health problems may be experienced very differently by men and women and may have different implications for their lives. The main emphasis in this document will therefore not be on the reproductive health problems specific to women (or men) but on the sex and gender differences in those health problems that affect both sexes.

Developing gender-sensitive evaluation strategies

Some of the most important work on developing gender sensitive care has been done by NGOs working on reproductive health issues in developing countries. This was reflected at Forum 5, the 2001 annual meeting of the Global Forum for Health Research, in a workshop discussion of an action research project undertaken by ARROW, a Malaysia-based NGO. The study was carried out in six countries in Asia and was designed to explore the gender dimensions of access and quality of care among both governmental and non-governmental providers. Findings revealed certain commonalities in the ways in which women were constrained by their domestic circumstances and also in the obstacles they faced in accessing care. However the study also demonstrated important differences between countries and communities, highlighting the need for service-providers and researchers to be sensitive to the social and cultural specificity of gender issues in different settings.

As part of the study, an in-depth analysis was undertaken of women attending a public hospital in the Philippines. A number of indicators were used to explore the women's access problems and experiences of quality of care itself. These included waiting time, cost of travel and distance, spousal consent issues, regulatory barriers, satisfaction with services and with quality of interpersonal relationships. The study also explored the levels of knowledge and understanding of health care workers about gender issues and their implications. It revealed that many faced serious obstacles including a heavy workload and inadequate facilities, which militated against the provision of appropriate and effective care.

Discussion in the workshop centred on how to operationalize the concept of gender sensitivity in the planning, delivery and evaluation of care. A number of methodological issues were discussed including the need for appropriate indicators and outcome measures, the importance of including the voices of all stakeholders in evaluative research and the problems of challenges faced in using the findings from small-scale qualitative studies to identify and disseminate good practice.

Sex, gender and health research in a divided world: making sense of the arguments

Putting gender on the international agenda

In recent years gender issues have been highlighted by most organizations concerned with the promotion of development and the enhancement of human wellbeing. They have integrated these issues into their ongoing work, justifying this with two main arguments. First, efficiency and effectiveness require that both women and men be at the heart of development. So long as artificial constraints prevent the full participation of both sexes, societies will be unable to reach their potential for meeting the needs of their citizens. Second, equity requires that both women and men should have the same opportunity to be active citizens, participating in the development process and having equal access to its benefits. Unless this is achieved, individuals will not be able to realize their potential for health and wellbeing.

These arguments are increasingly accepted in the international health arena and policies and practices are gradually being reshaped in recognition of the need for gender sensitivity. However there is considerable confusion about how this should best be done. Though they have many health problems and health care needs in common, women and men are divided by both their biological sex and their social gender. Unless these differences are taken seriously, the delivery of medical and public health services will be severely constrained in their efficacy and their equity. Under these circumstances it is likely to be women in the poorest communities who will be worst affected.

The level of avoidable sickness and death found among poor women remains enormous. Over one third of the years of healthy life lost by women in developing countries are caused by reproductive health problems, especially those related to pregnancy and sexually transmitted diseases. The most immediate indicators of this burden are maternal mortality and morbidity rates. Around 600,000 women die each year as a result of pregnancy and childbearing and many times this number are permanently disabled. The immediate cause of these huge losses is lack of

access to effective sexual and reproductive health services especially in rural areas. However they also reflect more basic social and economic inequalities between women and men.

Women are more likely than men to have less income than they need to sustain the health of themselves and their families. This poverty can have many causes including lone parenting responsibilities, low wages, less access to state benefits and reliance on work in the informal sector. As well as material poverty, women's health may also be damaged by their low status and lack of physical and psychological security. Recent research shows that depression and related disorders are associated with female gender, poverty and low education. Poor women have been shown to be particularly vulnerable to high levels of stress because of their multiple responsibilities, the frequency of domestic violence in many communities and the inequalities in their relationships with men.

These examples reflect the fact that men and women have very different experiences of health and illness. However the reasons for this are complex and are not always well understood by medical researchers. Male and female patterns of morbidity and mortality will be shaped by biological or sex differences but at the same time they also reflect gender differences in the social expectations of women and men. The reality of their daily lives will expose women and men to different hazards and will also give them unequal access to the resources necessary to sustain health. Both biological sex and social gender therefore play an important part in shaping the health of all human beings and the next sections will explore each of these in turn. However it is also essential to recognize that these two determinants of health are interconnected in complex and profound ways that need to be carefully explored if health care is to meet the needs of both women and men.

