

Social determinants of sexual and reproductive health

Informing future research and
programme implementation



World Health
Organization



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Abbreviations and acronyms

AIDS	acquired immunodeficiency syndrome	IUD	intrauterine device
BPL	below the poverty line	MDGs	United Nations Millennium Development Goals
CBD	community-based distribution	MEDS	Mission for Essential Drugs and Services (Kenya)
CHAG	Christian Health Association of Ghana	MMR	maternal mortality ratio
CHPS	community-based health planning and services	MVA	manual vacuum aspiration
CHC	community health compound	NGO	nongovernmental organization
CHN	community health nurse	OECD	Organisation for European-Cooperation and Development
CHO	community health officer	OPEC	Organization of Petroleum-Exporting Countries
CSDH	Commission on Social Determinants of Health	PPH	postpartum haemorrhage
CYP	couple-years of protection	PRSP	poverty reduction strategy paper
DALY	disability-adjusted life year	QALY	quality-adjusted life year
DHMT	district health management team	RHR	Department of Reproductive Health and Research
DHS	Demographic and Health Surveys	RTI	reproductive tract infection
DMPA	depot medroxyprogesterone acetate	SRH	sexual and reproductive health
FBO	faith-based organization	STD	sexually transmitted disease
GHI	global health initiatives	STI	sexually transmitted infection
HIV	human immunodeficiency virus	SWAp	sector-wide approach
HMO	health management organization	TFR	total fertility rate
HPV	Human papillomavirus	UNFPA	United Nations Population Fund
ICPD	International Conference on Population and Development (1994)	UNIFEM	United Nations Development Fund for Women
IMF	International Monetary Fund	UN-HABITAT	United Nations Human Settlements Programme
IOM	International Organization for Migration	USAID	United States Agency for International Development
INSS	National Social Security Institute (Nicaragua)	YLL	years of life lost
IPV	sexual intimate partner violence		

1

A view of sexual and reproductive health through the equity lens

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While the last two decades have seen improvements in access to and utilization of sexual and reproductive health (SRH) services, progress in many countries has been slow and – after decades of investments – disappointing. Social activists and health analysts have highlighted the potential role that persistent inequities in health play in hindering progress towards achieving international and national development goals. Health inequity is defined as "inequalities in health deemed to be unfair or to stem from some form of injustice. The dimensions of being avoidable or unnecessary have often been added to this concept."¹

A review of progress towards reducing inequities in coverage of key maternal, newborn, and child health interventions concluded that most countries examined:

"have made gradual progress in reducing the coverage gap for key interventions since 1990. The coverage gaps, however, are still very wide and the pace of decline needs to be more than doubled to make significant progress in the years between now [2008] and 2015 to reach levels of coverage of these and other interventions needed for MDG 4 and 5. In general, in-country patterns of inequality are persistent and change only gradually if at all, which has implications for the targeting of interventions."²

Likewise, analysis of differentials in uptake of modern contraception concluded that wealthy individuals are adopting family planning practices faster than the poor³ – widening the rich–poor gap in service utilization and corresponding advantages of reduced fertility. The existence of these rich–poor gaps in health status and utilization of health services is of interest to public health programmes, political leaders, and civil society because these disparities are markers of injustice in society as well as indicators of the capacity of the public health

system to meet the needs of the most vulnerable individuals in society.

The relationship between poverty and poor reproductive health is well established. Greene and Merrick conducted a thorough review of the social, financial and health consequences of key reproductive health indicators including maternal survival, early childbearing, and unintended pregnancy. The report concluded that large family size was associated with increased risk of maternal mortality and less investment in children's education. Unwanted pregnancy was positively correlated with health risks of unsafe abortion. Short birth intervals were found to negatively influence child survival, and early pregnancy was associated with lifelong risk of morbidities.⁴ Researchers have also documented that large families are more likely to become poor and less likely to recover from poverty than smaller family households.⁵

On a global scale, women living in low- and middle-income countries experience higher levels of morbidity and mortality attributed to sexual and reproductive health than do women living in wealthier countries, as the following estimates show.

- Many developing countries continue to struggle with high rates of population growth. While fertility rates in less-developed countries are declining, they remain almost double (at 2.9 versus 1.6 births per woman) the rates that are experienced by women in more-developed countries. Excluding China, the average number of births per woman rises to 3.4 in developing countries and more than five births among women living in the least-developed countries.⁶
- The average number of induced abortions a woman experiences in her lifetime is approximately the same regardless of whether she lives in a developed or developing country.⁷ The likelihood of her dying from an unsafe

abortion, however, is almost exclusively dependent on where she lives, with almost all mortality attributable to unsafe abortion occurring in developing countries.⁸ The risk of dying from an unsafe abortion is exceptionally high in sub-Saharan Africa. A woman living in sub-Saharan Africa is 15 times more likely to die from an unsafe abortion than is a woman living in Latin America, and 75 times more likely than is a woman living in a developed country. Young women in developing countries are most at risk, with almost half of all mortality attributable to unsafe abortion occurring among women less than 25 years of age.⁹

- The *Revised Global Burden of Disease (GBD) 2002 Estimates* indicate that over 90% of the global disability-adjusted life years (DALY) caused by sexually transmitted infections (STIs), excluding HIV, are experienced in low- and middle-income countries and over 50% of the global burden is suffered by women in low-income countries.¹⁰
- Researchers estimate that 8%–12% of couples worldwide will experience infertility^a at some point during their reproductive years.¹¹ Yet, a considerably higher level of infertility was found among couples living in developing countries. Based on data from Demographic and Health Surveys (DHS), investigators estimated that one in four ever-married women of reproductive age will experience infertility^b at some point in her lifetime.¹² Infection from unsafe abortion and prolonged exposure to STI are commonly known causes of infertility.¹¹
- Human papillomavirus (HPV) transmitted through sexual contact is estimated to cause 100% of cases of cervical cancer, 90% of anal cancer, and 40% of cancers of the external genitalia. Of the total estimated HPV-attributable cancers, 94% affect women and

80% are in developing countries. In Latin America, the Caribbean, and Eastern Europe, cervical cancer contributes more to years of life lost (YLL) than tuberculosis, maternal conditions, or acquired immunodeficiency syndrome (AIDS).¹³

- Advances in early detection and treatment have significantly improved a woman's chance of surviving cervical cancer. A review, however, found large differences in survival rates for cervical cancer among countries. Women in low-income countries, such as the Gambia, Uganda, and Zimbabwe, had lower 5-year survival rates (25%) when compared to women from higher-income countries such as China, Hong Kong Special Administrative Region (Hong Kong SAR), the Republic of Korea, and Singapore (more than 65% 5-year survival rate).¹⁴

These global averages mask important differences among and within countries, and (while they may provide essential evidence for global advocacy efforts) they do little to assist countries in understanding the causes of inequity in health status and designing programmes to reduce it. Therefore, it is essential that analyses go beyond global averages, to identify not only population groups which are at increased risk of adverse health outcomes, but also social structures which inhibit access to and use of safe and effective health services.

A primary concern of public health programmes is the existence of disparities in access to and utilization of health services and information. Data from population-based surveys document that women from the poorest households are less likely to use preventive and curative sexual and reproductive health services and products than women from the wealthiest households including

^a Calculations exclude China.

^b Infertility (primary and secondary) is defined as the percentage of women who have been married for the past five years, who have ever had sexual intercourse, who have not used contraception during the past five years, and who have not had any births; or women with no births in the past five years but who have had a birth at some time, among women who have been married for the past five years and did not use contraception during that period.

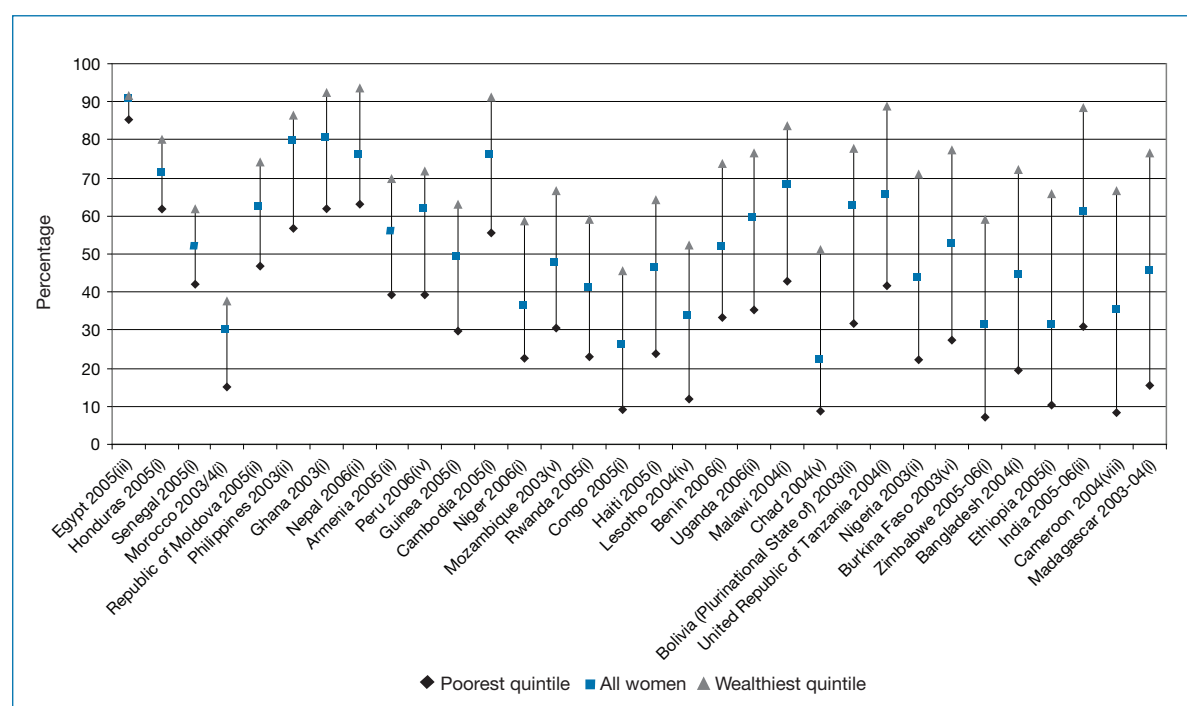
use of modern contraceptives,^{2,15} antenatal care,^{2,15} skilled attendance at birth,^{2,15} and seek treatment for self-reported symptoms of sexually transmitted infection.¹⁵ Figure 1, for example, presents data from 32 countries which show that women from poor households are less likely to be exposed to family planning messages than women from wealthier households.

Recently, attention has focused on the relationship between poverty and health indicators. Less consideration, however, is paid to other conditions of disadvantage, and rarely do policy-makers examine the relationship between multiple conditions of vulnerability and sexual and reproductive health outcomes. For example, adolescents living in poverty are particularly

vulnerable and evidence from developing countries suggests that an adolescent from a poor household is from 1.7 to 4 times more likely to give birth than a young woman from the wealthiest household.^{4,16,17} (See Figure 2.)

Country data consistently document significant disparities in utilization of SRH services and health outcomes defined by wealth, ethnicity, residence, education, age, and other social factors. These attributes, however, are more often used by researchers and programme managers as explanatory variables rather than markers of programme performance themselves.¹⁸ The question arises – are inequities in health and health service utilization inevitable?

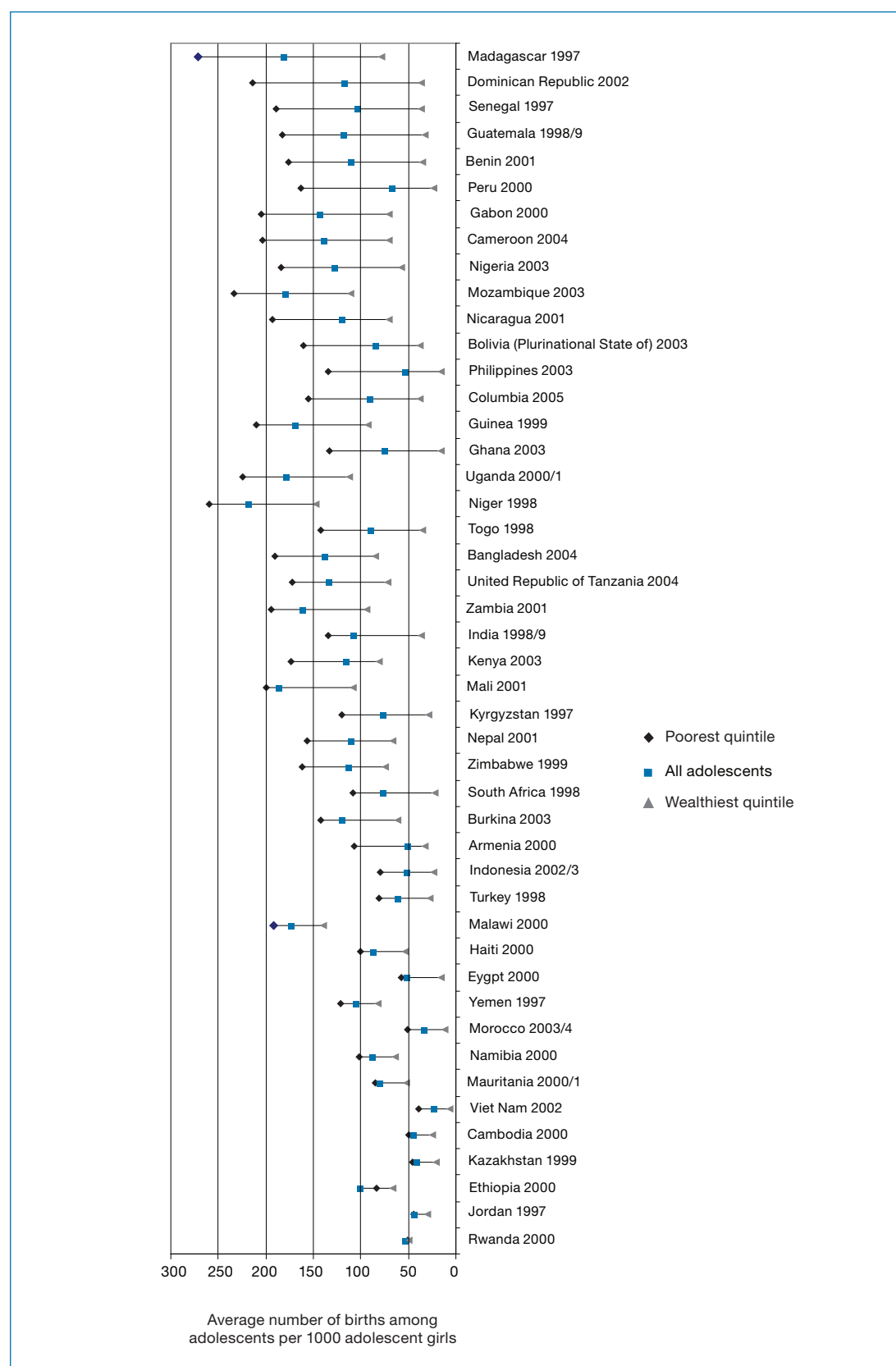
Figure 1. Percentage of sexually active women recently exposed^c to family planning messages in the media, according to wealth quintile^c.



Source: DHS country reports.

^c Exposure to family planning messages is based on percentage of women reporting hearing messages from (i) at least one of 3 media sources in the past few months, (ii) at least one of 5 sources in the past few months, (iii) at least one of 6 sources in the past 6 months, (iv) at least one of 3 media sources in the past 2 months, (v) at least one of 3 media sources in the past 6 months, (vi) at least one of 2 media sources in the past few months, (vii) at least one of 7 sources in the past 6 months, and (viii) at least one of 4 sources in the past 6 months.

Figure 2. Adolescent fertility rate by wealth quintile.

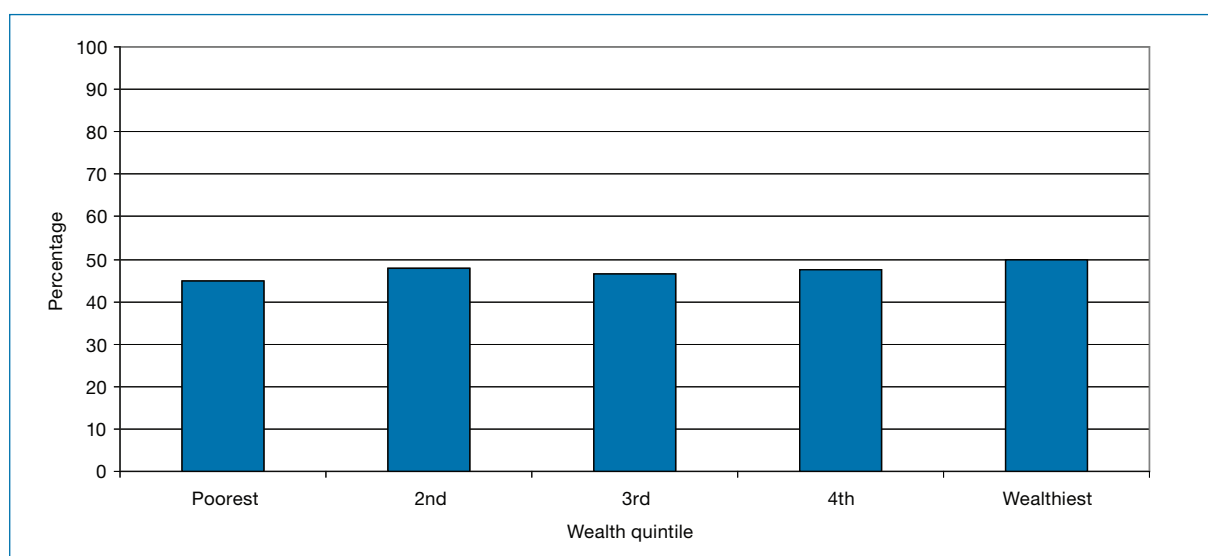


Source: Calculations by Gwatkins et al.¹⁵

Recent efforts to identify and address the social determinants of health challenge the notion that disparities in service utilization and health outcomes are unavoidable and insurmountable. Some countries have made progress in reducing the gap in coverage of key health interventions even while expanding access to the population in general.² The potential of public health programmes to achieve equity in utilization is evident in the example of Bangladesh (Figure 3). If public-health programmes endeavour to provide equitable access to services, then decreasing disparities in service utilization represent an important indicator of programme achievement.

By examining the disparities in health outcomes and the determinants that create these gaps, public health programmes can better organize services to reach the most disadvantaged, advocate for social development to have a positive impact on health, and play a key role in promoting progress towards a more equitable society. In recognition of observed disparities in health and the importance of social context in predicting health outcomes, the World Health Organization established the Commission on Social Determinants of Health (CSDH).

Figure 3. Percentage of currently married women using modern contraception by wealth quintile in Bangladesh 2004.



Source: DHS country report.

Since 2005, CSDH has provided information critical for understanding the role social status and context play in determining health. As part of this effort, the Department of Reproductive Health and Research (RHR) contributes to the Commission's work by examining inequities in sexual and reproductive health. The chapters included in this volume were commissioned to describe the evidence of a relationship between the social determinants of interest and sexual and reproductive health, as well

as to describe promising programmes which seek specifically to reduce observed inequities in health and/or address social structures which inhibit access to and use of sexual and reproductive health services.

The chapters included in this volume are not intended to address the entire range of social determinants associated with sexual and reproductive health. The topics addressed here

were selected by a interdepartmental working group and were identified based on their potential role in influencing sexual and reproductive health, the existence of a substantial evidence base describing this relationship, and their relevance to public health programmes. Nevertheless, a number of important social determinants are not addressed within the context of this volume, such as the influence of legal and policy frameworks and gender norms. Therefore, these chapters are intended to be a starting point for policy-makers, programme managers, and researchers in the process of examining equity issues and developing plans for addressing the social determinants of health.

In the first section entitled “Within the health system”, three chapters examine the relationship between the organization of the health system and sexual and reproductive health. In the first chapter, Tavrow describes how aspects of quality of care – more specifically, issues of provider attitudes and practices – influence the utilization of services. Unique among many other health services and conditions, sexual and reproductive health services often evoke judgemental and moralistic attitudes among providers – as well as among members of communities in which services are situated.

Tavrow describes the implications of the client–provider power dynamic, in which certain clients are likely to receive less attention in service provision. Such clients include those whose behaviours are judged to be immoral (e.g. engaging in sex outside of marriage or at an early age); those judged to be undeserving of services or information (e.g. the uneducated or those from stigmatized population groups); and services or information deemed to be unworthy of the provider’s time or contrary to the provider’s beliefs (e.g. counselling or provision of induced abortion services).