Understanding sex and health

The biological differences between women and men are reflected in the health problems they experience. Some of these stem from male and female reproductive functioning, with women facing major hazards as a result of their capacity for pregnancy and childbearing. This gives them 'special needs' for care which have to be met if they are to realize their potential for health. Other conditions are not directly connected with sexual or reproductive functioning but are nonetheless sex specific because they affect particular organs: cancers of the prostate and cervix, for example.

There are also marked sex differences in the incidence, symptoms and prognosis of a wide range of diseases and conditions that affect both males and females. These are evident in noncommunicable diseases, such as coronary heart disease and lung cancer, and also in a wide variety of communicable diseases including tuberculosis and malaria. Recent studies suggest that these differences are due in large part to previously unrecognized genetic, hormonal and metabolic differences between men and women. More research is needed to map these differences in greater detail. However the following facts give some indication of why biological differences between the sexes need to be taken seriously in all areas of health research.

- Men typically develop heart disease ten years earlier than women.
- Women's enhanced immune systems make them more resistant than men to some kinds of infection.
- Women are around 2.7 times more likely than men to develop an auto-immune disease.
- Male-to-female infection with HIV is more than twice as efficient as female-to-male infection.

Understanding gender and health

Biological differences are not the only ones shaping variations in male and female patterns of health and illness. Women and men often lead very different lives and this too will have a major effect on their wellbeing. Differences in their living and working conditions and in the nature of their duties and their entitlement to resources will put women and men at differential risk of developing some health problems while protecting them from others.

There is now an extensive literature documenting the relationship between economic, cultural and social factors and women's mental and physical wellbeing. The gender divisions in domestic work have been highlighted as a potential risk, especially when they are combined with waged work outside the home. The 1998 UNDP report pointed out that there are no societies in which women are treated as equals with men. However it is clear that many of the most extreme gender inequalities are to be found in the world's poorest countries. If the determinants of women's health are to be properly understood and appropriate interventions developed, the impact of these gender inequalities will need to be central in the research agenda.

As the problems faced by women are increasingly recognized, the links between masculinity and wellbeing are also beginning to emerge. At first glance, maleness might seem to be straightforwardly beneficial to men's health because it offers them privileged access to a range of potentially health-promoting resources. But being a man may also require the taking of risks, which can be damaging to health. In many societies the traditional role of breadwinner continues to put men at greater risk than women of dying prematurely from occupational injuries. In order to demonstrate their masculinity they are also more likely to engage in dangerous and/or violent activities including smoking, drinking to excess, driving too fast and indulging in unsafe sex.

Again, these examples of gendered health risks may be most pronounced in the poorest societies and researchers need to take them into account if they are to provide policy-makers and practitioners with appropriate evidence. Indicators of the importance of gender as a determinant of the health of both women and men are given below:

- In most countries men are more likely than women to commit suicide but women are more likely to attempt it.
- Both community-based studies and research on treatment-seekers indicate that women are two to three times more likely than men to be affected by Common Mental Disorders (CMD) such as depression or anxiety.
- Men are more likely than women to die of injuries but women are more likely to die of injuries sustained at home.
- The large differences between male and female smoking rates are beginning to narrow as young women are taking up the habit more frequently than young men.

Sex, gender and health care

As well as being a major determinant of health, gender also influences the access of individuals to health care. This operates through a number of different routes. In many households there is evidence of gender bias in the allocation of resources. Females of all ages may be assigned a lower status and will have less entitlement to food and health care. This bias will be especially damaging in poor communities where there is little state provision and care has to be bought with cash. Alongside the cultural and material obstacles to care, individuals themselves may feel unable to seek the help they need. In the case of women, this may reflect their socialization into a culture of sacrifice, which means that they see

themselves as being of little value. In the case of men, access to health care may be limited by the desire to appear 'strong'. In order to appear masculine they cannot admit weakness and this may prevent them from seeking necessary help.

There is also evidence that once they have accessed a service, women and men may receive treatment of differing quality. Many women have spoken of the lack of respect they experience from workers in reproductive health care and this seems to be especially severe among poor women. Research in the developed countries has also indicated that women may be offered care that is less effective than that received by men with the same condition. More research is therefore needed to explore both the gendered obstacles to care and the quality of the services received by women and men in different settings.

Recent studies relating to the HIV/AIDS epidemic has highlighted the continuing importance of these issues. Evidence about poor women in high income countries like the US as well as those in sub-Saharan Africa suggests that they have a shorter life expectancy than their male counterparts. This reflects a range of barriers they face in accessing care as well as inequalities in the treatment itself. Studies in a number of countries have shown that women are much less likely than men to be given anti-retroviral drugs for instance, even when their need is at least as great.

How can researchers be sex and gender sensitive?

Sex and gender are major determinants of health in both women and men. They are closely linked with other variables such as age, race and socio-economic status in shaping biological vulnerability, exposure to health risks, experiences of disease and disability and access to medical care and public health services. Researchers who ignore these differences run the risk of doing bad science. Failure to incorporate sex and gender in research designs can result in failures of both effectiveness and efficiency. Practice based on incomplete or misleading evidence is likely to lead to avoidable mortality, morbidity and disability as well as wasted expenditure of scarce resources. It will also perpetuate or exacerbate existing gender inequalities. Lost opportunities of this kind are obviously unacceptable especially in the context of the existing 10/90 problem.

It is therefore essential that all those involved in the commissioning and funding of research take issues of sex and gender seriously. Whether they

are private companies, government bodies, research councils or charities, an appropriate recognition of gender issues should be one of the criteria used for evaluating both the relevance and the scientific quality of proposals. Researchers themselves need to be aware of gender concerns at all stages of their work from the initial design to the dissemination process. And policy-makers need to look very carefully at the sex and gender implications of all research findings before deploying them in the development of services.

Strategies for ensuring that research is gender sensitive will vary depending on the type of study being undertaken. However the overall objective must be to ensure that both sex and gender are incorporated as key variables in all research designs unless there are clear reasons for assuming that they are not relevant to the problem under investigation. Thus the population of subjects needs to include sufficient numbers of women and men so that any sex or gender differences can be identified in the analysis. Any differences that do emerge then need to be clearly presented in the findings and their implications discussed. In the context of clinical trials this will need to include an assessment of the significance of any differences for the future use of the treatment being evaluated with male and female patients.

Sex- and gender-sensitive studies of this kind will not be easy to achieve without a coherent set of policies to build capacity among researchers. Such policies are now beginning to emerge in a few of the developed countries but if the 10/90 problem is to be tackled in the most effective and equitable way, they will need to be spread more widely. More conceptual work is needed to disentangle the links between biological sex and social gender and their relationship with wider determinants of health. Guidelines and educational tools also need to be developed to encourage greater awareness of these issues among health researchers.

More research will be needed across the biological/social divide. In order to understand the full range of influences on human health, more collaborative studies will be needed with social scientists, psychologists and biomedical researchers working together. In many areas of health care the best knowledge base is one which is produced through a combination of quantitative and qualitative methods. The value of integrated approaches of this kind has been clearly demonstrated in recent years in the fields of sexual and reproductive health and mental health, where new techniques have been developed to explore those

intimate concerns of both women and men which are vital to the development of sensitive and appropriate policy.

Finally it is essential that strategies be devised for ensuring the more active participation of women in health research as scientists and as advocates. In most countries there is a marked absence of women researchers and this is especially true in those countries where research capacity is least developed. Policies designed to enhance these capacities should therefore include strategies for removing the obstacles that currently limit the numbers of women able to enter medical research and to proceed through the career structure on equal terms with men.

At the same time it is essential that a broader range of women are enabled to become actively involved in the determination of research priorities and in the design and conduct of individual studies. One way of achieving this is through formal dialogues between researchers and representatives from local communities and women's organizations. Good practice in the conduct of such processes is already being developed in the arena of reproductive health research in particular.