In the next chapter, Montagu and Graff highlight the importance of central decision-making

regarding *what* services are available (e.g. treatment/prevention; long-term/temporary contraceptives), *where* those services are provided (urban/rural, inpatient/outpatient), and *who* is providing them (formal clinical staff/informal healers, public/private), in redressing or exacerbating inequities in access to and utilization of services. The authors discuss the fragility of political and financial support for sexual and reproductive health services and products – an area of health which is highly sensitive and susceptible to fluctuations in political pressure and public opinion.

Awoonor-Williams et al. reinforce many of the themes discussed by Montagu and Graff and Tavrow, by means of a case-study of Ghana’s experience with reorienting the health system to the community level. The authors describe the challenges and potential benefits of creating and scaling-up a community-driven, community-based service-delivery approach. The influence of international development policy is demonstrated in the comparison of the Ghana experience with that of a similar programme implemented in Bangladesh more than two decades ago. The case-study illustrates the challenges to scaling-up structural interventions which address the social and contextual constraints to service utilization in the current international development environment.

The second section, “Beyond the clinic walls”, examines the relationship between social conditions of vulnerability (e.g. poverty, migration, and social exclusion), institutions (e.g. schools), behaviours (e.g. sexual violence or coercion) and sexual and reproductive health. The first chapter provides an overview of current understanding of the relationship between poverty and sexual and reproductive health. Channon et al. highlight the multidimensional, multidirectional association between measures of poverty and sexual health. This chapter addresses macro-level influences,

including national investments in human development, as well as factors at the individual and household level that influence utilization of sexual and reproductive health services.

This first chapter emphasizes the difficulty in describing the nature and direction of the influence that poverty exerts on sexual and reproductive health. The difficulty of this task is illustrated in the discussion of the interplay between poverty, restrictive gender norms, and contraception. The authors suggest that while poverty is strongly correlated with lower rate of contraceptive use, this relationship is mitigated by gender norms which prevent women of varying socioeconomic status from autonomous decision-making and control over and/or access to financial resources.

In the following chapter, Smith and Qian explore an issue of increasing concern for many countries – migration. Population movement – domestic and international – has gained increasing attention in the past few years, and estimates suggest that young women constitute an increasing proportion of the migrating labour force. The authors discuss the causes and consequences of migration as they relate to sexual and reproductive health. Although the evidence base is limited, the authors provide compelling evidence that sexual and reproductive health programmes are failing to reach this transient, displaced population and describe the legal, social, and cultural barriers which inhibit effective use of health services.

Recent reviews of adolescent programmes identify school-based sexual and reproductive health education as a proven approach for improving adolescent sexual and reproductive health. Alternatively, the chapter by Lloyd explores the relationship between *school participation* and sexual and reproductive health. The author argues that cognitive and social development offered through participation in educational institutions positively impacts the sexual behaviour of girls.

Therefore, efforts to ensure gender-balanced, high-quality education are likely to have a positive impact on adolescent sexual and reproductive health. The chapter also offers a note of caution, and highlights a number of challenges to the implementation of school-based sexual and reproductive health programmes in settings where the education system is particularly weak.

The last chapter, by Bott, synthesizes recent evidence on the consequences and determinants of sexual violence and coercion. Growing evidence suggests that sexual violence and coercion affects men and women of varying age, educational attainment, and economic status. The author provides an overview of the mechanisms through which sexual violence is perpetuated in societies.

Taken together, these chapters provide strong evidence that factors beyond the control of the individual influence sexual and reproductive health. These factors are believed to contribute to inequities in the utilization of health services and, ultimately, observable differences in sexual and reproductive health. Programmes which fail to consider these external influences are unlikely to improve the sexual and reproductive health particularly among vulnerable populations.

The evidence is consistent that certain population groups – such as the poor, women with less education, those living in rural or remote areas, and adolescents; are underserved by current services. Evidence is mounting that the needs of other population groups – such as migrants, ethnic minorities, and individuals with disabilities; are also not being met. A first step in redressing inequities is to define these vulnerable population groups and identify key social determinants which reduce and exacerbate inequities at the local level.

Social determinants work at different levels to influence exposure to the risks of unintended pregnancy or sexually transmitted infection,

care-seeking behaviour, and access to and use of preventive services, care and treatment. Each chapter provides a brief review of programmatic approaches to addressing social determinants of health. Interventions of this type are usually classified as addressing issues of *availability* (the supply of health services), *acceptability* (interventions which seek to alter social norms), or *accessibility* (those which manipulate resources or power).²⁰ A review of these chapters identifies striking similarities among the programmatic approaches designed to promote sexual and reproductive health.

Several authors identify programmes which aim to create systems which take services to where potential clients live, work, or gather. Such programmes are intended to increase the availability of services by reducing the financial and social costs of seeking services. Mass-media campaigns, social marketing, and community education programmes are identified as promising approaches to increasing the acceptability of sexual and reproductive health, by raising awareness of the impact of harmful traditional practices and/or the benefits of sexual and reproductive health services.

Finally, several of the interventions mentioned in this volume seek to increase the accessibility of sexual health through the manipulation of power. Interventions of this type include increasing the quality of and access to education for girls, organizing communities to advocate for high-quality health services which respond to their needs, and promoting voucher systems which allow individuals greater choice in seeking care.

The powerful influence of social context and position upon care-seeking and utilization behaviour is documented in these chapters. The evidence of the impact of programmes upon reducing the inequities created by social forces is less compelling. Most of the programmes described in these chapters were implemented and evaluated at the pilot stage. A notable exception is the Community Health Planning and Services Programme currently being scaled up in Ghana. Additional research – as well as a robust analysis of the impact of structural interventions on health outcomes – is needed to understand the complex interaction of the social determinants of sexual and reproductive health.

This volume contributes to a growing consensus advocating for the inclusion of equity as a key concept in measuring programme success. At the national and international levels, work is currently under way to define and develop standards of “equity”. Advocates and practitioners of sexual and reproductive health must engage in these discussions to ensure that sexual and reproductive health and its determinants are considered in the development of conceptual models, development of interventions, and measurement of achievement.

Additional research is needed to better understand the influence of social determinants on individual behaviour and how health programmes can mitigate this relationship. Disappointingly, few programme evaluations consider issues of equity in their analysis. Additional resources are required to develop tools and methods for measuring the impact of innovative approaches on improving the sexual and reproductive health of the vulnerable.

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Section 1

Within the health system



2

Promote or discourage: how providers can influence service use

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1. Introduction

The International Conference on Population and Development (ICPD), held in Cairo in 1994, was noteworthy for achieving a global consensus that all people – regardless of age, parity, marital status, ethnicity, or sexual orientation – are entitled to reproductive health and rights. Reproductive rights were defined as “the basic right of all couples and individuals to decide freely and responsibly the number, spacing and timing of their children and to have the information and means to do so, and the right to attain the highest standard of sexual and reproductive rights” (emphasis added).¹ As human-services workers on the front line in clinics and hospitals, health providers possess the very information and means that can enable people to realize these rights. Indeed, within virtually any regulatory context, providers with adequate knowledge, skills, equipment, and supplies are uniquely situated either to enhance reproductive health and rights or to subvert them.

This chapter will:

- discuss why health-provider attitudes and practices can be important determinants of sexual and reproductive health;
- review evidence of provider attitudes and practices, mainly from developing countries where unmet need for contraception, safe abortion, and sexually transmitted infections (STI) treatment is highest;
- assess how these attitudes and practices affect access to and use of sexual and reproductive health services, particularly by adolescents and women of low socioeconomic status;
- seek explanations for the perpetuation of practices that inhibit health and rights, and describe promising strategies for addressing them; and
- suggest where further research would be valuable and provide recommendations for actions to improve provider practices.

2. The context of provider – client interactions

The quality of any health system is determined by a complex array of interconnecting factors: infrastructure, guidelines and standards, supplies and drugs, record-keeping, and personnel. However, it is widely recognized that health providers play a particularly critical role in the quality of SRH services and clients’ access to them.²⁻⁴ The term ‘providers’ refers to government doctors and nurses, private practitioners, community-based distributors, midwives and nurse auxiliaries, pharmacists, and the assistants to all these. Providers have been characterized as service-delivery ‘gatekeepers’ or ‘street-level bureaucrats’, because generally they alone decide who will be permitted to obtain information or medical attention, and under what conditions.⁵ As professionals who deal directly with the public, providers have considerable discretionary power in determining how policies and guidelines are implemented. Sometimes this power can translate into routines or procedures that are convenient or rational to providers, but pose serious barriers to clients.

One reason why providers of SRH services exercise so much power is that their clients often feel embarrassed, anxious, or socially vulnerable. Just to reach a facility offering contraceptives, abortion care, or STI treatment, people frequently have had to overcome a number of psychosocial and financial hurdles. Many people harbour deep-seated fears about the potential side-effects of contraception or abortion. They may also have heard rumours about or actual accounts of inconsiderate or humiliating treatment by providers at the facility. Sexual and reproductive health services often require people to disrobe and have their genitalia or vagina scrutinized, which can cause acute shame if privacy is not ensured or if the provider is of the opposite sex.⁶ Others may be seeking services secretly in the face of spousal, mother-in-law, or parental

disapproval or opposition: if they are found out, they could suffer serious consequences. It may have taken considerable courage for people to surmount these fears and 'risk' obtaining services.

Hence, while a potential client may be exhibiting resilience and courage by seeking SRH services, she or he may still experience considerable apprehension which could be exacerbated or ameliorated by providers. If providers do not respect clients' privacy or confidentiality, clients could be ridiculed, beaten, or even ostracized. Those who are more socially marginalized, such as the unmarried or poor or those with disabilities, are even more susceptible to whatever might transpire at a clinic.⁷⁻¹⁰ They often arrive at a facility with greater trepidation because they do not know what to expect, or worry that they do not have a right to services. Their reduced social standing makes them more easily humiliated. Many have struggled to secure enough money for transport or consultation fees. For those who lack resources to travel elsewhere, providers' practices towards them could discourage or delay them from obtaining services in the future, which could have repercussions for their own and their partners' health and well-being.

Providers also have a major influence on the public's sexual and reproductive health because many people consider them to be the best source of information on these issues.^{11,12} Not only are providers thought to be more knowledgeable by virtue of their training, but they are also believed to be more likely to keep matters confidential. People recognize that peers and sexual partners, even if they have had some sexuality education, can give inaccurate information or divulge private matters to others. When providers are friendly and welcoming, young people find it easier to discuss sensitive topics with them than with their parents or teachers – who might penalize them for being sexually active. For low-literate people, or those with limited access to the media or the Internet, health providers may be their only source of scientific information.

If the information providers give is biased or inaccurate, clients are not in a position to judge or question that information.

In view of providers' power and influence on clients, policy-makers and programme managers have been interested in making provider behaviour more 'client-oriented', with more consideration given to clients' rights to safe, respectful, and comprehensive SRH services.^{13,14} They recognize that altering demand-side variables which influence sexual and reproductive health, such as cultural traditions and socioeconomic status, will occur slowly and are not within their direct control. By contrast, improving supply-side conditions such as providers' behaviours, can sometimes be accomplished relatively easily and at low cost. However, single-faceted solutions such as issuing new guidelines, training providers, academic detailing, or providing job aids have rarely been effective.¹⁵⁻¹⁷ Like their clients, providers are strongly affected by local traditions and beliefs. They are also likely to resist reforms that might increase their workload or lower their status by reducing the social distance between themselves and their clientele. Several promising multifaceted strategies to improve providers' performance will be discussed later in the chapter.

3. Provider behaviours affecting access

Over the past two decades, numerous studies have documented providers' attitudes and practices towards clients who were seeking to regulate their fertility or to obtain STI treatment. Most of these studies have focused on delineating medical and administrative barriers imposed by providers in developing countries, as well as providers' biases and judgemental attitudes.¹⁸ Quantitative studies have usually adopted the Bruce quality of care framework as a way to measure provider practices and facility readiness.¹⁹⁻²¹

The Bruce framework has six “fundamental elements”: choice of method, information given, technical competence, interpersonal relations, continuity of care, and appropriate constellation of services.² However, as several analysts have noted, the framework is not empirically grounded and may not reflect what is most important to clients.^{3,22} More recently, Hyman and Kumar have proposed a similar framework for high-quality abortion care that involves tailoring care to each woman’s needs, providing accurate and appropriate information, using recommended medical technologies, offering post-abortion contraceptives and other health services, and ensuring privacy and respect.²³ Studies which have specifically sought the clients’ perspective indicate that clients are most interested in obtaining the method or procedure they desire, being treated considerately and given encouragement, having their questions answered, and not waiting too long or paying much.^{24–26}

Some important questions about the role of provider attitudes and practices still have not been adequately researched. To date, reviewers have found no empirical evidence concerning the impact of provider behaviours on clients’ overall achievement of their sexual and reproductive goals.^{27–29} With only a few exceptions,^{30,31} researchers also have not identified and quantified exemplary practices which encourage and facilitate clients to achieve their desired family size. In addition, no one has yet tried to determine the impact of provider practices on the incidence and prevalence of STIs/HIV.

Several analysts have sought to estimate the impact of the quality of family planning services on contraceptive use. A 15-country study estimated that clinic-related factors accounted for 7%–27% of client discontinuation of contraception after one year, but the authors were unable to estimate how many people were discouraged from initiating use.³² In Peru, researchers calculated that contraceptive prevalence would increase by

16%–23% if all women were given high-quality care.¹⁹ However, it is not known how many unintended pregnancies or abortions might have been averted if family planning services were more user-friendly.³³ To date, only one study has specifically sought to estimate whether making post-abortion contraception easily available could affect unintended pregnancies. This study, from Zimbabwe, found that greater access to contraception could halve the number of repeat abortions after twelve months.³⁴

This section will review the existing literature on client–provider interactions from the standpoint of the client. We will examine how some provider behaviours can impede clients or potential clients from achieving their reproductive goals: by *denying* them outright the services they desire, by *discouraging* and *delaying* them from obtaining services, and by *misinforming* them about services or methods. The approach will be to draw on qualitative studies to appreciate how the clinic encounter is experienced by clients, and on quantitative studies to estimate the magnitude of the impact.

3.1 Denial of services

Denying clients the services they desire – such as information, procedures, medications, or contraceptives – is clearly the most serious barrier to reproductive rights. Shelton et al. have identified six types of “medical barriers” that can lead providers to deny family planning services: outdated contraindications, eligibility restrictions, process hurdles, limits on who can provide services, provider bias, and regulation. Medical barriers are defined as “practices, derived at least partly from a medical rationale, that result in a scientifically unjustifiable impediment to, or denial of, contraception”.³⁵ Administrative barriers, such as providers’ refusal to offer services on certain days or to demand unauthorized fees for services, are difficult to quantify because providers generally

do not engage in these practices when they are being observed, and records of denials are not kept.³⁶ While it is difficult to measure how often medical and administrative barriers result in denial of SRH services, experts contend that these barriers are rampant and have been underestimated.^{18,35,37} Some researchers have tried to estimate the extent of denial from providers' statements on eligibility criteria, recognizing that they may miss other provider-imposed barriers.^{38,39} Studies using focus groups and 'mystery' clients – who are trained to pose as ordinary people seeking services and are not known to the providers – generally uncover considerable denial in developing countries.^{40,41}

Despite the measurement difficulties, numerous studies have documented that people are being denied contraceptives on the grounds that they are not eligible for services due to age, marital status, or parity, even though most national guidelines have removed these restrictions.¹⁶ Unmarried adolescents in developing countries have particular difficulty in obtaining contraceptives, mainly because providers fear that access to family planning will encourage promiscuity or be dangerous to them.^{39,41} A recent study in Kenya and Zambia found that only 55%–67% of nurse-midwives agreed that "a schoolgirl who is sexually active should be allowed to use contraceptives".⁴² Similarly, only about two thirds of providers in the Lao People's Democratic Republic would be willing to provide an adolescent with contraceptives.⁴³ In China, 40% of providers did not approve of government provision of contraceptive services to young people, and approximately 75% felt these services should not be extended to high-school students.⁴⁴

Because these attitudes are also the norm in many developing countries, providers rarely face community censure if they deny SRH services to youths. A study in Malawi employing adolescent- and widowed-simulated clients found that about one third were denied oral contraceptives, generally

because of their age and status.⁴¹ One adolescent-simulated client described her encounter with an antagonistic provider:

*The provider said lots of rude words against my suggestion to get family planning services. She even said that my behaviour is not all that straight because I was looking for family planning methods. She also said that I should not use contraceptives because I am a schoolgirl; therefore it won't help me to concentrate on school. Finally she told me that if I need anything I should come with my parents.*⁴¹

Youth seeking condoms or pills in Uganda reported that health centres "always told them to wait until they were older before going to ask for these items because it increases immorality".⁴⁵ A recent study in Lesotho found that some providers denied contraceptives to adolescents unless they brought their husbands to the facility. Since most adolescents are unmarried, they were unable to get services.⁴⁶

Worry by providers that contraceptives will impair women's subsequent fertility is a frequent reason given by them for denying methods to young or nulliparous women. In the United Republic of Tanzania, researchers estimated different rates of contraceptive denial at government facilities for a 15-year-old unmarried adolescent, depending upon the provider's beliefs about the safety of the method – such as injectables (63%), oral contraceptives (57%), intrauterine devices (IUDs) (57%), and condoms (38%).³⁸ Community-based distributors and nurses in Kenya told researchers that they would never provide unmarried girls with pills before they had given birth.⁴⁷ Not only were they worried that the pills would render a girl infertile, but they also wished to avoid being blamed. As one distributor explained:

I always tell them [her unmarried teenage clients] that it is advisable to use pills only after

you have given birth. If I give you pills and perhaps you are barren, when you get married and you do not have children, you would always imagine that I, the provider, made you not get a child because I gave you pills when you were a little girl.⁴⁷

In some countries, women who have few children are denied contraceptive methods because of providers' patriarchal notions about appropriate family size, the need for sons, or a husband's right to regulate his wife's contraceptive use, particularly regarding long-acting and permanent methods.^{8,39,41} In Jordan, researchers noted that whereas family planning programme managers advocated a family size of two children, most providers thought the ideal family size was four or five children. This influenced the methods that they were willing to provide.⁴⁸

A review of situational analyses from five sub-Saharan African countries found that parity requirements of at least two children were imposed on 48%–93% of women seeking IUDs and 27%–95% of women desiring injectables.²⁰ For sterilization, parity requirements ranged from three to six living children. Spousal consent was required by 9%–73% of African providers, depending on the country and type of method desired.²⁰ In contrast, providers in countries with authoritarian birth control policies sometimes denied women contraceptives such as the pill because they believed it was not sufficiently efficacious.⁴⁹ Denying women their contraceptive choice seems to be significantly associated with discontinuation. In Indonesia, a retrospective study of 1945 women estimated that if choice had not been denied, 91.1% of women would still be users after one year rather than the actual rate of 82.5%.⁵⁰

One common reason that providers deny women contraceptives is their adherence to outdated national policies. For instance, many providers require proof that a woman is not pregnant prior to prescribing birth control methods other than the

condom.⁵¹ Providers defend policies of this kind on the grounds that pregnant women sometimes try to 'cheat' them into giving them pills under the mistaken belief that oral contraception can be used as an abortifacient.^{41,52} Providers also believe that they need to safeguard the 'goodness' of contraceptives, which will appear non-efficacious if given to women who subsequently start to show.^{41,52} When pregnancy tests are not available, providers generally require that women be menstruating at the time of their clinic visit. In a study in Kenya, researchers estimated that 78% of non-menstruating clients (35% of all potential new clients) were sent away without contraceptive services. A more recent study of three countries found that 17%–35% of non-menstruating new family planning clients were denied their desired contraceptive method because they were not menstruating. The researchers reported that introducing a simple pregnancy checklist, which could determine with high accuracy that a woman was not pregnant, reduced this rate significantly.⁵³ The World Health Organization now recommends that providers employ this checklist where pregnancy testing is not readily available, but many providers still do not use it.