Conclusion

It is important that all stakeholders in health and medical research take the issues of sex and gender seriously in all aspects of their work. As we have seen, failure to do so may result in findings which increase both inefficiency and inequity in the allocation of scarce resources. However the best methods for the integration of gender concerns are neither simple nor self-evident. The remainder of this document therefore provides a number of case studies and other resources to help in the process of mainstreaming gender into all aspects of the work of the Global Forum and its partners.

Sex, gender and tropical infectious diseases

Until recently, researchers had paid little attention to either sex or gender differences in the field of tropical diseases. However this gap is beginning to be filled. It is now clear that biological factors influence male and female susceptibility to these diseases. Gender roles and relations shape both the degree of exposure to the relevant vectors and also access to the resources needed to protect individuals from the consequences of infection.

Biological differences mean that women and men may experience the same disease in different ways. In the case of malaria for instance, men may be slightly more susceptible to the disease than women. However women's biological immunity is compromised during pregnancy making them more likely to become infected and worsening the effects. Malaria is an important cause of maternal mortality, spontaneous abortion and stillbirths and contributes to the development of chronic anaemia among pregnant women. These findings highlight the importance of sex differences in the 'natural history' of tropical diseases but much more research is needed to identify their extent and their implications.

Gender differences in living and working conditions also lead to variations in male and female exposure to infection from tropical diseases. Women who are in seclusion are less likely to be exposed to mosquitoes and their more extensive clothing may also have protective effects. However their domestic labours may increase exposure to other vectors. A recent study in Nigeria showed that the prevalence of schistosomiasis in girls is highest at the age of 15 when they are maximally involved in water-related domestic work such as agricultural tasks and clothes washing. While the rate drops in males after late adolescence, that of females remains stable, reflecting the fact that men grow out of playing around water while women's domestic duties may require continued exposure.

Diagnosis of tropical diseases and the effectiveness of their treatment may also be affected by gender. Women are often constrained in their use of appropriate health services by lack of transport or inability to pay the fees. These problems may be compounded by the social interpretation of particular diseases. In the case of disfiguring problems such as leprosy, for instance, women may be especially reluctant to expose themselves to health care providers, fearing subsequent stigmatization. Similarly, some cultures have a double standard, equating diseases such as schistosomiasis with virility in men but promiscuity in women. These gender differences in illness behaviour and in societal responses to female and male patients mean that the progress of tropical diseases can sometimes be accelerated in women, especially those with the least resources and lowest levels of support.

Resources for developing gender sensitivity in health research

This guide offers a brief introduction to some of the resources available to those wishing to enhance their understanding of gender issues in their own research and also in that of others. Some resources are included on reproductive health and what are traditionally seen as women's problems. But following the framework used in the first section, the list concentrates mainly on resources relating to the impact of sex and gender on the health problems experienced by both women and men.

1. Articles and reports

The first section includes a number of key articles chosen to reflect the current debate about the impact of sex and gender on patterns of health and illness. Much of this debate has taken place with reference to the situation in the developed countries but these articles have been specially selected for their relevance to more global concerns. They have also been chosen from a variety of journals to demonstrate the importance of a wide range of disciplinary perspectives for understanding sex, gender and health.

The articles selected should not be taken as the last word on a particular topic. Rather they demonstrate the range and focus of current debates. They explore general issues relating to the relationship between gender, health and poverty as well as the sex and gender determinants of specific health problems. They also outline the links between gender and health care in a range of settings.

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Rivers, K. and Aggleton, P. *Men and the HIV epidemic*. New York: UNDP 1999.

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World Health Organization. *Women of South East Asia. A health profile*. New Delhi: WHO South-East Asia Regional Office 2000.

2. Websites

World Health Organization, Department of Women's Health
<http://www.who.int/frh-whd/>

Family Health International
<http://www.fhi.org>

PATH (Program for Appropriate Technology in Health)
<http://www.path.org>

Siyanda: mainstreaming gender equality
<http://www.siyanda.org>

University of Sussex, Institute of Development Studies
<http://www.ids.ac.uk/ids/>

World Bank publications on gender
<http://www.worldbank.org/html/extdr/hnp/health/newagenda/women.htm>

Women, health and development programme at PAHO
<http://www.paho.org/english/hdp/hdw/gensalud.htm>

Reproductive Health Gateway
<http://www.rhgateway.org>

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