Requiring women to undergo a laboratory test or pelvic examination before receiving contraceptives is another medical barrier which many providers insist upon, even if it is not in national guidelines. While 'bundling' services such as Papanicolaou test (pap smears) and STI screening with contraception may seem cost-effective, it can pose a major barrier to women who fear the pelvic examination. Given that there is no link between hormonal methods and cervical cancer, organizations such as the World Health Organization, the International Planned Parenthood Federation, and the American College of Obstetricians and Gynecologists now recommend that pelvic examinations not be made a requirement for hormonal contraception.³⁷ In developing countries, where pap smears and STI diagnostic screening generally are not

available, compelling women to have a pelvic examination has virtually no medical value and most governments have removed this requirement. However, numerous studies have documented that providers still insist that clients undergo the examination and refuse to provide services unless clients submit to it – in part, as a way to demonstrate authority.^{38,39,41,48} As a simulated client in Malawi noted:

One of the potential clients refused to have the speculum exam. The provider said to her, “The problem is that you are not educated. You can’t always keep running away from the speculum. To have family planning your vagina must be examined.” The potential client was a woman with four children. She left without getting services.⁴¹

In general, the literature indicates that providers seem more inclined to deny contraception to young, unmarried or nulliparous women. When it comes to abortion, however, regulatory or legal restrictions routinely lead providers to deny services to all women. Generally, providers share the same negative attitudes about abortion as the rest of the public in countries where abortion is proscribed or outlawed.^{54,55} Even in developing countries where abortion is legal, procedural hurdles and provider biases often make it very difficult for women to secure a safe, timely abortion. In Zambia, one of only two countries in sub-Saharan Africa where abortion is unrestricted by law, researchers noted that onerous requirements – such as the need to obtain signatures from three physicians, to pay for expensive supplies and tests, and to keep rescheduling the date for the procedure – effectively prevented most women from obtaining a safe abortion.^{56,57} In South Africa, which liberalized its abortion laws in 1996, the majority of nurses have refused to render abortion services for religious or moral reasons. In the few facilities where abortion services were available, nurses were reportedly overworked and morale

was low.⁵⁸ A recent study in the North West Province of South Africa found that all nurses felt that nulliparous women should never be permitted to abort, and that a woman should only be allowed one termination of pregnancy in her lifetime.⁵⁹

3.2 Discouraging use of services

Providers either deliberately or inadvertently send signals to clients about whether their service needs are legitimate. These signals could involve their manner towards clients, how well they tailor information to clients’ concerns, the extent to which they respect clients’ privacy and confidentiality, the quality and quantity of supplies they provide, how long they make clients wait, their willingness to answer questions and address sensitive topics, their attention to clients’ pain, and their encouragement of clients to return. Even if they do not deny services, providers can use the power of their position to make potential clients reluctant to initiate or return for services. This reluctance can translate into an unintended pregnancy, delayed treatment for sexually transmitted infections, continued transmission of disease, or injury or death associated with an unsafe abortion.

The most frequently cited way in which providers discourage clients is by being rude, moralistic, rough, or abrupt. Fear of rude treatment was the reason given by 22% of women in urban Pakistan for not using family planning services – second only to husband’s or religious opposition to contraception.⁶ Women from households with few assets or whose husbands had little education were significantly more likely to report that providers’ rumoured or actual treatment discouraged their use of family planning services. In South Africa, 17% of women suffering from abortion complications stated that anticipation of staff rudeness had discouraged them from seeking a legal abortion at a government clinic.⁶⁰ STI clients in Brazil – particularly men who had sex with men – reported that they opted for self-medication or delayed

care-seeking because of stigmatizing behaviours and rude remarks from providers.⁶¹ Adolescents in developing countries often report avoiding clinics because they fear being scolded or humiliated by hostile and moralistic providers who want to discourage them from being sexually active.^{45, 62-65} Researchers in northern Thailand found that young women were more likely than young men to face judgemental provider attitudes because of gender double standards.⁶⁵

Like adolescents, women with disabilities or who are HIV-positive are often discouraged from obtaining sexual and reproductive health services. Several studies have found that women with disabilities consider provider attitudes to be the most difficult barrier to surmount.^{66,67} In part due to providers' lack of training in dealing with women with disabilities, and the common misperception that such women are asexual, providers often express surprise or shock when they request contraception or prenatal services.⁶⁸ Providers are also more likely to be patronizing and to invalidate a woman's own knowledge of her body and needs.⁶⁹ Because providers sometimes presume that people with disabilities would not be good parents, they frequently counsel them not to have children.⁷⁰ In Uganda and Zambia, clinic staff ridiculed pregnant women with disabilities and interrogated those seeking birth control. Rather than assisting women with disabilities, providers in Zambia sometimes labelled them as "complicated cases" and required them to go to a hospital for primary care services.

It seems that when providers oppose providing a service or resent unpaid extra work, they are more likely to be rude or even to inflict pain. A study in rural Bangladesh observed that six of ten clients wishing to have their IUDs removed were treated harshly, as compared to only one of thirteen who wanted an IUD insertion.⁷ In South Africa, researchers discovered that providers were verbally coercive and even physically violent with women

who sought obstetric care at times inconvenient to the provider. At one clinic they studied, they found that all but one of the women who delivered there reported experiencing "shouting, scolding, rudeness or sarcasm" from providers as a way to discourage future deliveries there.⁹ The providers were particularly antagonistic to adolescents, whom they felt had been acting immorally by getting pregnant.

Since providers in many countries are underpaid and work in difficult situations, it is not surprising that their demeanour can be affected by informal fees. In their study of public health workers in Uganda, McPake et al. observed that providers "seem to use impolite behaviour as an enforcement mechanism, reserving good services only for those who pay well".⁷¹ In Angola, researchers found that pregnant women lacking money were often given negligent and humiliating care, which could be ameliorated if their husbands or family members rushed home and found money to pay for the services.⁷² According to researchers, a major cause of the high abortion rates in Romania after the abortion ban was repealed was providers' adamant refusal to "volunteer unpaid time" to counsel women on contraceptives, which they often felt was beneath them. Offering abortions was lucrative and less time-consuming.⁷³ In the Lao Peoples' Democratic Republic, researchers noted that private providers were more inclined to offer contraceptive services to adolescents than were government providers because of the remuneration they received.⁴³

Providers also discourage clients by not ensuring privacy and confidentiality. It is estimated that most clinics in developing countries are able to offer women sufficient auditory and visual privacy.²⁰ However, unless providers are vigilant, privacy can be compromised. In Malawi, researchers noted that although 76% of facilities were able to offer privacy, only 62% of simulated clients reported receiving sufficient privacy.⁴¹ In countries where

preserving women's modesty is paramount, fear of having one's body exposed to others can prevent women from obtaining SRH services.^{6,48} In Lesotho, women told researchers that they stopped attending facilities if privacy was lax.⁴⁶ Fears that hospital staff would gossip about them (and demand fees) discouraged approximately one third of those pregnant Zambian women who desired a termination from obtaining a safe abortion.⁵⁷ For adolescents, particularly those who are timid or do not want others to know they have an STI, privacy and confidentiality are their top concerns.^{65,74} In South Africa, researchers noted that providers who violated adolescents' confidentiality by telling their parents, or by demanding parental consent, effectively discouraged young clients from returning.⁷⁵

While the pressure of having many clients can lead to long waits in health facilities, delay is sometimes a tactic providers use to discourage clients from accessing or returning for services. Singling out SRH clients and making them wait can also be a way to punish them for 'immoral' behaviour. In Malawi, researchers found that family planning clients were often compelled to wait until clients for all other services were seen. The average waiting time experienced by simulated clients seeking oral contraceptives was almost three hours. Simulated clients recorded several instances where actual clients grew weary of waiting and left without services.⁴¹ In Zambia, women suffering from post-abortion complications were always scheduled last in the operating theatre, with occasionally dire consequences.⁵⁶ Women in South Africa seeking legal abortions were required to wait two to four weeks before being able to see a doctor, even if their gestational age was advanced. Such delays led many of them to opt for a quick, unsafe termination.⁶⁰ Those most discouraged by long waiting periods are likely to be adolescents, who are more impatient than others and do not want to be noticed by someone they know. Other ways that providers can discourage clients are by requiring

them to return repeatedly for follow-up IUD visits or for pill replenishment.¹⁸

3.3 Misinforming clients

At the heart of client-provider interactions is the information that providers give to clients. After analysing the components of effective family planning services, the United States Agency for International Development (USAID) recommended that providers give clients their preferred method, treat clients with respect, personalize counselling to specific situations, be interactive and responsive to clients' questions, avoid information overload, and provide memory aids.⁷⁶ To help clients choose methods, providers are to give unbiased, "balanced counselling" that includes effectiveness, side-effects, advantages and disadvantages, when to return, and whether each method prevents HIV.^{77,78} Comprehensive counselling tailored to the needs and educational level of clients seems to have a positive effect on their use of family planning.¹¹ In Niger and Gambia, researchers found that only 14%-19% of clients who reported that they were adequately counselled on side effects discontinued contraceptive use, as compared to a 37%-51% discontinuation rate among clients who did not feel they had been sufficiently counselled.⁷⁹ In rural Bangladesh, visiting family-health workers who gave empathetic and "high-quality" counselling appeared to increase contraceptive use by 21% and continuation rates by 72%.³⁰

Unfortunately, in many countries, providers' biases against certain contraceptive methods or abortion, unease with discussing sex, or unwillingness to spend time in individual counselling can impair clients' ability to achieve their reproductive goals and to avoid STIs/HIV. For example, when providers believe that women would be unable to negotiate the use of male or female condoms, they do not promote these products and their actual use remains low.^{20,80,81} Two studies in the United States found that providers' negative attitudes towards

natural family planning or Norplant reduced significantly the proportion of clients who received these methods.^{82,83} Providers who oppose abortion on moral grounds sometimes distort the truth about the long-term physical and mental health consequences of terminations. This misinformation has dissuaded some women from ending an unwanted pregnancy.^{54,84} If providers were less reticent about educating people concerning emergency contraception, it is estimated that half of unwanted pregnancies could be avoided.⁸⁵ One reviewer noted that some providers fail to inform people about emergency contraception because of erroneous beliefs that it is an abortifacient or will displace condom use.⁸⁶

In several studies, it has been found that providers' aversion to lengthy counselling sessions, particularly with poor or uneducated clients, leads them to dispense with vital information. This may in part be due to the heavy patient load faced by many providers. Clients of family planning services are often given insufficient information on side-effects and their right to change methods.^{2,36} When counselling on these issues improved in China, contraceptive failure declined.⁴⁹ Consultations for STI clients are often very brief, with providers giving only cursory information. In South Africa, one study found that only 21% of male clients were told how STIs were transmitted, and only 25% were taught how to use a condom.⁸⁷ Similarly, a study in India revealed that only 12% of STI consultations met the minimal criteria of promoting condom use and partner notification, and only 1% of clients were given condoms.⁸⁸

Lack of up-to-date knowledge by providers is the other main reason that clients receive misinformation. In many developing countries, it has been documented that some providers share and perpetuate community myths about the dangers of contraceptives or abortion.¹⁸ The perpetuation of myths can heighten clients' latent fears about modern methods, and is believed to

be a major contributor to high discontinuation rates.^{32,79} It is even possible that providers' expectations that clients will suffer from side-effects could actually induce some psychosomatic symptoms, which in turn could lead clients to abandon contraceptive use.^{89,90} In the United States, researchers estimated that the failure of private providers to inform clients fully about their various contraceptive options – probably due to the providers' ignorance – accounted for 14% of abortions in 1999–2001.¹²

4. Determinants of provider behaviour

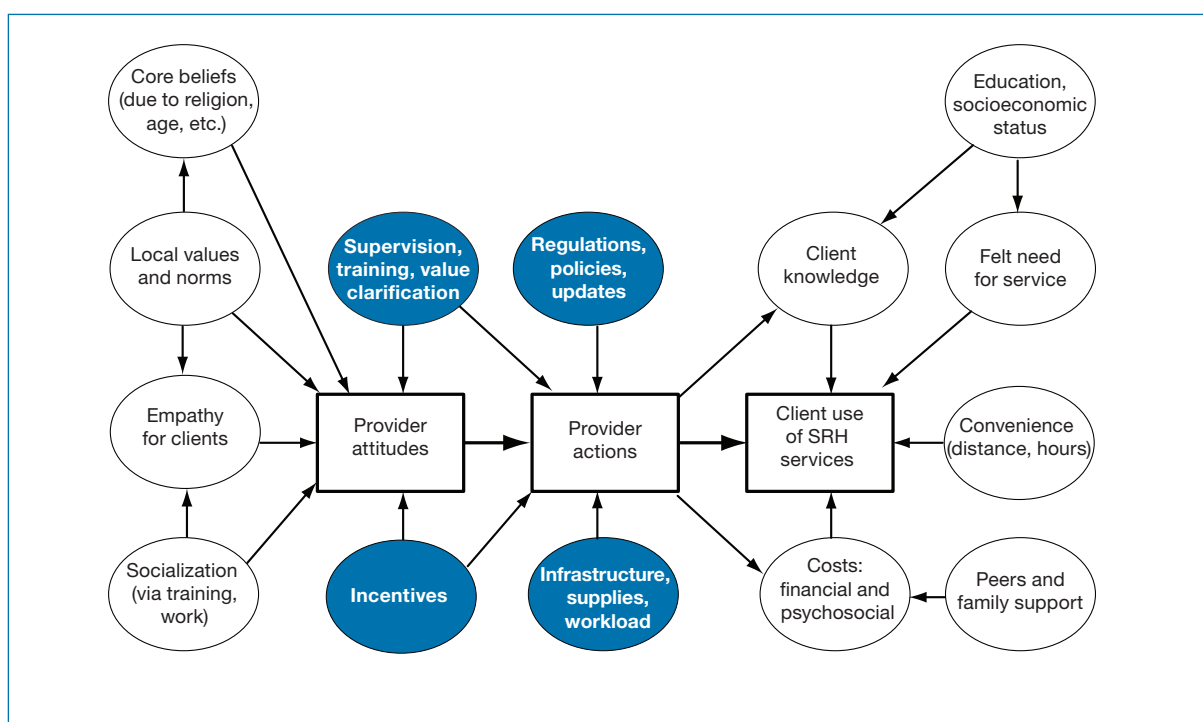
Various analysts have sought to offer rationales for the detrimental attitudes and behaviours of some providers. Figure 1 presents a conceptual framework depicting the main influences on provider attitudes and practices, and how they can affect client utilization of SRH services. If there are no effective checks on their behaviour, providers at times play out their predispositions by denying and discouraging SRH clients whom they do not consider worthy of their attention. The moralizing stance of many providers may arise from their religious backgrounds or core beliefs, which can be moulded by local values or norms. This stance can be reinforced at training institutions and workplaces, which in some developing countries are sponsored by religious organizations with their own biases. Providers' empathy for their clients can be eroded by socialization and judgemental values of the community. Occupational sociologists who study how norms are internalized find that newly-minted nurses initially look to patients for feedback on how they are performing. But soon the opinions of their co-workers predominate, and patients' views recede into the background.⁹¹

The situation in the workplace can have a strong influence on how providers act towards clients. Providers are constrained by the larger health

system within which they work. Without clear guidance and incentives to the contrary, such subconscious goals as maintaining control over their workplace, keeping a social distance from clients so that providers' status is enhanced, and developing routines that are not too physically or mentally taxing, may take precedence over offering client-oriented care.⁴ In resource-poor environments, providers also have a natural inclination to conserve supplies and drugs for the general good, which may outweigh concern for

an individual client's welfare. Providers' aversion to 'wasting' resources may explain why clients are often given limited numbers of pills or condoms, and why providers are reluctant to remove expensive implants or IUDs soon after insertion. If providers' morale is low because of small salaries, overwork, and deplorable infrastructure, they may lash out or give insufficient time to clients. Lastly, in some cases, providers may lack the knowledge and skills necessary to provide high-quality, unbiased care to anyone of reproductive age.

Figure 1. Conceptual framework of providers' influence on client utilization of sexual and reproductive health services.



Note: Areas in blue represent where programmatic changes are most feasible.

The literature indicates that providers who purposely adopt practices that deny or discourage clients from obtaining SRH services generally possess one or more of the attitudes listed in Box 1. Studies from South Africa also suggest that providers sometimes feel ridiculed by clients, which makes them want to 'put clients in their place'.^{9,70} It is difficult to quantify the prevalence of these negative attitudes because providers are aware that some of their views may not be acceptable

to supervisors or to the communities they serve. Hence, surveys of providers are unlikely to yield a true picture of their attitudes.⁹²

Wilson has argued that attitudes do not influence job performance unless the work is "weakly defined" and incentives or penalties are inadequate.⁹³ In many developing countries, there have been concerted efforts to define family planning service delivery more precisely through

the issuance of new, liberalized guidelines. Yet, in the minds of some providers, the goals of their work may still not be clear. As health professionals, the providers' overarching credo is 'first, do no harm'. For those who fear that the widespread availability of SRH services could have dangerous consequences – both for individual's health and for society's norms – the new guidelines seem at variance with that basic credo. Where induced abortion is legally restricted, providers faced with desperate women desiring abortions are given

virtually no guidance on what to do. By merely disseminating new guidelines without addressing these situations or anxieties, governments may have failed to define providers' work adequately. Furthermore, governments have rarely put 'teeth' into guidelines through a system of rewards and punishments, as well as more regular supervision. As a result, provider attitudes are continuing to have a significant impact on how SRH clients are treated.

Box 1. Provider attitudes that restrict client access to services

- Distrust of the long-term effects of contraceptives' on people's bodies, particularly nulliparous women.
- Concern that providing easy access to contraception for minors and unmarried people, low-cost treatment for STIs, and rapid attention to post-abortion complications will encourage people to "misbehave" in the future.
- Dislike for some aspects of SRH service delivery, which they find to be tiresome, unrewarding, or even disgusting.
- Belief that many clients, especially the young or poorly-educated, are incapable of making their own reproductive health decisions.
- Suspicion that clients are often dishonest or are trying to trick the provider into helping them to abort.
- Unwillingness to allow clients to have more than a month's supply of contraceptives at a time because of desire to conserve scarce resources.

5. Ways to improve client-provider interactions

Despite the difficulties inherent in changing ingrained practices of health professionals, particularly in countries where resources are limited, some interventions seem to have made a significant impact on provider practices. Clearly, if governments and organizations expect providers to give high-quality care, they need to make sure that providers have the necessary knowledge, skills, equipment, and infrastructure to do their jobs. They also need to ensure that facilities have adequate staff, because performance suffers if providers are overwhelmed by the number of clients. Once the necessary inputs are in place, nonperformance becomes largely a management issue. Supervisors

need to be engaging in "preventive management" – proactive interventions with providers to prevent problems from occurring, as opposed to mostly solving problems after the fact.⁹⁴ When human-service employees in any setting do not know precisely what behaviours are acceptable, fail to get regular feedback on their interactions with clients, and experience no negative consequences for poor performance or rewards for good performance, the services they offer will be suboptimal.

The quality of health supervision in developing countries is a neglected area that needs more attention.⁹⁵ While many studies have focused on client-provider interactions, very few have identified and assessed the components of effective supervisor-provider interactions and

made recommendations for improvements.⁹⁶ It is important to recognize that supervisors themselves require ongoing feedback from higher levels of management. Certification classes and examinations for supervisors could be introduced to ensure that supervisors know what behaviours are expected of them. Because supervisors often have transport problems that make it difficult to monitor far-flung facilities, researchers need to test innovative approaches to increase the feedback and rewards that providers receive – such as through cell-phone discussions, ‘nurse of the year’ competitions, self-assessment combined with systematic peer review,⁹⁷ client satisfaction surveys, and reports by designated citizen advocates. Providers also need easy access to supervisors, to report obstacles they may encounter and to get timely assistance.

To improve provider performance, a first step is to revisit the current SRH guidelines for providers and supervisors in each country. Governments need to make sure that guidelines are up to date and very specific, particularly regarding services for adolescents and nulliparous women. The guidelines need to address the range of situations that can arise, and delineate the appropriate responses or behaviours of providers. Providers need to know that making moral judgements about clients, showing distaste for non-normative sexual behaviours, and denying SRH services are unacceptable. Vague instructions and unrealistic goals will result in providers making their own rules. Poorly-written guidelines in stilted prose, resembling an ‘information depository’ rather than an easy-to-comprehend manual for providers, can actually serve as a barrier to performance.⁹⁸ Once guidelines have been revised, job aids and checklists describing specifically the behaviours expected of both providers and supervisors need to be developed and introduced.

Training of providers on updated guidelines and job aids offers an ideal opportunity to clarify their value judgements towards those who traditionally have been marginalized – such as adolescents, women with disabilities, and ethnic minorities with low educational levels. Inviting representatives from these client constituencies to training workshops, and assisting them in conversing with providers about their concerns, can help to convey to providers that these groups have legitimate needs and rights to services. Viewing videos of clients describing ill treatment, presenting data delineating clients’ dissatisfaction with services, and having providers reflect on situations in which clients from certain groups may have been wrongly denied services or discouraged from receiving them, can further help to humanize clients and improve provider attitudes towards them.^{41,71,99,a} Modelling effective client–provider interactions, promoting self-assessment by providers, and offering them opportunities to discuss their performance with peers have also changed provider practices.⁹⁷

Among interventions to influence provider behaviours, those which are multifaceted and build on human performance theories seem to be the most successful. Three SRH interventions which appear to be especially innovative and promising, yet so far have only been introduced on a small scale, are described in Boxes 2–4. All of these interventions employ multiple reinforcing strategies, appear to be cost effective, and include provider incentives, guidelines, job aids or training, and supportive supervision.

^a For an example of a values clarification workshop, see: http://www.reproductiveaccess.org/getting_started/values_clar.htm.

Box 2. Achieving quality through client demand: a voucher system for adolescents (Nicaragua)^{100,101}

Adolescents in most developing countries face major barriers to accessing SRH services. The goal of this intervention was to encourage Nicaraguan youth to seek out services and to motivate providers to be more adolescent-friendly. Its main components were:

- wide distribution of vouchers, valid for three months, that could be used by adolescents for one free consultation and one free follow-up visit for any SRH service offered in participating clinics (public, private, and NGO);
- provision of an adolescent-health book and condoms to all voucher redeemers;
- conducting of adolescent-friendly training for providers at all participating clinics;
- introduction of a standardized medical form to guide doctors in consultations with adolescent clients; and
- reimbursement to clinics for the vouchers, based on agreed fees.

In less than one year, more than 28 000 vouchers were distributed and about 3500 were redeemed by adolescents. Adolescents who received vouchers were significantly more likely than non-receivers to use SRH services (34% versus 19%), to use condoms during their last sexual act, and to have correct knowledge about contraceptives and STIs. While the voucher programme did not change doctors' core attitudes about youth sexuality, it did appear to result in improved knowledge and better practices towards adolescents. Providers at both public and private facilities had a clear incentive to treat adolescent clients well, because word of mouth might lead other adolescents to redeem their vouchers at the facility, which in turn would result in more reimbursements. The medical form served as a job aid to remind providers of the specific components of high-quality care for adolescents.

Box 3. Creating an ethos of excellence: private physicians' abortion network (Kenya)¹⁰²

Unsafe abortions account for a sizeable amount of maternal mortality and morbidity in the developing world. The purpose of this intervention was to reduce barriers to accessing safe abortions within a very restrictive regulatory context. The researchers believed that private physicians in Kenya, who practise medicine with fewer encumbrances than government providers, would be able to offer safe abortions if they were trained in post-abortion care and equipped with manual vacuum aspiration (MVA) kits. They had also determined that while government providers were not willing to offer abortion services, at least one quarter were willing to refer women to private practitioners. The main activities of the intervention were:

- development of clear guidelines on acceptable standards for facilities;
- selection of physicians based on interest and willingness to adhere to standards;
- training in post-abortion care and provision of MVA kits;
- identification of back-up emergency facilities for each physician;
- introduction of special consent forms and client cards;
- provision of on-site training for nurses or aides to assist physicians in record-keeping and equipment maintenance;
- requiring physicians to renovate their facilities to offer sufficient privacy and a wide choice of contraceptive methods;
- agreement that physicians would only charge a minimal consultation fee and would give free services to very needy clients; and
- submission of monthly reports and regular supervision visits.

In the first year, the intervention trained 35 private physicians who safely assisted 675 women who had abortion complications or 'menstrual irregularities'. An important contributor to the intervention's success was its selection of physicians who were committed to offering convenient, affordable abortion care. Once trained, the physicians have needed only minimal supervision. The fees they receive serve as an incentive to sustain the service.

Box 4. Designing quality into service provision: STI syndrome packets and provider training (South Africa) ¹⁰³

In many developing countries, STI case management is often flawed and providers do not give adequate counselling. The goal of this intervention was to improve the quality of STI treatment in a way that would be replicable and affordable in other low-resource settings. The chief components of the project were:

- problem-solving and STI syndromic training for all clinical staff;
- three follow-up visits of providers focused on various aspects of STI case management;
- development and distribution of Zulu-language packets that included recommended drugs, condoms, partner cards, and patient information leaflets; and
- provision of Zulu-language STI health-education materials for all clinics.

The intervention was evaluated using simulated clients. Large improvements were found in the proportion of simulated clients correctly treated (88% versus 50% at baseline), high quality of counselling (68% versus 46%), and positive staff attitude (84% versus 58%). Control facilities showed negligible change. The effect on provider practices with female STI clients was the most dramatic: 87% in intervention facilities were correctly treated, versus 20% in control facilities. The researchers attributed the success of the intervention to an integrated set of low-cost activities that reinforced each other. The packets helped to make counselling and treatment more consistent and in line with national guidelines.

6. Conclusion: recommendations for the future

People of any age or status deserve to have access to friendly, appropriate, client-oriented, and affordable sexual and reproductive health services. As this chapter has shown, some providers are denying, discouraging, or misinforming potential SRH clients. All of these behaviours are counterproductive and impede sexual and reproductive rights. For providers to have a positive impact on client utilization of SRH services, their actions need to increase client understanding and diminish the psychosocial and financial costs of services (see Figure 1, above). If governments and organizations wish to reduce negative provider practices in health facilities, more attention and funding need to be given to:

- adapting and scaling up promising approaches, such as the interventions listed above;
- developing and implementing innovative supervision systems that are regular and focused on client-provider interactions;

- revising guidelines and developing job aids that specifically proscribe client denial and misinformation;
- introducing a continuing education programme for providers so that they are up-to-date on the latest information, treatments and counselling techniques;
- ensuring that providers' workloads are manageable and that their basic supplies are adequate; and
- seeking regular client feedback on service quality and tailoring services to meet clients' changing needs.

Measurement is the cornerstone of quality management. To assess the impact of these kinds of interventions, regular monitoring of providers' actual practices needs to occur. Feasible approaches that can track provider denial, discouragement, and misinformation need to be developed. Relying on provider surveys – or even exit interviews – will not give a true picture of the situation, due to self-presentation and courtesy biases. To complement these activities, governments may wish to consider introducing an ongoing, standardized monitoring programme

using simulated clients.⁹² These simulated clients should include representatives from marginalized groups – such as adolescents and women with physical disabilities – whom providers are most likely to discourage. In addition, facilities should be encouraged to collect SRH-service statistics that include information on age, ethnicity, and disability. These data, when compared with census information, can help to determine if certain groups are being underserved.

The WHO reproductive-health indicators for global monitoring also need to be reviewed.¹⁰⁴ With the current set of indicators, improvements in provider attitudes and practices towards clients cannot be tracked – either locally or globally. A few years ago, researchers in China convened a workshop to develop ‘community-based’ reproductive-health indicators which included two indicators linked to provider behaviours: the proportion of women with the freedom to choose which type of contraception to use; and the proportion of women with the legal right to decide whether to bear children.¹⁰⁵ While this was a useful exercise, it was not apparent how these indicators would be operationalized. Moreover, certain critical issues (such as adolescents’ access to services) were not included. Some analysts have cautioned that developing quality measures for unintended-pregnancy prevention in health-care services is difficult.¹⁰⁶ Clearly, more work needs to be done to arrive at meaningful indicators of respectful, client-oriented care, which could serve as tools for supervisors, governments, and global policy-makers.

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3

Financing mechanisms to improve equity in service delivery

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1. Introduction

A 2006 policy brief by the World Health Organization¹ describes the three essential aspects of health-care financing needed to adapt the Global Reproductive Health Strategy at the country level: resource mobilization, resource pooling, and purchasing. The evidence on effective use of financial mechanisms to improve health equity in developing countries is scant, but there are indications that some mechanisms are being tested to apply subsidies in a way which improves access to care for marginalized populations.² This chapter will look at mechanisms by which social determinants, beyond immediate health-delivery systems, affect equity and financing of sexual and reproductive health (SRH) services. The chapter also provides illustrations of new and innovative mechanisms to translate health-care financing into improvements in equity, focusing primarily on resource pooling and purchasing.

Funding for SRH services has increased dramatically in the past decade. However, the bulk of this growth has resulted from spending on HIV/AIDS, which increased tenfold between 1996 and 2004.³ International funding for other SRH services – including family planning, non-HIV reproductive health, and research – is stagnant or declining. In particular, funding for family planning assistance has declined since 1998.⁴ Partly to compensate for declining external assistance, and partly due to growing economies, national funding for family planning and non-HIV reproductive health services has increased – particularly in Asia and South America.

According to the Kaiser Family Foundation, donor funding for health in low- and middle-income countries amounted to US\$ 22.1 billion in 2007.⁵ In some of the world's poorest countries donor funding has begun to displace government expenditure on health.⁶ Because the bulk of national health expenditure is generally committed

to salaries and ongoing operations, donor funding plays a disproportionately important role in shifting health-spending priorities, even in those countries where the relative size of donor funding does not dwarf that of government. Because of the flexibility of extra-budgetary funds, trends in donor priorities and funding mechanisms have an important effect on SRH financing. The net result is to introduce a degree of uncertainty in the resources available for SRH in developing countries. This in turn has led to a demand for better documentation of innovations in the field and better measurements of the current and potential benefits from these innovations.

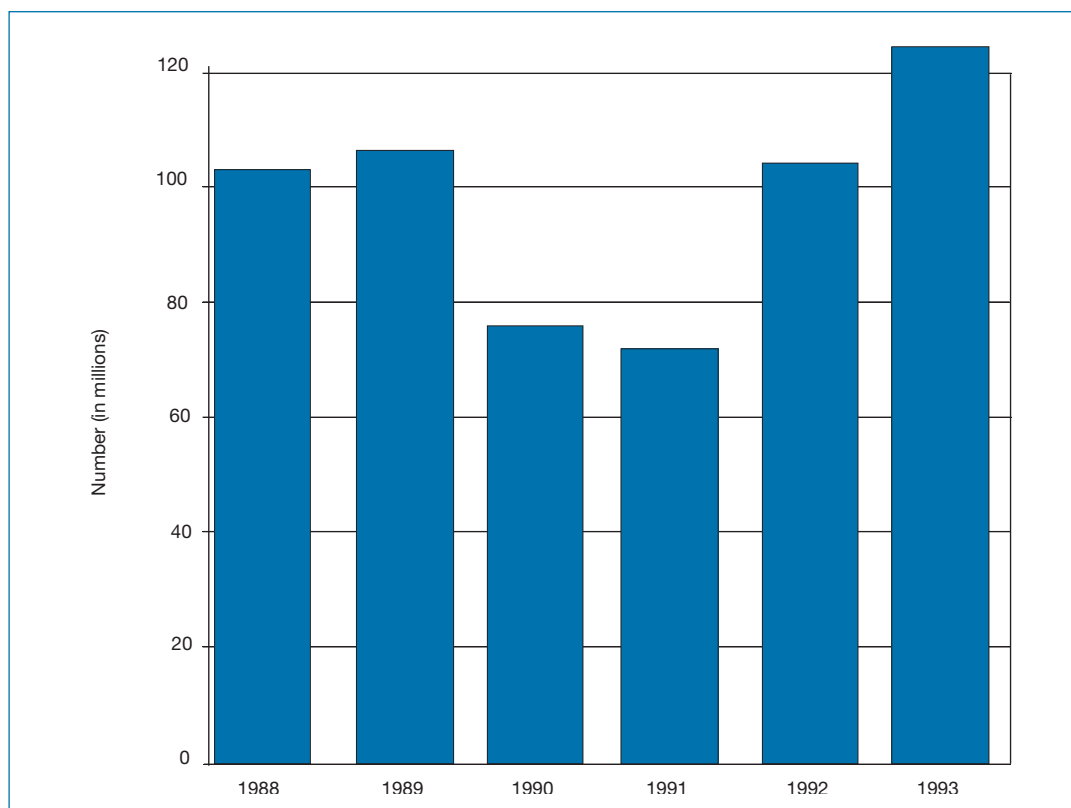
2. Equity in financing

In general, funding appropriations for health are not planned in order to explicitly improve equitable distribution of benefits. Equally important, governmental funding makes up just over half of all expenditure on health care globally, the rest coming from insurance, direct out-of-pocket payments, and other sources.

This pattern of expenditure is true for SRH care as well: in 2004, out-of-pocket expenditures constituted the greatest source (42%) of financial resources for SRH in developing countries.⁷ Donor and government subsidies must therefore be examined as a component of – but not the totality of – SRH financing.

National Health Accounts data show that in most countries – irrespective of national income level – the majority of SRH services are either preventive or involve treatment of chronic rather than acute illnesses. As a result of this factor – and leaving aside the special case of HIV/AIDS – the demand for SRH services is elastic: even a small increase in cost to the client will result in a large decrease in uptake of services (Figure 1).

Figure 1. The elasticity of demand for condoms. Annual sales of Raja condoms, social marketing project, Bangladesh, 1998–1993.



Source: Reprinted from Ciszewski and Harvey, 1995⁸ (with permission of the authors).

The graph illustrates annual condom sales, and reflects the effect of a 60% increase in contraceptive prices implemented in 1990 and rescinded in 1992. Similar decreases in sales occurred for other contraceptives during the same period.

At the same time, SRH services have high positive externalities and societal value, as evidenced by the primacy of SRH services in international donor funding. These dual properties of low personal value and high societal value explain why the delivery of SRH services commonly remain fully or partially subsidized by national governments and international donors.

Therefore, national and international financing decisions have profound impacts upon the type, unit cost, and distribution of commodities and services for SRH, and upon the equity of availability

and use of these goods and services. When political and non-societal priorities drive these decisions rather than the goals of efficacy or justice SRH often falls victim to budgetary cuts or shortfalls.

SRH issues engender an emotional response that ignites cultural and moral debate unique to SRH. In many instances, the effects of emotionally or politically driven policy decisions have unintended consequences beyond the immediate targets of their initiators. An example of one such policy is the Mexico City Policy restricting donor funding for organizations engaged in abortion and abortion-related activities. Recently rescinded, this policy was created in 1984 to address concerns that donor funds were being used to support controversial abortion services. Evidence suggests that The Mexico City Policy had a dramatic effect on nongovernmental provision of SRH services in

low-income countries around the world despite acknowledgement of the donor government that voluntary family planning services are one of the best ways to prevent abortion (see Box 1).

2.1 National policies concerning access and reducing financial barriers

Changes in national taxation policies regarding SRH have the potential for large positive effects as well: prior to the 1994 ICPD meeting in Cairo, the Mexican Government reduced tariffs on imported contraceptives. Taxes on condoms were reduced from 45% to 10% between 1988 and 1991, and the subsequent price reduction to consumers is estimated to have contributed to a 25% increase in condom sales during 1990.¹³

Policy decisions to provide or withhold approval for specific drugs can have important, though often difficult-to-quantify, effects on access to care.

These effects are illustrated in the following two examples.

In India, women's groups have consistently blocked the inclusion of injectable hormonal contraceptives in the national family planning programme subsidy package over concerns of method safety, a lack of adequate quality control in the public sector, and a belief that demand for such products is low among Indian women. As a result, despite being legally available in the private sector, low sales volumes have led to higher prices in India than in neighbouring countries, and usage of depot medroxyprogesterone acetate (DMPA) and other injectables is negligible. This situation is in sharp contrast to Bangladesh, where injectables make up 10% of all contraceptives used and are at least partially responsible for the overall increase in contraception use since 1999.¹⁴

Box 1. Unintended consequences of international funding policies: the Mexico City Policy^{9–12}

Created in 1984, rescinded in 1993, reinstated in 2001 and rescinded again in 2009, the regulations of the Mexico City Policy (MCP) withheld USAID financial support from NGOs which used funds from any source to perform or promote abortion, or to provide “advice, counseling, or information regarding abortion, or lobbying a foreign government to legalize or make abortion available”.⁹ U.S. NGOs implementing services overseas with U.S. funding were legally responsible for enforcing the policy.

Although there has been no systematic evaluations of the MCP, both proponents and those who oppose the policy have assessed the impact through anecdotal evidence, documented reports, and case studies.^{10–12} The effect of the MCP was reportedly limited for NGOs who agreed to the restrictions, but was substantial for organizations which refused to comply with the policy and for the populations served by these organizations. According to research conducted by Population Action International, the loss in financial support resulted in clinic closures, reductions in staff and services, and increased fees. Community based distribution programmes, services in rural areas, and programs for underserved populations were eliminated, or experienced serious staff and budget cuts. Terminated outreach services, in a number of documented cases, were sometimes the only access to contraceptive supplies, HIV/AIDS education, or health referrals for rural populations. In many documented instances, contraceptive supplies were depleted or the costs increased because the countries' family planning organizations no longer receive U.S.-donated supplies due to the MCP.¹²

In several of the country case studies collected by Population Action International, clinics that closed because of the loss in funds were the only source of health care for local communities. MCP restrictions ended partnerships among organizations that previously worked together to provide services, and dramatically limited the coordination of healthcare programs.¹² In this way, a policy which was intended to affect only access to abortion had an unintended impact on access to a much broader array of reproductive and general health services in many countries.

In Ghana, India, Kenya, Mozambique, the United Republic of Tanzania, Zambia, and elsewhere, recent government decisions to approve the registration of misoprostol for postpartum haemorrhage (PPH) prevention and treatment has the potential for a large and positive impact on the reproductive health of women for whom alternative management of PPH, using oxytocin or other medicines, is unavailable. Because misoprostol does not require extensive training to administer and is stable for long periods at room temperature, the system-level investment needed to reach low-income populations is very low.

By contrast, expanding access to oxytocin means incurring significant costs for human resource training and salaries, and for cold-chain creation and maintenance. Expanding legal availability of low-tech interventions such as misoprostol has the potential for rapidly increased access to care with small financial costs to national health programmes or to low-income beneficiaries. The broader significance of policy in this instance can be measured by the importance of improving PPH management: in sub-Saharan Africa, the maternal mortality ratio was 900 per 100 000 in 2005, with PPH accounting for approximately 25% of those deaths.¹⁵⁻¹⁷

2.2 National policies on direct financing

As is true at the level of international assistance, national decisions on financing for SRH are often influenced by political considerations. The effectiveness of services and the equity of SRH service coverage in low-income countries are determined largely by decisions made by central-level policy-makers and by foreign donors; not by local-level providers. The influence of politics in funding priorities is particularly apparent in countries where there are significant differences in sources of SRH services between urban and rural populations.

In Ghana, for example, the private sector supplied 54% of the couple-years of protection (CYPs) in 2003. From DHS data we know that the majority of public sector CYPs come from urban hospitals and clinics providing IUDs, sterilizations, injections, and implants. Pharmacies and chemical sellers are the largest source within Ghana's private sector and the last reported source of family planning for 39% of all contraceptive users, supplying mostly pills and condoms. Public financing for SRH services in this instance has limited benefits for the poor, because it is directed primarily at services (e.g. sterilization, IUD) that are only delivered by providers in urban settings serving a higher-income clientele. Intentionally or not, the central decisions on what services would be financed by the national family planning programme effectively defined where services would be provided.

Equity of SRH service delivery is often (as in the example from Ghana cited above) partially determined by what services are financed or subsidized. For family planning, it is often the case that long-term methods, being more cost effective at reducing fertility, are given priority among government-supported initiatives, to the detriment of the poor – who often live in areas where such services are of low quality or unavailable. Exclusively subsidizing government or NGO delivery channels can also exclude adolescents and other populations who are known to prefer to seek family planning service and counselling from private providers.^{18,19} Those services which are more commonly paid for directly by beneficiaries – treatment of STIs, abortion services, normal deliveries – are correspondingly more likely to be delivered by providers who are not subsidized by the government, and for whom government oversight of quality is lax or non-existent.

Traditional birth attendants, drug sellers, informal providers of abortion services – all of these exist largely outside of the influence of governments or international donors. An examination of equity

and financing therefore must take into account what services are being financed (e.g. treatment/prevention, long-term family planning/short-term commodities), where those services are provided (e.g. urban/rural, hospital/outpatient), and who is providing them (e.g. formal clinical staff/informal healers, public/private).

3. Innovative financing approaches to promote equity

At its core, financing of SRH services has a limited number of component factors: resource mobilization, resource pooling, and purchasing of services and commodities. Within these broad areas of activity, however, there are numerous opportunities for innovation, and – through that innovation – for increased coverage, equity of access, and use of SRH services. Innovations in financing cannot be, and ought not to be, divorced from the services or commodities that are provided. Once an idea is broadly applied and accepted, it becomes the norm by which other activities or concepts are measured.

Innovations, by their nature, are new ideas and usually exist on a limited scale. Nevertheless, the attraction of innovations for global attention must be their ability to go to scale, and that criterion has been applied to the projects examined in the preparation of this chapter. Current innovations in SRH financing fall broadly into four sometimes-overlapping categories: targeting, financing of government provided care, subsidy delivery, and sustainability.

3.1 Targeting

Targeting benefits is a critical component of SRH services, particularly because of how often they are both subsidized and unevenly accessible to the poor and the geographically remote. Assuring that health-care financing reaches those most in

need is never easy; it is particularly challenging when the services in question are not related to an evident need (e.g. cataracts), an urgent event (e.g. emergency care), or a national risk (e.g. infectious disease epidemics), and are not easily addressed by a contained vertical intervention (e.g. immunization). Unlike the examples above, SRH services require sustained programmes and system-wide responses. Targeting the application of financing for SRH, whether for fully or partially subsidized services, requires a system-wide response.

Some recent innovations in targeting of SRH financing and care have come through better identification of need and through the use of lower-level providers to expand the reach of subsidized services to groups not served by more formal national care systems. The Cambodia Health Equity Funds (HEF) provide an example of community-based identification of need, where communities are engaged to supplement governmental pro-poor initiatives in identification and support of in-need or at-risk groups. There are 26 operational HEFs in Cambodia managed through 91 pagodas and 5 mosques. Once services have been provided to an eligible patient, the providers submit vouchers to a pagoda committee of volunteers. The programme has demonstrated that community-based identification of the poor is feasible. By engaging with community leaders and grass-roots organizations in this way, governments and international NGOs are able to benefit from local knowledge. This sort of on-the-ground awareness of need is particularly important in targeting transient and informal populations, where local officials are less likely to have information on the needs and resources of population members.²⁰

Lower-level providers are often the primary source of SRH services, particularly in rural and poor-urban settings. Self-treatment through pharmacies is the primary source of outpatient care in many countries. Most care in Bangladesh

and India is delivered through rural medical practitioners (RMPs) – non-medical trained sellers of goods, advice and health services. One report from Uganda notes that “57% of the population will not encounter either a nurse or physician in their lifetime.”²¹ More than simply expanding government-provided care, expanding the range of those who provide care is an important consideration in making financing care effective in reaching the poor.

In the Indian states of Bihar and Jarkhand, the Janani programme has enrolled more than 35 000 RMPs into a franchise network with regular support, re-supply of commodities and consumables, and a referral system within the franchise to nearby clinicians who are able to provide higher-level clinical services. In the villages, where most Biharis live, there is no access to government-supported medical care. RMPs within the Janani programme provide family planning commodities, pregnancy tests, and basic counseling services; they are able to facilitate appropriate introductions for other SRH services, including IUD insertions, STI treatment, delivery assistance, and abortion services. Services are provided at low, posted prices. Subsidies for the delivery of SRH services are central – defraying the operational costs of training, supplying, and operating the network – but do not directly finance RMPs and thereby avoid the need to verify the quality of service delivery. When services are delivered, RMPs are paid (at above the RMPs’ marginal cost, but below the true system cost); when services are not delivered, RMPs go unpaid.²²

In Peru, the RedPlan Salud franchise delivers a range of safe-delivery, family planning and other SRH services to low-income groups through clinicians – specifically through private doctors and midwives who are located in low-income areas. Like the Janani programme, RedPlan Salud simplifies subsidized service financing through a centre of support, itself funded by external donors, to make a network of for-profit SRH providers viable at lower

prices than would otherwise be possible, while still supporting quality standards through training and regular provider support.²³

Ensuring the quality of services provided through alternative service delivery mechanisms, such as RMPs or private sector providers, is a challenge for programmes. RMPs often serve communities which are difficult to reach by support systems providing essential supervision and supplies. Private sector providers are usually not subject to the quality assurance and reporting mechanisms which regulate public sector providers. Thus, any form of performance-based reimbursement must be carefully planned and managed to ensure clients are provided care in which they are afforded a minimum standard of care including informed choice which is free of coercion.

3.2 Financing of government-provided care

Working Paper No. 5 of the WHO series Making Health Systems Work lists eight innovative strategies being applied in developing countries to improve health services.²⁴ Among these eight innovations, only one (contracting) is directly related to the ways that governments finance health-service delivery. To this could be added social health insurance, as an example of innovative programmes for government-supported inclusiveness.

At the extreme, there are examples of some countries which have expanded service coverage by using NGO or faith-based organization (FBO) resources as a de facto extension of government health resources. The Christian Health Association of Ghana (CHAG) has such a relationship with the Government, receiving core staff funding, training, pharmaceuticals and other support.²⁵ Although operated independently, the providers and facilities of CHAG are considered (by many in government, and in many instances by CHAG staff) to be de facto branches of the national programmes.

There are a limited number of examples of health ministries in low- and middle-income countries that have been able to effectively divide the specialized management aspects of service financing, service delivery, and service oversight. For those that have accomplished this objective, whole areas of service expansion and gains from competition arise.

For SRH services, the examples of Profamilia in Columbia and Banja La Mtsogolo (BLM) in Malawi provide illustrations of what can be achieved through centralized innovation that allows external contracting. In both of these examples, the external contractor is a multi-site organization. In both instances, the services that were contracted out were initially limited to family planning. In Columbia (and similarly in Brazil), the contract to Profamilia grew over time to include a host of services beyond family planning, with the NGO contracted to provide population-level coverage of a wide range of services in parts of the country. By 1999, BLM provided up to one third of reproductive health and family planning services in the country.²⁶ The part of this collaboration between government and NGO that is particularly impressive is that the funds which are spent are those of the Government.

Bangladesh, Haiti, and other countries have long had a practice of allocating parts of the country – particularly the difficult-to-reach rural areas – to local and international NGOs, which are then expected to provide full medical services to all residents within their assigned catchment area. Normally, foreign donors supply the funding for the NGO to take on this responsibility. As such, these latter examples demonstrate a positive collaborative relationship between donors, government, and NGO, but are not an example of innovation in financing or ministerial operation. By contrast, Profamilia (Columbia) and Banja La Mtsogolo in Malawi do represent that innovation.

Other innovative examples are found in those places where health ministries have contracted

out services not to an NGO, which then operates multiple clinic sites, but directly to multiple private practitioners. While this is the norm in Germany, the United Kingdom, and the United States, it is both new and courageous in many countries. The safe-delivery coverage under the Chiranjeevi Yojana programme in Gujarat, India, applies this approach – enrolling nearly all rural obstetrician/gynaecologists in the pilot regions and paying them a flat rate reimbursement for all deliveries to women registered as below the poverty line. The project grew out of frustration with the inability of the state health system to reduce maternal mortalities. Funding is flat rate, and providers commit to not turning away women with more complicated deliveries. By offering all poor women access to the level of medical care provided to the upper middle-income groups in their districts, Chiranjeevi Yojana has been very successful thus far at reducing maternal and child mortality rates – all done in a manner that the director of health services feels to be a very justified use of public funds.^{27,28}

In Nicaragua, the Empresas Medicas Previsionales programme works similarly, but under the auspices of the national social security institute (INSS). The programme gives loans to private clinics to upgrade the quality of services they are able to offer, particularly for SRH services, and then contracts to them for population-level coverage of those services through the INSS.²⁶

In Nigeria, the National Health Insurance Scheme is expanding coverage for all care in a related way – not working directly with providers, but contracting service delivery to private insurers or health management organizations (HMOs), which then in turn contract to private providers and clinic groups. As an HMO, Hygeia offers health-insurance products with direct-service provision. While it is again too early to know how well this new national programme will operate at scale, the response to the pilot project has been good so far.

Only 10% of its 70 000 clients pay out of pocket or have individual plans, and the rest are sponsored through an employer.²⁶ A similar national health insurance programme in the Philippines, PhilHealth, has been well received and had many successes in increasing overall health coverage.²⁹

3.3 Demand-side subsidies

Once a population of at-risk or disadvantaged individuals has been identified, assuring the delivery of services to that group remains a challenge. Demand-side subsidies are put into place by programmes in which subsidies are provided not to the service deliverers (e.g. clinics, hospitals, HMOs), but to the patients – the demand side of the health service transaction. These programmes are difficult to monitor, open to problems of corruption, and face a significant education hurdle to assure that beneficiaries understand the subsidies being offered to them. Once all these issues are addressed, however, demand-side subsidies have the possibility of changing patient health-seeking behaviour in ways that can have far larger potential for population benefit than do supply-side programmes.

There are several different types of demand-side financing. Cash transfers are common in many countries, and include income support, child grants, disability benefits, scholarships, and pensions. Voucher programmes are a form of demand-side financing in which a subsidy is transferred to targeted individuals. This subsidy can then be used in exchange for specific products or services. Incentive-based voucher schemes provide a subsidy directly to recipients, to encourage a specific behaviour or reduce the cost of a given service. Conditional cash transfers are a type of incentive-based voucher.

The largest demand-side programme to date has been the Mexican Progresa/Oportunidades initiative – a conditional cash transfer by means of

which poor families receive direct cash transfers in exchange for meeting criteria for child education (e.g. sending children to school regularly), paediatric and maternal health (e.g. immunization and antenatal care). Unusually for large-scale health programmes, Progresa was rigorously evaluated, and demonstrated, *inter alia*, increased survival rates and height among children in benefiting families.³⁰ Attempts to duplicate the success of Progresa have not yet been as rigorously assessed as the original initiative.

In Kenya and Uganda, Kreditanstalt für Wiederaufbau (KfW) is supporting two large pilot programmes built upon vouchers for reproductive health services and STI treatment, respectively. These programmes link subsidies to specific services used. Both programmes are being evaluated by outside academics to test the effectiveness of the interventions.^{31,32} In Nicaragua, STI voucher programmes were started by the Central American Health Institute (ICAS) during the early 1990s and showed strong, if small-scale, successes.³³ Two of the most successful national family planning programmes in the 1960s and 1970s – in China (Province of Taiwan) and the Republic of Korea – were both based upon voucher systems which targeted subsidies to specific services, but were effectively agnostic about where those services were delivered. It is not yet clear how to bridge the gap between the small-scale, high-cost programmes in Nicaragua and East Africa and the nationwide programmes that were set up four decades ago in Asia.

3.4 Sustainability

SRH services are not well suited to sustainability. Like other preventative services, demand elasticity is high: if prices rise above a bare minimum, demand decreases significantly. As a result, with a few exceptions (deliveries, abortions, treatment of HIV/AIDS or advanced RTIs), the provision of SRH services cannot deliver high profit margins to

clinicians. Where such margins do exist, the conflict between profits and equity is significant, due to the challenge of diversifying across multiple-income-stream services within the envelope of SRH care – profit for SRH services means high margins and low volume in a niche area of care. Pressure from donors to demonstrate sustainability can have a damaging effect when demand is fragile.³⁴ In this context, the strategies applied by those institutions capable of making SRH service delivery both equitable and financially sustainable are of great interest.

In 1989, WHO formally endorsed a model of rotating drug funds which was codified in the Bamako Initiative.³⁵ Since that time, assuring the sustainability of lower-level services for low-income populations has been recognized in most instances as needing a more nuanced approach. This approach encompasses cross-subsidization from more profitable services with lower social value to loss-making but high social-value services. Simple in theory, this approach is difficult in practice. The revolving medical funds of Pro Redes Salud in Guatemala appear to be accomplishing something along these lines through a two-stage division of responsibility, in which NGOs deliver services and the revolving drug fund supplies the NGOs at cost. In Kenya, the Mission for Essential Drugs and Services (MEDS) operates similarly, but on a larger scale and with a scope that includes all essential medicines – particularly and recently – antiretrovirals. Like Pro Redes Salud, MEDS is a non-profit entity, charging a mark-up on drugs which is designed to cover costs but no more. Critical to both is the scale and the style of the relationship between the pharmaceutical supplier and the recipients. The formalization of this interaction inhibits unreimbursed drug transfers which might otherwise make the whole system unsustainable.

While MEDS and Pro Redes Salud focus on an application of risk-pooling so as to achieve average costs for pharmaceuticals, a number of other initiatives are looking to achieve sustainability

through diversification of income streams – subsidizing SRH services through non-SRH profit-making income. The Clinix Health Group in South Africa and the Bushenyi Medical Centre in Uganda are both examples of networked private clinics that provide a range of for-profit inpatient and outpatient care – including SRH services – that are sustainable service delivery sites for SRH because of the income from a diversified portfolio of care offered. Both, incidentally, focus on serving low-income populations, which they target through selection of poor areas for locating their clinics. In Nicaragua, Profamilia clinics achieve full cost-recovery through expanding the range of services provided in each clinic to include such high-end services as x-ray, mammography, and surgery. Ultrasound procedures, for example, are primarily elective for antenatal care, but because of income from these non-essential uses, the equipment is available when it is clinically necessary.²⁶

These examples demonstrate both the potential of achieving sustainable funding through better cost-spreading and risk-pooling, and also how difficult this approach can be. The programmes described above differ from place to place, and replication across national borders has by and large either failed or required significant reworking of the model to adapt to local conditions.

4. Conclusion

The challenges in developing countries for the delivery of SRH services that are both sustainable and equitable are not easily overcome. While some funding initiatives have proven themselves capable of withstanding political changes, this is not always the case and priorities unrelated to health or equity drive many international and national funding decisions. Because of this factor, much of the innovation in this area has focused on resource-pooling and on purchasing (or subsidy) of SRH services. Within these broad categories, there are a

number of initiatives that have taken steps towards addressing equity and sustainability issues.

Ongoing documentation and evaluation of SRH innovations remain important, both to improve the programmes and initiatives that are underway, and to disseminate lessons learned so as to speed replication where justified. Particular attention must be paid to the socio-economic status of programme beneficiaries, to assure that equity issues are not forgotten in the rush to increase uptake of services. Unintended effects of programmes, funding initiatives, and policies will occur. Therefore, processes for monitoring and mitigation of any negative effects must also be designed into new activities.

While no 'one-size-fits-all' solution to the particular challenges of SRH services exists, there are examples of successful innovations in targeting, financing of government provided care, demand-side subsidies, and sustainability. For most of these innovations, information on long-term success is not available, precisely because the ideas being tested are new. They nonetheless provide encouragement and a strong foundation on which to base advances in this field.

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4

Scaling up health system innovations at the community level: A case-study of the Ghana experience^a

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1. Introduction

Four decades after the 1978 Alma Ata Conference, the global consensus for achieving “health for all” by the year 2000 remains intangible for most sub-Saharan African families. Moreover, concerns about reproductive health and rights that were fostered by the 1994 Cairo International Conference on Population and Development (ICPD) have also been inadequately addressed in the region. Not only are United Nations Millennium Development Goals (MDGs) for child and maternal-mortality reduction unmet by any sub-Saharan African country, the recently promulgated target of establishing accessible reproductive health services for all is a challenging prospect throughout the region.

The demographic consequences of poor reproductive health conditions are relentlessly evident. According to a recent World Bank review, thirty-one of the thirty-five ‘high fertility’ countries in the world with a total fertility rate (TFR) of more than 5 are located in sub-Saharan Africa.¹ In the two decades after the Alma Ata conference however, the region witnessed a decline in the TFR from 6.3 to 5.5 in the 35 sub-Saharan countries where Demographic and Health Surveys (DHS) have been conducted. Despite this achievement, recent data collected since 2005 have shown that several countries in the region have experienced stalled or increasing fertility rates since their previous DHS results. Namely, Ghana, with zero national fertility declines between 1998 and 2003, and Cameroon, Guinea, Kenya, Mozambique, Nigeria, Rwanda and the United Republic of Tanzania with an increase in fertility within the same period.²

Even in countries with reduced fertility, not all segments of society have experienced either fertility declines or the associated social and economic improvements equally. Women in rural areas still have maintained relatively high birth rates of two more births on average than their urban

counterparts. Fertility differentials arise mainly from disparities in contraceptive use among rural women living in poverty.² According to available country DHS statistics collected over the past five years, the average contraceptive prevalence in sub-Saharan Africa was more than twice as high in urban areas in comparison to rural areas (25% versus 12%). Reported rates of unmet need for contraception however, are high in both urban and rural areas, (27% in urban versus 23% in rural areas).² Since unmet need for family planning is actually lower in rural areas despite higher fertility levels, this finding suggests that fertility demand remains high in rural sub-Saharan Africa – a circumstance that is undoubtedly related to pervasive poverty, poor health conditions, and sustained pronatalist traditional values. Capacities to overcome social and economic constraints to reproductive change with accessible services are constrained by poor access to public infrastructure and underfinanced government social and health services.

The Ghana Community-Based Health Planning and Services (CHPS) initiative originated with a 1993 exchange between the Ghana Ministry of Health and the Bangladesh Ministry of Health and Social Welfare. At that time, a team of Ghanaian scientists, administrators, and policy-makers collaborated with counterparts in Bangladesh to develop a programme that would transfer elements of the highly regarded Bangladesh approach to Ghana, adapt strategies to local circumstances, test their efficacy in an experimental trial, and scale up the results. This experimental trial was deemed to be essential because social research on African reproductive norms suggested that Asian programmatic strategies would not work in the African context.^{3,4}

Representing the culmination of a process of experimental research utilization, CHPS provides an example of a successful approach to evidence-based national programme development in Africa that derived lessons from the Bangladesh

experience. This chapter focuses on the principal scaling-up innovation that was demonstrated by the Bangladesh example. This innovation involved the national replication of research in districts in Ghana that adapted the Matlab experiment to a

non-research environment and generated results that built policy commitment to utilizing the Matlab service model on a large scale (see Box 1). The research also produced evidence for guiding and refining the scaling-up process.

Box 1. The Matlab experience

Evidence from Matlab suggested that community-based approaches eventually cut in half the national total fertility rate of 6.8 in less than two decades – a success-story that was widely publicized by the early 1990s.⁵ Substantial improvements in child health were also evident. International donor support, combined with Governmental political commitment, had led to the hiring of nearly 28 000 female community-health workers whose jobs involved visiting households, meeting with residents, caring for the health needs of mothers and children, and offering injectable, oral, and barrier method contraception. Doorstep reproductive and child health services were backed up with paramedical clinical referral points known as “Sub-District Health Centres” where clinical family planning was available along with basic primary health-care services.

2. CHPS: A programme that works

The experience of CHPS, a programme that promotes the idea that communities can be active participants in the provision of their own health care, demonstrates that urban/rural differentials in health are not insurmountable. Indicators of reproductive health status and practices of impoverished and illiterate women improved when CHPS was introduced in 1999. Most indicators of access to and utilization of maternal health services were improved by community exposure to the CHPS approach. These indicators included utilization of safe motherhood services, contraceptive use, and partner condom use among women who believed that they were at risk of HIV.⁶ In communities covered by CHPS, child health indicators also improved. These indicators included immunization coverage, patterns of parental health-seeking behaviour and care for most recent illness, and parental knowledge of priority health problems.⁷

Evidence from the initial implementation effort found that between 1995 and 1998, childhood immunization coverage increased from 30% to

over 83%, contraceptive use increased from 3% to 20% in the area where the nurse worked within a context of active community support, and infant mortality rates declined from 141 to 96 per 1000 live births. By 2001, the fertility rate declined by almost one birth per woman, representing the largest fertility effect ever demonstrated in Africa through programmatic intervention.^{8,9}

3. The long road to designing a programme that works

3.1 Early disappointments

For the past two decades, the challenge of increasing the equitable distribution of reproductive health services in Africa has invited consideration of the potential application of strategies that have contributed to Asian programmatic success. Of particular interest was evidence that improving geographical access to services could fulfil unmet need and catalyse reproductive change – a strategy known as “community-based distribution” (CBD) of family planning services. CBD programmes were launched throughout Africa in the 1980s, with the hope that Asian experience with this approach would occur

wherever CBD was launched. However, several reviews of initiatives of the 1990s noted African programmatic failures to replicate critical elements of Asian CBD success.

For example, a 1993 review concluded that most African CBD programmes remained focused on urban areas and towns and were community-based in name only. Even when programmes were based in rural areas, strategies were overly homogenized – with little attention to decentralizing strategic planning in response to diverse ethnic and social compositions of African countries. Compounding strategic problems, political and administrative commitment remained weak in most African countries, hampering efforts to build extensive national community-based programmes on the Asian model.¹⁰

Survey data compiled up to 1990 suggested that Ghana's family-planning programme was an example of African programmatic failure, despite decades of policy commitment and extensive investment in the CBD concept. Reviews of programme operations provided insights into why this had occurred. For example, a 2000 assessment of CBD, summarizing the experience of the 1990s, concluded that NGO activities that extended to districts throughout Ghana were typically limited to the few communities where programme operations had been initially launched. Moreover, CBD was usually an extension of clinical services rather than a comprehensive approach that relied upon village-resident personnel. Finally, management and administrative lapses compounded flaws in the operational design of CBD, paralysing the programme rather than fostering its scaling up.

It soon became clear from research findings that primary health-care programmes were also failing in Ghana. This led to policy-maker interest in the possible relevance of Asian programmatic models to Ghana. Particular attention was directed to evidence showing that Bangladesh,

despite formidable challenges, had succeeded with its national reproductive and child-health programmatic strategy. Two decades of uninterrupted demographic change in Bangladesh suggested that daunting social, economic, and institutional constraints to reproductive change could be addressed if a community-health and family planning programme was developed, launched, and sustained over time.

3.2 The search for alternatives

In the early 1990s, demographic evidence and operational reviews led the Government of Ghana to realize that its health programmes were failing to meet the health-care needs of its rural poor.¹¹ The Government launched a programme of health reform, in keeping with international models for the sector-wide approach (SWAp) that emphasizes the importance of integrating vertical programmes and decentralizing management and planning. Taken together, these reforms represented the health component of the National Poverty Reduction Act of the Ministry of Health in 1998.¹²

Cost recovery

While there was policy consensus about the need for reform and the merits of SWAp, the actual model for service delivery at the periphery of the programme was the subject of continuing discussion and debate. One perspective was based on the UNICEF-sponsored Bamako Initiative, which had been launched at a 1987 conference of regional ministers of health. Bamako created a framework for many countries – including Ghana – to promote community-based oversight, financing, and delivery of health services, as well as the incorporation of traditional leadership in the planning and provision of health services.¹³

Cost-recovery schemes were linked to the provision of essential drugs, so that volunteers could provide accessible basic health services at minimal cost

to the formal programme. Despite their appeal, however, volunteer programmes were not working well in Ghana. Evidence compiled in several programme reviews showed that volunteers often exploited weak supervision and poor community understanding of their roles by becoming peddlers of drugs that they were untrained to dispense. Volunteers diverted parental health-seeking away from clinics, instead of referring patients for treatment.¹⁴

Community health nurses

In 1989, the Ministry of Health responded to problems associated with volunteer services by launching a programme for hiring and training community health nurses (CHNs). By 1992, over 2000 CHNs had been hired and trained for 18 months in basic primary health-care services, including, the treatment of febrile illnesses such as malaria and acute respiratory infections, the management of diarrhoeal diseases, and the promotion and management of comprehensive childhood immunization. Unlike volunteers who were restricted to the distribution of oral pills, CHNs were trained in the provision of both injectable and oral contraception, and were oriented to family-planning referral services, basic safe-motherhood interventions, and reproductive health.

While the CHN concept solved some of the operational problems associated with volunteer deployment, resources for posting CHNs to communities were constrained. Nearly all were assigned to existing subdistrict health centres, where they joined an already fully staffed team of paramedics. This inefficient deployment of CHNs failed to increase the coverage of reproductive- and child-health services. In the most underserved rural areas of Ghana, subdistrict clinics were not only geographically remote from most households, but clinical services were culturally inappropriate. The health system was socially isolated and managers failed to engage community leaders in health

communication, promotion, or social support of services. Failure to engage the social system was particularly damaging to reproductive health, since building understanding among men and the male leadership system was crucial to offering services that women could embrace without social opposition or spousal discord.

Thus, the two most promising community-health service components of the SWAp agenda – volunteers sustained with Bamako cost-recovery mechanisms and CHNs posted to clinics – were lacking any evidence that either strategy could work. To generate evidence to resolve strategic debate about their relative merits, the Ministry of Health launched a field experiment to develop, test, and document feasible means of implementing the SWAp policy at the community level.

In Bangladesh, an experimental study in a rural impoverished area known as Matlab had shown that low-cost health and family-planning services could induce reproductive change – even in a setting where social norms, economic conditions, and development circumstances were unfavourable to progress of any kind¹⁵ (see Box 1). A project of the Ministry of Health and Social Welfare had tested means of transferring service innovations from Matlab to the national programme in two rural districts, generating results that guided a decade of health-sector policy, priority, and operational planning.¹⁶

In Matlab, the integrated package of household and clinical health services offered was backed by a research programme for guiding detailed strategic planning, national political commitment to programme development, and international funding. The programme was supported by the World Bank, which financed the incremental costs of innovation and reform. The system of action and commitment catalysed the increase in national contraceptive prevalence from 3% to 32% between 1970 and 1988, and resulted in one of the most

rapid declines in fertility ever recorded.¹⁷ Matlab experience, its replication, and the large-scale operation that research had inspired, suggested that an African government could achieve success by improving equitable access to affordable health and contraceptive technologies. In response, a team of Ghanaian officials visited Matlab in 1993 to plan the Navrongo experiment.

Participants in this exchange were mindful of the contrasting institutional and social context for a trial of the Matlab approach in West Africa, and the inherent risk in assuming that success in South Asia would be transferable to Ghana. Bangladesh is a culturally homogeneous and monolingual country. Yet, at the community level, its social organization is diffuse and complex. Families rely upon interpersonal networks and connections for economic advancement and social security. Organized health and social programs therefore rely upon formal bureaucratic mechanisms for top-down planning and leadership, institutional arrangements that existed centuries before the arrival of the British. Community-based programmes function with minimal organizational reliance on traditional leaders, village governance, or social institutions. External aid to Bangladesh in the early post-independence era therefore utilized large, bureaucratic and centralized programmes for implementing services.

In contrast, Ghana is a polyethnic setting with 82 languages and cultural groups, all with well articulated social institutions. Clearly, the organizational model that worked well for scaling up the Matlab experiment would be irrelevant to the Ghanaian context, where decentralization, adaptive planning, and leadership by consensus would necessarily underpin any successful strategy. Ghana required a new round of experimentation and trials, where the principles of community-based health and family planning services would be developed from the ground up, subordinating programme management to vibrant institutions

of village governance, collective action, and social cohesion.

4. Creating a Ghanaian response

4.1 The Navrongo experiment

Three study communities of the Kassena-Nankana district in which the Navrongo Health Research Centre operated were selected for the pilot project. The district was ideally suited for policy research because results could not be dismissed as the product of favourable development circumstances. Navrongo served an isolated and impoverished locality in northern Ghana, where health problems resembled circumstances prevailing throughout the Sahelian regions of Ghana. Family-planning practice in this locality was rare, owing to pervasive cultural, economic, and institutional constraints to reproductive regulation.¹⁸ Despite its impoverished conditions, the Navrongo experiment reduced fertility and maternal mortality, whereas national averages remained constant. Between 1995 and 1998, fertility reduced by 15%⁹ and maternal mortality ratio declined from 800 to 600 maternal deaths per 100 000 over 14 years (1985-1997).^{19,20}

The study began with participatory planning and action for resolving problems associated with the Bamako Initiative. These problems involved high volunteer turnover, low quality of care, lapses in supervision, and widespread disruption in the flow of essential drugs (including contraceptives). Pilot research developed ways to select, train, and supervise volunteers that would avoid such problems. Community-engagement strategies were developed for ensuring transparency about and accountability for the flow of essential drugs, with safeguards for ensuring that Bamako-mandated revolving accounts would work as originally envisioned.

Pilot activities were also directed to clarifying means of supporting the deployment of CHN to

community locations. By engaging leaders, social networks, and communication systems in health-promotion and support, the programme could marshal traditions that had long been ignored by the health-service system, but were the very backbone of institutions that govern daily life in rural Ghanaian society. Once organized, community leaders and volunteers were willing and more than capable of mobilizing human and capital resources to support community-health services.²¹

Building on this new understanding of how to organize services, two general domains of the Navrongo experiment were delineated. Each of these domains corresponded to perspectives of the policy debate; each represented sets of untapped resources for developing community health services; and each defined domains of a factorial design (See Box 2).²²

Box 2. The Navrongo experiment

The Navrongo experiment used a factorial, four arm design to test the hypothesis that strategies developed in the pilot phase could lead to reduced fertility and childhood mortality. The arms were defined as:

- **“Community Health Officer (CHO)” arm:** reoriented existing clinical nurses to enable them to provide community health care and assigned these workers to village locations.
- **“Zurugelu (togetherness)” arm:** mobilized cultural resources and social networks in order to integrate project management into the traditional system of social organization and communication. A primary component of this arm involved a gender component to facilitate male ownership of reproductive health services and expand women’s participation in community activities.
- **Joint-implementation arm:** integrated interventions from the CHO and *Zurugelu* arms to assess the combined effect.
- **Comparison area:** provided clinical services, equivalent densities of staff and access to supplies and technical training.⁹

Reorienting community health nurses

For the health-service arm of the experiment, CHNs were retrained in community organizational skills. These CHNs were given the new title of “community health officer” (CHO) to recognize their new capabilities and role. Pilot activities clarified appropriate work routines, community-engagement procedures, and training methods for implementing CHO services. Each CHO had originally been assigned to central subdistrict health facilities, and had already received 18 months of clinical training. To prepare them for community health services, CHOs were provided with an additional six weeks of orientation to community mobilization and engagement methods.

CHOs offered immunization services and treatment of childhood ailments and diseases such as malaria, acute respiratory infections, and diarrhoeal diseases. Reproductive health services included family planning, adolescent health and education, STI treatment, as well as safe motherhood services (antenatal, postnatal and supervised delivery for both facility- and home-based deliveries). Most importantly, the CHO served as a much-needed referral point, providing quicker and streamlined access to a higher-level medical practitioner for complicated cases beyond the scope of the CHO. The CHO was expected to supervise traditional birth attendants (TBAs) and assist in deliveries deemed to be normal or low risk.

Mobilizing the community and health-service volunteers

From the start, chiefs and elders were asked to participate, and they eagerly convened community gatherings to seek volunteer support for constructing dwelling units termed “community health compounds” (CHCs). The CHC concept used local architecture, materials, and resources to develop health posts where nurses could live and provide 24-hour clinical services, as well as routine doorstep mobile primary and paramedic services. Once nurses had completed retraining sessions, they were designated as CHOs and assigned to CHCs. Supervisors assisted nurses in delineating catchment zones comprising a population of 3000–3500, and each zone was provided with basic clinical equipment, start-up pharmaceuticals, motorbikes, and training to provide household outreach services.

The *zurugelu* arm of the experiment mobilized cultural resources of chieftaincy, social networks, village gatherings, volunteerism, and community support. Whereas community liaison in the community health officer dimension focused on starting the programme, liaison in the *zurugelu* arm was continuous, involving regular community gatherings, the recruitment and management of male health-service volunteers, community-network mobilization, and other activities designed to integrate project management into the traditional system of social organization.

A prominent feature of the *zurugelu* dimension was a gender component, developed in the course of the pilot project. Research showed that men were anxious about the impact of family planning on their status and role, and women feared violence and social discord if they adopted family planning.²³ Activities were designed to address these anxieties by building male leadership, ownership, and participation in reproductive health services and by expanding women’s participation in community activities that traditionally have been the purview of men.

This social-action agenda was designed to enhance the autonomy of women in seeking reproductive- and child-health care, thereby reducing the social costs of women’s participation in the programme. The *zurugelu* system involved this social-action agenda, combined with health services consistent with the Bamako model. The cost of volunteer-provided essential drugs was addressed with a start-up kit of essential drugs, and with training in managing services and revolving accounts so that the flow of supplies would be sustainable and financed by the community.

Evaluating programme impact

The Navrongo experiment was designed to measure the relative impact of mobilizing community-based health care through newly retrained CHOs, mobilized community volunteers, and the combined effect of community volunteers and CHOs compared to the traditional health-care system. Navrongo results soon demonstrated that posting nurses to communities rapidly reduced childhood mortality.^{24,25} Combining volunteers with community-based nurses represented an effective strategy for introducing family planning.⁸ The cost of introducing the CHO and volunteer to the US\$ 6.80 per capita primary health-care budget was under US\$ 2 per capita per year, demonstrating that community health-service delivery is affordable. Grounding activities in community engagement established accountability of the nurses and volunteers. The high level of accountability and trust developed between health professionals and the community suggested that the approach was sustainable and culturally appropriate.

By 1996, the Navrongo experiment was scaled up to a district-wide experimental study. Work routines were established, and these routines have since become national activities. For example, outreach to chiefs and utilization of traditional festive gatherings – called *durbars* – became the responsibilities of the CHOs. Each CHO was

stationed at the designated CHC, and equipped with essential health-care supplies, a motorbike, and fuel.

Taken together, the various components of the experiment comprised a set of innovations, known as the “Navrongo model”, which involved a strategy for reaching Ghana’s most impoverished and vulnerable families. Strategies were premised on the notion that poor parents are often passive about seeking health care for their children, and that service delivery must compensate for this passivity by being an active agent in serving clientele. CHOs sought clientele in the course of providing doorstep care. Effective doorstep outreach required each CHO to be immersed in local cultural norms and to build substantial trust with the community. Within this framework, nurses and volunteers became active participants – continuously monitoring the health status of the community as a whole, as well as that of individuals. Nurses provided health care in market squares, during community outreach activities, and in the personal and private living areas of each household compound within their zone.

4.2 Replication of the Navrongo model

Demonstrating demographic success in Navrongo failed to generate an immediate consensus that the strategies were transferable and sustainable in other cultural zones of Ghana. Lack of consensus was evident in the course of a national health forum sponsored by the Ministry of Health in 1998 for discussing policy implications of the Navrongo experiment. All district health management teams (DHMTs) in Ghana were invited, as were regional directors and their technical teams as well as all national policy-makers and directors. Despite promising preliminary results, it was clear from initial reactions that the Navrongo experiment would not be implemented on a large scale unless its activities were successfully demonstrated in other areas of Ghana.

The territory of Ghana is dispersed over three major ecological zones – coastal, savannah, and Sahelian – each with contrasting patterns of human settlement and population density. In all, 82 distinct cultural groups are dispersed in 138 districts. Economic, social, and environmental conditions differ from one district to another. The critical importance of decentralization is grounded in this diversity, but the general relevance of results from a single experimental trial – no matter how dramatic may be its impact – is questionable in this context.

Attention was therefore redirected to testing the transfer of the Navrongo model to other areas of Ghana. By early 1997, the operational design had been fully implemented in Navrongo for a year. Senior officials who had sponsored the experiment travelled to the study site to monitor activities, discuss progress with project workers, and develop preliminary plans for moving work forward. These officials communicated observations to regional directors and DHMTs, some of whom conducted their own field visits to the Navrongo project to resolve their curiosity about the relevance of operations to their districts. In response to this initial spontaneous interest, the Navrongo Health Research Centre (NHRC) launched a formal programme of exchange, which was designed to foster replication projects based on the Navrongo service system. The districts of the Volta region were invited to participate in this exchange programme, which included the Nkwanta DHMT.

The exchange programme allowed the Nkwanta district DHMT to develop strategies concerning aspects of the Navrongo model that could improve health-service access and health indicators among the rural poor. The Nkwanta DHMT developed a pilot version of the Navrongo model to test whether or not the model could be replicated in a non-research setting in Ghana, launching in the process a national CHPS programme.^{26–28} Nkwanta became the first ‘lead district’ to be involved in the CHPS effort, positioning its DHMT to develop

procedures for translating the Navrongo innovation into national action. Plans called for establishing one such lead district in each of the 10 regions of Ghana.

Experience from the transfer of the Navrongo model to Nkwanta demonstrated the rationale for replication projects in the general context of scaling up evidence-based research projects in Ghana. Within a year, the Nkwanta demonstration clarified the operational process of taking up the Navrongo agenda. Activities showed that implementing the Navrongo approach required six essential component milestones (see Box 3). The demonstration and documentation of these milestones have been adopted by the Ghana Health

Service (Policy, Planning, Monitoring and Evaluation Division) as points of reference for all DHMTs in Ghana that are implementing CHPS over time.

While elements of these milestones could be discerned from initial Navrongo activities, actual demonstration and documentation of their feasibility was first pursued in Nkwanta. In 1999, the National Health Forum was focused on discussions of the Nkwanta experience with these milestones, clarification of actions required to implement them, and demonstration of the feasibility of adapting strategies to local circumstances. By consensus, the Navrongo model was adopted as national policy in the 1999 forum, due largely to the impact of Nkwanta on building a national policy consensus.

Box 3. Milestones to implementing CHPS

- **Planning phase:** DHMT demarcates all CHPS zones, clarifies traditional leadership, geographic conditions, and existing health activities. CHPS zones are delineated primarily according to the boundaries of traditional governance of the local chieftaincy system and tribal affiliations, rather than according to political-administrative lines.
- **Community entry:** During this phase, traditional leaders, chiefs, and opinion-leaders are oriented to CHPS. This is followed by the selection and training of a community health committee. Committees are trained to organize volunteer activities and support the daily living needs of nurses (such as the procurement of water, marketing, and security).
- **Community health compounds:** Community volunteers renovate or construct health facilities and living quarters for the CHO, often with the assistance of district and regional public health funding in addition to externally supported grants.
- **Essential equipment:** each CHC is provided with essential clinical and transportation equipment for CHOs and volunteers, as well as drugs and other basic supplies. This includes a motorbike for CHOs, a refrigerator for maintaining temperatures of medicines requiring a 'cold chain', a backpack with essential medicines, and bicycles for health volunteers.
- **Community health officers:** are trained in community health liaison methods, record-keeping, and service activities that are unique to community work. Family planning services, for example, require procedures for monitoring follow-up, discontinuation, referral, or side-effects. The CHO is officially introduced to the community in a traditional *durbar* celebration.
- **Volunteers:** Village health committees designate volunteers who are then trained to support CHOs with community education, counselling, basic first aid and preventive home-care services. Male volunteers are trained to mobilize male support for family planning.

5. Replication: Nkwanta District Case-Study

Initial success in launching the Navrongo model in Nkwanta was followed by operations research on the impact of the replication process. This research was designed to test the hypothesis that operations that worked in Navrongo could, in fact, be transferred to a contrasting cultural situation.

Certain elements of the Navrongo context also applied to Nkwanta. Nkwanta was isolated and remote, with an economy that was dominated by subsistence agriculture. Socioeconomic circumstances in Nkwanta were well below levels

that prevail in central and coastal Ghana, ranking the district among the poorest in the country. According to recent data collected by the Nkwanta Health Development Centre in four sampled CHPS zones, less than 29% of male heads of households between the ages of 15 and 49 can read without difficulty in any language, whereas only 15% of their female members of households (aged 15–49) have the same level of literacy (see Table 1). In a previous survey conducted in 2004, only 4% of female respondents living in CHPS zones across the district could read without difficulty a newspaper, letter, book or other printed material (which are primarily written in English).

Table 1. Literacy levels in sampled CHPS zones for male heads of household and women aged 15–49 in Nkwanta District.^c

Literacy levels	Male heads of household % (N)	Female members of households % (N)
Reads easily without difficulty	29 (41)	15 (84)
Reads with difficulty	19 (27)	22 (119)
Does not read at all	52 (74)	63 (347)
Total	100 (142)	100 (550)

Source: Nkwanta District Survey 2007.

In 1995, health services in Nkwanta were rudimentary – with only a handful of nurses serving a district of just under 200 000 people. There were health-delivery points in three of five subdistricts, but no district hospital. Within three years, the district had built a district hospital and two more subdistrict facilities. However, health services were still not equitably distributed in the district since most of the additional facilities had been built in central locations. Since only five health centres had been opened in rural areas, access to basic primary health care was severely constrained for most households.

Motorbike and truck mileage readings showed that the average household was approximately 14 km away from the nearest subdistrict health facility before CHPS was implemented in 1998. By 2004 (after CHPS had been fully implemented for five years), the distance to the nearest health facility had shortened to under 9 km (see Table 2). In 1998, only 44% of the district's households were less than 10 km away from their nearest health facility, whereas in 2004 more than 63% had a health facility within a 10 km travelling distance. For the purposes of placing CHPS zones where they were needed most, zones were established in areas that were already more than 10 km away from the pre-existing subdistrict health facilities (including the hospital and clinic outposts).

^c Most printed material in Ghana is published in the English language. Therefore, invariably any measurement of literacy coincides with mastery of the English language.

Table 2. Distance in kilometres from nearest health facility to sample households before and after CHPS in Nkwanta District.

Distance to the nearest health facility, when that facility is a:	1998 (before CHPS)				2004 (after CHPS)			
	No. of households	Minimum (km)	Maximum (km)	Mean (km)	No. of households	Minimum (km)	Maximum (km)	Mean (km)
District hospital	357	2.3	34.3	16.2	198	2.3	26.6	9.2
Sub-district health centre	716	0.2	36.0	12.8	452	0.2	28.0	8.2
Clinic/outpost	86	1.0	16.0	9.5	86	1.0	16.0	9.5
Community health compound	-	-	-	-	423	0.4	25.8	9.0
Average distance to nearest health facility	1159	0.2	36.0	13.6	1159	0.2	28.0	8.8

Source: Nkwanta District Survey 2007.

At the time of CHPS implementation most communities in Nkwanta lacked any type of telecommunication or access to roads. The population generally had no access to pipe-borne water, and instead depended primarily on drinking water from boreholes and hand-dug wells. The district's settlement patterns were clustered by hamlet, each with multiple ethno-linguistic groups, which include semi-nomadic populations. One community could have as many as five main ethno-linguistic groups, each group led by its own chieftaincy and lineage system. Migration patterns and linguistic diversity presented unique challenges in terms of behavioural change, communication, and health education.

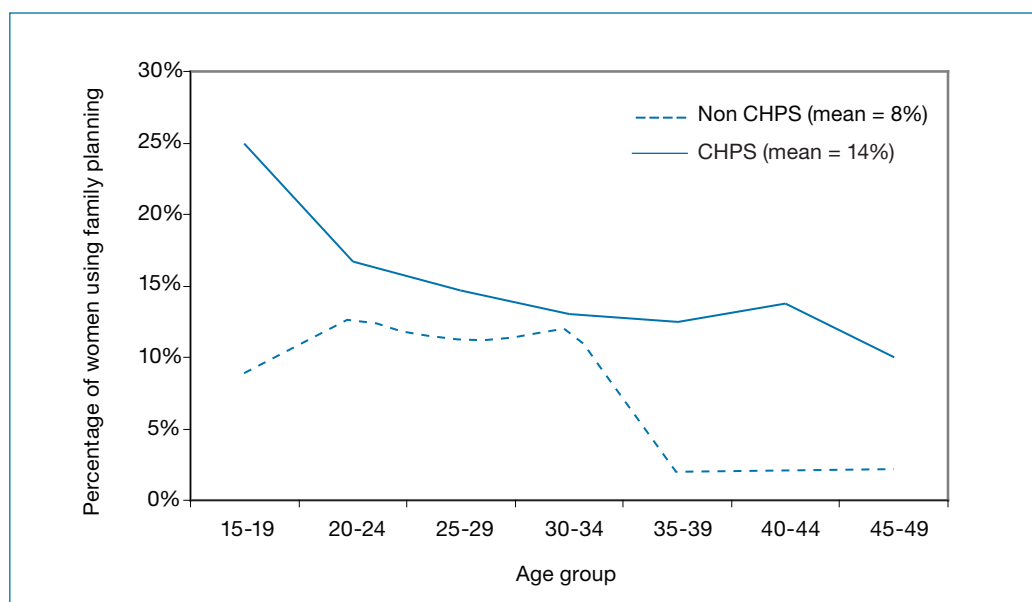
In the context of this profound isolation and poverty, only one doctor was assigned to the district. Statistics on health status in the district are indicative of the profound effects of isolation and poverty on well-being. Communicable diseases were prevalent – leading to tragically high rates of infant and childhood mortality. Waterborne diseases (such as schistosomiasis and guinea worm) were endemic. Both family planning and childhood

immunization coverage in Nkwanta were low, and approximately 25% of all children under five years of age suffered from severe malnutrition.³⁰ The high prevalence of measles, malaria, and other communicable diseases was compounded by the inaccessibility of health facilities.

5.1 Evidence of impact

Service statistics demonstrate that observed improvements in health are attributable to the introduction of CHPS and that CHPS improves upon the equitable distribution of family-planning services in hard-to-reach rural areas. Data from the 2004 district survey suggest that women living near a CHPS health centre are more likely to exhibit knowledge of available family planning methods, and are more likely to use a contraceptive method and to have exhibited lower fertility after four births. Figure 1 shows that among women living in households more than 10 km away from the nearest town centre, women in CHPS zones have a contraceptive prevalence rate of 14%, whereas only 8% of women living outside CHPS zones report using contraceptives (see Figure 1).

Figure 1. Contraceptive prevalence rates among women aged 15–49, living ≥10 km away from town centres by exposure to CHPS in Nkwanta.



Source: Nkwanta District Survey 2007.

Despite health-education campaigns, condom use rates are relatively low. However, it is clear from the research that CHPS does make a difference. In Nkwanta, female respondents aged 15–49 in CHPS zones reported condom use rates (women reporting use during last intercourse, as a current family planning method, or ever use) just under 9% and women not living in CHPS zones had 4% usage rates. When comparing distance from the nearest town centre by age, CHPS has made a significant impact on increasing condom use at all age groups (see Figure 2).

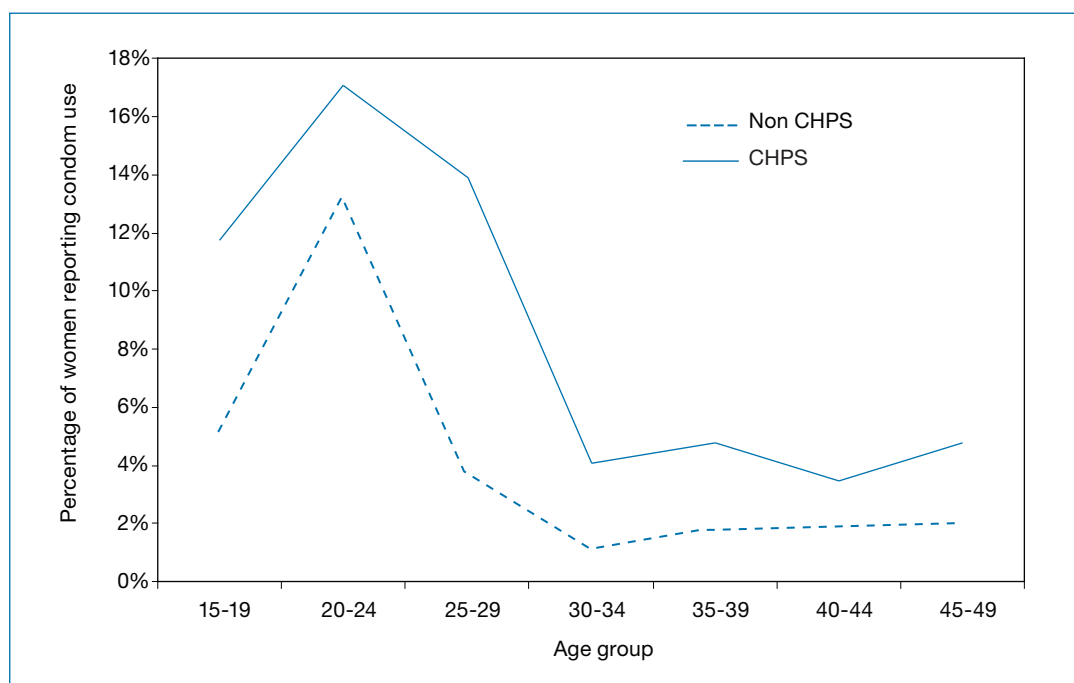
5.2 Adapting the model

Nkwanta has not limited its health innovation activities to the Navrongo model, however. For example, Nkwanta launched an adolescent health volunteer project known as the Health Ambassadors Programme, that trains youth living in CHPS zones to participate in health campaigns, including condom distribution. The Health Ambassadors work as apprentices to CHOs. The programme is self-funded with small donations

and by local sales of cloth purses made from leftover flour sacs and scrap materials donated by seamstresses. Part of this funding is allocated to a small scholarship award programme that gives financial incentives to continue school at each educational level. For those graduating from senior secondary school, district scholarships for further education at the regional and national level are available for those choosing to become CHOs. Other paid positions – such as field researchers and health aid workers – are also available (on a competitive basis) within the district for graduates of the programme.

Providing family planning in Nkwanta has been a challenge – not only because demand for family planning is new to this population (owing to cultural constraints to demand for services), but also because the effective supply of services is constrained by the geographical terrain. Because couples are new to the concept of family planning, contraceptive users often initially accept during home visits.

Figure 2. Condom use rates among women aged 15–49 living ≥ 10 km from nearest town centre by exposure to CHPS in Nkwanta.



Source: Nkwanta District Survey 2007.

Injectable contraception is typically the preferred method. This creates dependency on the programme for regular and continual access to repeat visits at the time that follow-up injections are needed. However, sustaining regular visitation is particularly challenging during the rainy season when many villages and homesteads are isolated by flooding rivers or impassable roads. Gender orientations to the rigours of fieldwork confound general service supply difficulties. Most CHOs are women, many of whom resist assignments requiring physically strenuous field visits.

In response, the Nkwanta DHMT has recruited male CHOs for posting to challenging environmental locations (where effective service work requires crossing rivers and traversing rough terrains). But all CHOs – men and women alike – have found ingenious ways to increase access. Some CHOs offer services near places where women fetch water, or provide services in the market places while the women are purchasing their weekly produce. Linking services to marketing permits CHOs to

accept commodity payment for contraceptive supplies – so that clients who lack cash can barter eggs, maize, and yams for their family-planning supplies.

6. The future of CHPS

Currently, 110 out of 138 districts in Ghana are implementing CHPS at one level or another. Where CHPS is implemented, the approach improves access and diminishes social barriers to health care – improving reproductive and child-health indicators in the process. Safe-motherhood services, family planning, and reproductive-health indicators improve wherever CHPS is implemented. Navrongo demonstrates strong demographic evidence that the model can accelerate achievement of the maternal and child-health Millennium Development Goals. Nonetheless, there are gaps that the programme aims to address in the future.

6.1 Meeting the needs of the community

CHOs posted to villages are typically expected to provide midwifery services even if they lack training for this important service. To respond to widespread community interest in improved maternal-health care, several district health-management teams are now rotating CHOs in three-month maternity-ward assignments with the goal of improving the midwifery skills of CHPS workers. Where staff has become available (such as in Birim North district), CHOs are paired in communities – with one qualified in midwifery and the other trained in basic CHPS services. Ultimately, this broader range of capabilities will improve the quality of CHPS reproductive-health care, permitting support for routine deliveries and competent referral of obstetric emergencies.

Neonatal mortality remains high, even in experimental areas of Navrongo. There is a need for experimentation on ways to improve CHPS interventions for saving newborn lives.

6.2 Solving operational problems

When discussing problems that they encounter with CHPS, DHMTs, supervisors, and nurses often cite shortages of essential resources. Posting nurses within communities accelerates health-service encounters, expands demand for essential drugs, and depletes district pharmaceutical stocks in the process. To develop and test ways of solving this problem, Nkwanta has started the Ghana Essential Medicines Initiative (GEMI) to test means of sustaining the flow of essential drugs and to develop procedures for CHOs to report pharmaceutical needs.⁷

GEMI demonstrates that Nkwanta has moved beyond the role of replication research, and into providing CHPS within a district where operations research can be launched for solving implementation and scaling-up problems.

In recognition of this transition, the Ghana Health Service has created the Nkwanta Health Development Centre as an institution for conducting research on CHPS implementation issues.

6.3 Catalysing leadership

District directors of medical services are sometimes hesitant to launch CHPS because of concerns that change will not be sustainable, manageable, or even desirable. Policy documents do little to dislodge implementation paralysis, particularly if nurses also resist community posting or if supervisors are reluctant to change operations.

Research has shown that DHMTs that have visited Navrongo or Nkwanta and have received on-site orientation are much more likely to start CHPS operational planning and convert plans into action than district teams that have not participated in district visits. Evidence suggests that exchanges are particularly productive if teams include front-line workers, so that participating CHOs and supervisors can convert experience into CHPS pilots in their home districts.^{9,26}

In response, Nkwanta has shifted its focus from being a study site for testing the replication of the Navrongo model and has since become a health systems demonstration site. District managers, implementation teams, and community nurses can observe operations, consult with experienced counterparts, and plan their own CHPS systems development on the basis of practical in-service training.

As an important part of the exchange programme, community nurses live and work with Nkwanta CHPS health officers in their field stations for a short (one- to two-week) rotation. Research has shown that most national CHPS progress is associated with this Navrongo and Nkwanta demonstration

process.²⁷ There is a need to extend this programme of exchange, with funding for participating teams to implement pilots on the basis of lessons learnt.

Teams from all regions of Ghana and from other countries have visited Nkwanta, with the goal of helping participants develop CHPS pilot projects. Beginning in 2005, district teams (listed in chronological order) from Sierra Leone, Burkina Faso, Ethiopia, and Kenya have visited Ghana for Nkwanta-based exchanges.²⁸

7. Conclusion

CHPS demonstrates that operational innovations developed in Asia can be utilized in Africa. However, the CHPS experience also attests to the need for strategic planning, experimentation, and replication research in Africa.²⁹ The process of evidence-based planning that was developed in Bangladesh proved to be useful and relevant to the Ghanaian context, but the programme that emerged from Navrongo and Nkwanta bears little resemblance to its distant cousin in Matlab. Ghana's social system, leadership patterns, ethnic complexity, and other important features of the environment required careful redevelopment of the Bangladesh model.

The Ghana example is less of a demonstration of the transferability of Asian success to Africa than a demonstration of the need to reformulate imported models when they are introduced into the African context.¹⁴ Social and operations research provided the evidence that guided this reformulation process. In particular, the Nkwanta story attests to the value of replication research in scaling-up initiatives. Just as the extension districts catalysed scaling up in Bangladesh, the Nkwanta replication project catalysed scaling up in Ghana. Nkwanta's results are notable, less in the manner of showing that a uniform model could work but rather in demonstrating that piloting could be a tool in decentralized strategic planning.

Consensus-building that was fostered by replication research was even more important to the scaling-up initiative in Ghana than had been the case in Bangladesh. CHPS operates within existing budget parameters of the Ghana Health Service. No donor has subscribed to offset its incremental costs. In Bangladesh, every element of the scaling-up process had World Bank budgetary implications, resources, monitoring, and support. Because CHPS has yet to generate this critically needed international commitment, the pace of scaling up has been more constrained than in the case of Bangladesh.

Nonetheless, evidence emerging from Nkwanta and Navrongo research has set the stage for rapid scaling up in the future. Impact research in both Navrongo and Nkwanta provides unequivocal evidence that CHPS can accelerate improvements in reproductive and child health. Peer exchanges, information, demonstration, milestones, and other products of operations research provide clear guidance on how CHPS can scale up this impact nationwide. Clear guidance on how CHPS can succeed in the future is provided by the effect of peer exchanges on the diffusion of consensus for change, community exchange of information for fostering further implementation within Ghana, staff recruitment and training policies, the content and implementation of milestones, strategies for sustaining the flow of essential medicines, and other products of operations research.

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Section 2

Beyond the clinic walls



5

Sexual and reproductive health and poverty

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1. Introduction

The 1994 International Conference on Population and Development (ICPD) brought the importance of sexual and reproductive health (SRH) to the attention of policy-makers worldwide. The subsequent neglect of SRH, and its exclusion from the Millennium Development Goals (MDGs), have resulted in a patchy evidence base concerning the links between poverty and SRH. Clearly poorer populations suffer worse reproductive health, but the mechanisms and sometimes even the extent of the link remain difficult to specify.

This chapter presents an outline of existing research on the relationship between poverty and SRH and suggests areas in which effort should be concentrated in order that programmes are targeted towards those in greatest need. The relationship between poverty and SRH is bidirectional, and research has been widely conducted on the effect of poor SRH on poverty (see Greene and Merrick for a comprehensive review).¹ This chapter will focus on the effect of poverty on SRH, although clearly the circular nature of causality cannot be ignored.

The chapter will begin by briefly examining the definitions of both poverty and sexual and reproductive health. The next section presents existing evidence at two different levels: the macro level and the micro level. Macro-level findings examine associations between poverty and SRH at either a country level or an administrative regional level, to produce assessments of national poverty levels and how these levels may impact on a country's SRH. Evidence at the micro level focuses more on individuals or households, and looks at the relationship between personal or family poverty and health. Factors that mediate the impact of poverty on SRH – such as age, gender, and locality – are of great importance in the evidence base, and are addressed in the subsequent section.

The penultimate section explores interventions which have been implemented to reduce the wealth inequalities in SRH, and examines some factors that either enhance buy-in or are barriers to the implementation of programmes that both reduce poverty and improve SRH. Finally, recommendations are made on how research on the links between poverty and SRH can be advanced, highlighting the current knowledge gaps.

2. Defining poverty and sexual and reproductive health

It must be stressed that the evidence presented in this article needs to be evaluated in the light of poor data availability. In many developing countries, the main (and sometimes only) sources of data are Demographic and Health Surveys (DHS). These surveys provide a wealth of information, although the analysis of poverty is not their main motivation. Also, many aspects of SRH are difficult to measure; these aspects include unwanted fertility, the incidence of certain sexually transmitted diseases and infertility, amongst others.

Poverty can be measured in many different ways. Indeed, the Copenhagen summit in 1995 set out a general definition of poverty that recognizes that human development goes beyond purely economic factors. Absolute poverty includes “severe deprivation of basic human needs including food, safe drinking water, sanitation facilities, health, shelter, education and information. It depends not only on income but also access to social services.” (Paragraph 19, Chapter 2).²

In this chapter, however, poverty will mainly be defined as material poverty. Most country DHS include an estimate of the wealth of the household, divided into quintiles. This takes into account the physical characteristics of the household, as well as household possessions. Households in

the lowest quintile can be considered as being in poverty. This measure is not perfect, and there has been discussion about the drawbacks to these quintiles.³ However, it is felt that the quintiles give an indication of relative levels of wealth in a country at the household level. Wealth quintiles are not absolute, and therefore should not be compared between countries.

There are many different areas which are considered under the umbrella term of sexual and reproductive health. The World Health Organization states that reproductive health implies that “people are able to have a responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so”.⁴ Topics within sexual and reproductive health include fertility, pregnancy, power within sexual relationships, access to and use of reproductive health services, sexually transmitted infection (STI) incidence, and maternal health. Clearly, HIV/AIDS is also an important aspect of SRH, but will not be discussed here. The other facets can all be measured, with differing degrees of success, and will be discussed where possible.

3. The evidence: poverty and sexual and reproductive health

The aim of this evidence review is to investigate the links between poverty and sexual and reproductive health. It is clear that this relationship can work in both directions, although this review focuses on poverty as a determinant of poor SRH. This can be seen at both the macro and micro levels.

3.1 Evidence at the macro level

At the macro level, there is a longstanding literature on the effect of poverty as a constraint to fertility decline. Interest in adding to this evidence base waned in the mid-1990s, when it became clear that global fertility decline was under way – even in

sub-Saharan Africa. However, a recent resurgence in studies related to failing family planning programmes has emerged due to evidence of stalling fertility decline in many countries, and even some evidence of reversals. It is important to include this literature in a review of the effect of poverty on SRH, because high fertility goes hand-in-hand with lack of access to contraception, poor maternal health, and often a lack of status for women.

Also summarized here is the literature concerning the effect of poverty upon poor SRH outcomes at the national level. This is an emerging literature – it is sparse and patchy, and has suffered from the neglect of SRH as a focus area during the last decade.

At the macro level, poverty – manifested in low investment in basic social services such as education and health – can have significant implications for reproductive health and fertility trends. Low levels of health investment keep mortality levels high, while failing to provide the contraceptive services needed to achieve fertility decline keeps fertility higher than it might be otherwise. Low levels of investment in education prohibit the societal diffusion of ideas regarding childbearing and contraception.

Education has long been recognized as crucial to fertility levels and patterns; and there is an extensive demographic literature devoted to the role of female education in promoting sustained fertility decline.^{5–7} Despite the debates over the needed duration, level, and type of educational provision required to trigger fertility decline, the evidence is compelling in terms of the need for investment in education and the elimination of institutional and cultural barriers to women's schooling in order to promote development and reduce fertility.⁸

Poverty-constrained lack of infrastructure for health and transport in countries also has implications

for reproductive health – creating barriers to the accessibility of family planning services which are of a sufficient quality to sustain method continuation. This is often compounded by health-system inadequacies that foster insufficient financial access to services, and poor or patchy supply of human resources as well as equipment and supplies.

A recent article has highlighted the link between poverty and high fertility. A study of modern contraceptive use in 55 developing countries found a consistent gap between rich and poor in the use of contraception, within and between countries.⁹ Modern contraceptive use is lower in the poorest wealth quintile and the differentials in usage between rich and poor are widening as general use increases in the whole population, both of which factors enhance inequality.

The mechanisms through which poverty determines fertility were specified by David and Blake¹⁰ and developed by Bongaarts.¹¹ Poverty is termed a “distant determinant” of fertility, alongside women’s education and family planning policies. These variables are all factors in influencing age at marriage and contraceptive use, both of which are closely related to fertility. Bongaarts also identified four variables that are mainly responsible for fertility variation among populations, most of which are closely related to poverty.¹²

The four variables are: the proportion of women married; contraceptive use; induced abortion; and postpartum infecundity (or duration of postpartum amenorrhoea).¹³ Poorer women have a lower average age at marriage and lower contraceptive use,^{14,15} which increases fertility in comparison to the richer stratum of the population. Conversely, poorer women in developing countries usually have a longer period of postpartum infecundity. This factor lowers the fertility levels in this poorer group, although the effect is small.¹⁶

The links between poverty and fertility have been expounded elsewhere, coupled with a framework

for the main pathways of influence and the possible escape routes from the poverty-high fertility cycle.¹⁷ That poverty is related to poor SRH is clear to see at a country level. A lack of investment in the required facilities to promote good sexual and reproductive health, such as hospitals and family planning clinics, has a great effect on the level of reproductive health in that country.

The relationship between country wealth and SRH can be clearly observed if gross domestic product (GDP) per capita (PPP in US\$) is plotted against certain reproductive health outcomes. There is a strong positive correlation between log GDP per capita and the percentage of people using contraception, and a strong negative correlation between log GDP per capita and the percentage of people with an unmet need for contraception and also with the maternal mortality rate. These relationships obviously do not imply causation. However, Eastwood and Lipton estimated that had the fertility rate in 45 countries been reduced by 4 births per 1000 during the 1980s, the incidence of poverty in these countries would have been reduced by 13.9%.¹⁸

3.2 Evidence at the micro level

Evidence which links poverty and poor SRH has been obtained from the large-scale retrospective surveys which are increasingly being conducted in developing countries, including the World Fertility Surveys and the Demographic and Health Surveys. This section studies the links and mechanisms between poverty and excess fertility, unwanted births, unsafe abortion, access to contraception, and STIs at the micro level.

Excess fertility, unwanted births, and unsafe abortion

Researchers have proposed that large families are a result of poverty, due to the need for security in old age.¹⁹ However, it could be argued that children are

more often a net drain than net producers for their families across a wide range of settings, especially in the case of daughters who tend to leave home before 'returns on investment' can be reaped.²⁰⁻²⁴ The link between poverty and excess fertility may change over time or as countries develop economically. Caldwell suggests that transition from a farming mode of production reduces the value of children's labour inputs to their families.⁵

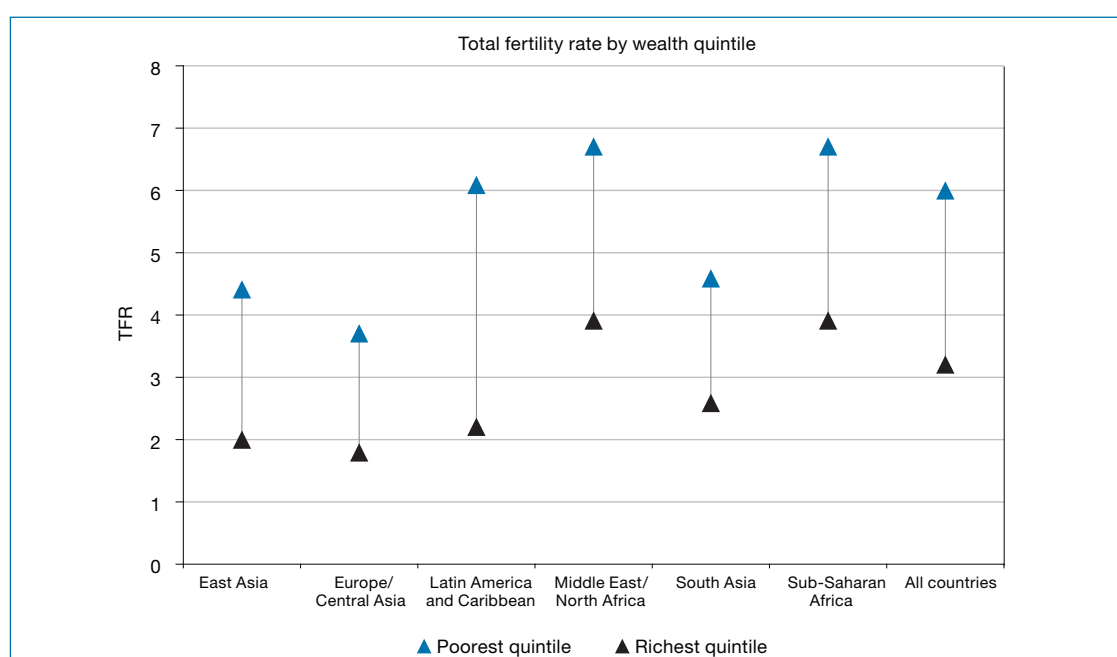
It has been hypothesized that because children are a source of old-age security in societies that lack social security systems, poor families do tend to have more children to insure against continued poverty in old age. However, evidence for using children as an insurance policy has been elusive.²⁵ Despite many analysts continuing to conclude that "children are the best deal around" for intergenerational wealth flows towards parents during old age,^{5,26,27} there are dissenting voices that emphasize the continuing role of the elderly in supporting their children well into adulthood.²⁸ Old-age security alone is therefore unlikely to account for the very large fertility differences seen

between rich and poor sections of societies in all regions of the world – with approximately two additional children per women among the poor, compared with richer groups.¹

The link between wealth and fertility can be seen at both a country and regional level. In 58 countries with data, only one country (Chad) had a higher total fertility rate (TFR) for its richest quartile than it did for its poorest group.²⁹ The mean difference in the TFRs between the richest and poorest quintiles is 2.6 births, with the richest having fewer births. Regionally, the difference between richest and poorest endures.

The difference in the TFR between the richest and poorest is greatest in Latin America and the Caribbean, and smallest in Europe/Central Asia and South Asia (see Figure 1). Gillespie et al. demonstrated in 41 developing countries that there is inequity between wealth groups in fertility – with the rich having lower fertility and fewer unwanted births, and being more able to access facilities to reduce fertility further, if desired.³⁰

Figure 1. Poorer subgroups of the population have higher fertility.



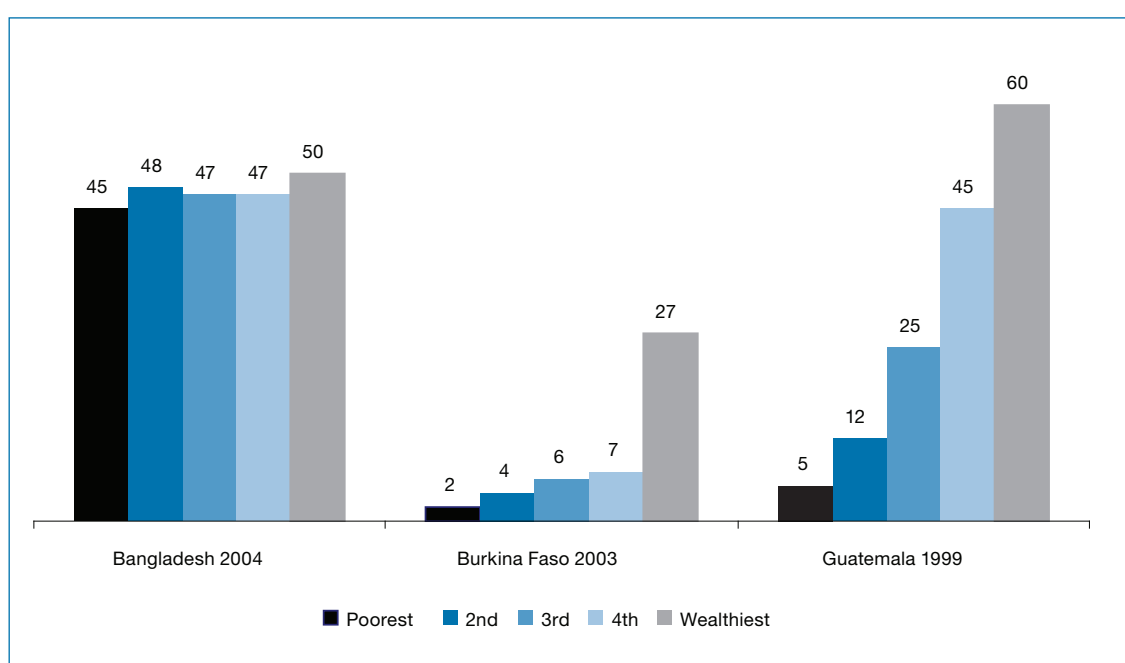
Source: Gwatkins et al., 2003.³¹

Linked with the higher levels of fertility for the poorest quintiles, access to safe abortion services is constrained for poor women – although, ironically, poverty is one of the key reasons given by women who seek abortion services.³² In many countries, safe abortion services are not widely available and indeed may be illegal. These factors drive demand for unsafe abortion, and it is estimated that one in ten pregnancies ends in this manner.³³ Even in countries such as India, where abortion has been legal since 1971, unsafe abortion remains a substantial problem. Up to 90% of the estimated six million induced abortions performed in India per year are illegal, defined as provided in settings or by providers who are not certified. Many of these illegal abortions are unsafe. Poor women are more likely to use unsafe providers because they are less able to afford the large fees charged in the certified public and private sector.³⁴

Access to contraception

Poor access to contraception can be considered as a direct result of poverty. Contraceptive use is uneven within countries and varies by education, ethnicity, and place of residence as well as by wealth. Greene and Merrick¹ provide evidence that the unmet need for contraception is greatest among poorer women worldwide, and the World Bank clearly shows that husband disapproval of contraception is much more prevalent among the poorest quintile.³⁵ Even though poorer women use contraceptives at a lower rate than richer women, this differential can be reduced by strong family planning efforts. An example of this is Bangladesh, where the contraceptive prevalence difference between the richest and the poorest quintiles is much lower than in other countries, such as Burkina Faso and Guatemala, that do not have such a strong family planning programme (see Figure 2).

Figure 2. Percentage of women using modern contraception by wealth quintile in Bangladesh (2004), Burkina Faso (2003), Guatemala (1999).



Source: Gwatkin D, et al., 2003.³¹

At the individual and household level, poverty is often associated with low levels of educational attainment and rural residence. Education is thought to be a key mechanism through which poverty affects contraceptive use. It is believed that lower levels of education among poor women translate into less knowledge of contraceptive methods and more difficulties in accessing services. Living in a rural area is also associated with higher contraceptive discontinuation and failure rates. Evidence indicates that methods that require a regular supply, such as condoms, are quicker to be discontinued in rural areas than in urban settings.³⁶

Furthermore, if payment for contraceptives is required, then some contraceptive methods may be too expensive to obtain for the very poor, even if the contraceptive prices are heavily subsidized.³⁷ The relationship between poverty and inadequate access to family planning services is observed in the persistent differential in contraceptive prevalence rate (CPR). The rich–poor gap in the CPR is 10 percentage points or higher in all regions of the world, rising to 23 percentage points in Latin America.¹

Sexually transmitted infections

It is clear that there are micro-level links between poverty and STIs, although few studies have researched this in detail. WHO estimated that there were 340 million new cases of four curable STIs worldwide (gonorrhoea, syphilis, chlamydia, and trichomonas) in 1999, with the great majority of these cases occurring in developing countries, especially sub-Saharan Africa.³⁸ Including such infections as Human papillomavirus and herpes simplex virus increases the new cases of infection to over one billion.³⁹

The relationship between STI and wealth is complex – a higher proportion of the wealthy contract an STI as compared with the poor. This relationship is not consistent in all countries. There are a

number of potential explanations for this observed relationship, which can also be seen in some analyses of HIV prevalence and in self-reported morbidity more generally. Firstly, richer people may be more likely to report an STI – or simply to be more aware of the symptoms – because they have a higher level of education.

Hence the figures may not show actual differences, but indicate reporting biases. It may be that the very poor, lacking the resources to access medical care, define illness more narrowly than those who are able to afford treatment, which in effect reduces the number of times they need to initiate attempts to raise funds for health care.⁴⁰

An alternative explanation is that the wealthier population in certain countries do actually have a higher prevalence of STI due to a higher number of sexual partners, riskier sex, and a lower use of barrier methods. However, differentials in STI prevalence by wealth quintile may mask power differentials created by gender, age, or socioeconomic status. In some countries, increased differentials in STIs among socioeconomic groups has been explained by the lack of preventive and curative services for the poor.⁴¹

A final point to note with the results presented above is that the data are taken from cross-sectional surveys, and therefore cannot provide evidence of causality. Longitudinal data sets would provide evidence of causality and, although available in some developing countries, have only very recently been considered for examining the important relationships between poverty and SRH.

4. Factors mediating the impact of poverty on sexual and reproductive health

Poverty is an important determinant of poor SRH, as noted above. However, there are many other

areas that mediate the role of poverty and are also directly related to poor SRH outcomes. Factors discussed below include gender, locality, age, education, and ethnicity. In general, these factors are related to poor SRH through poverty due to a lack of control of the limited resources available, as will be discussed below.

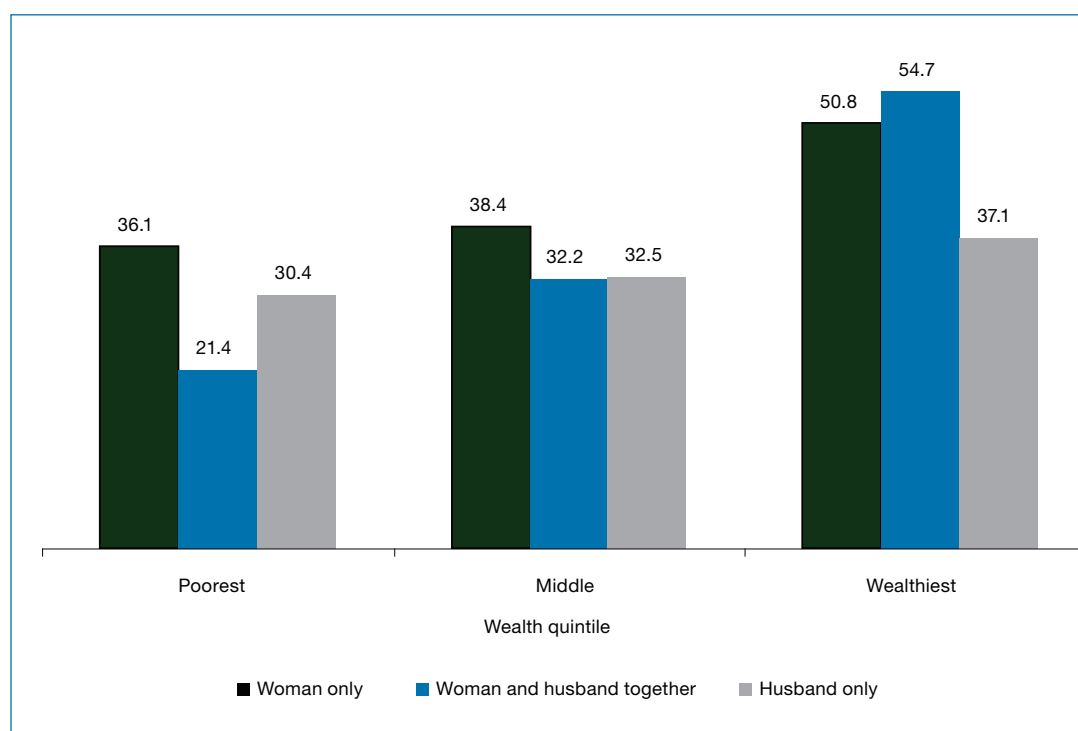
4.1 Gender

According to Nanda, the relationship between poverty and poor reproductive health can only be fully understood if the gender perspective is highlighted.⁴² Nanda suggests that women's ability to pay for health services is constrained by their access to and control over resources. Qualitative work has shown that women from poor households find it hard to pay – and that widows and unmarried women with children find it even harder.⁴³ Thus, in many cases it is not poverty per se which leads to poor SRH, but rather a lack of

control over limited resources. A person's position in the household determines how allocations to health-care payments might be made. Thus, even within non-poor households women may not be able to pay fees and may develop desperate coping strategies because of their weak positions within the household.

Figure 3 shows the use of any modern methods of contraception by wealth according to who decides how to spend money in the household, for married women in Bolivia (Plurinational State of) in 2003. The richest women are most likely to be using a modern method of contraception, but they are most likely to be using contraception if they have some say in what money is spent on. The poorest group of women are more likely to use a modern method if they make the decisions on spending money by themselves. If the husband is involved in decisions, then modern contraceptive use falls.

Figure 3. Percentage of women using modern contraceptive methods by wealth according to who makes decisions concerning what money is spent on, Bolivia (Plurinational State of), 2003.



Source: ORC Macro.

A woman's situation in relation to general contraceptive use hinges on the power dynamics inherent in her relationship with her partner. Sexual coercion is a major issue in understanding limitations to negotiating contraceptive and infection protection between sexual partners. Reports of 4–30%⁴⁴ of first sex experiences for girls being coerced, as reported in a recent multicountry survey, may provide some idea of the scale of this problem. Violence by husbands indicates a severe unequal power balance within a household and causes great physical and mental hardship for many women. Related SRH problems are also suffered disproportionately by the poorer sections of society.

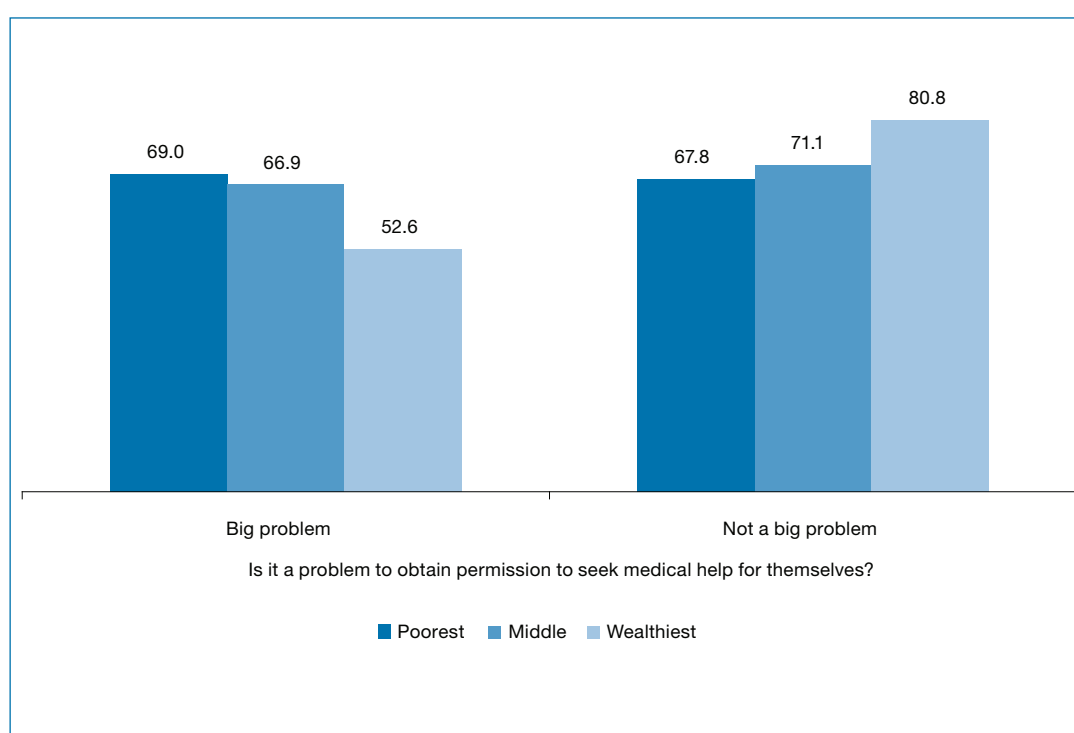
The ability to regulate fertility levels is often not under women's control, with unwanted pregnancies being the result. Figure 4 shows the percentage of women in Cambodia (2005) who

wanted their last child, by wealth and by how problematic it was to obtain medical care for themselves. There is not much difference between the percentage of women with unwanted births for those in the poorest and middle-wealth groups. For the richest group, however, if permission for medical care was difficult to obtain, a far higher percentage of births were unwanted compared to rich mothers who could easily obtain medical care.

4.2 Urban and rural poverty

Poverty takes on different dimensions in urban and rural areas. Rural areas lack accessibility to health services – agricultural lives can be hard and hazardous, without access to clean water, good housing, sanitation, and a varied diet. In urban areas, however, poverty is also endemic – resulting health outcomes are sometimes as bad as or worse than outcomes among the

Figure 4. Percentage of women who wanted their last child, by wealth and ability to obtain permission to seek medical care, Cambodia 2005.



Source: ORC Macro.

rural poor. In urban slums – despite improved employment opportunities – crowded spaces, lack of infrastructure, high levels of indoor air pollution, poor and overstretched sanitation, illegal status, lack of security, and sometimes reduced mobility can represent worsening poverty. Slum-dwellers can also be effectively excluded from nearby health services, or find them difficult to access.⁴⁵

Reflecting these different contexts of poverty, the issue of measuring wealth at household level is problematic when comparisons between urban and rural areas are made. Using ownership of assets as a means of assessing wealth requires a completely different approach in urban – as contrasted with rural – situations. One cannot compare ownership of land or livestock with ownership of the type of household amenities that might imply wealth in an urban area. Even consumption and income measurements can be difficult to measure – and very different – at various levels of urbanization.

In terms of fertility behaviour, slum-dwellers can often represent ‘the village in the city’ in that they are recent migrants who might retain the high fertility aspirations of the rural areas they have left behind. Thus, large influxes of young migrants can change the age structure of a big city, as well as the sex ratio if the migration stream is gender-specific. This can put a strain on infrastructure at the same time as migrants are providing much-needed labour to boost economies. However, when the urban areas are assessed as a whole, their fertility rate is lower than that in the rural areas for each level of wealth. Modern contraceptive use is far higher in urban areas compared to rural areas, most likely due to ease of access to obtain such methods and a higher level of education.

A further indicator of SRH is the proportion of births that are attended by a qualified and skilled practitioner. There is a severe urban/rural differential in skilled attendance at birth, with urban

areas having far higher coverage. This is mainly due to the heavy concentration in urban areas of hospitals and other places where skilled attendants are available. These urban/rural differentials are maintained even when wealth is taken into account. Poor urban women are more likely to have a skilled attendant at birth than poor rural women, although there is not much difference between the percentage of women with skilled attendance at birth in the richer strata.

4.3 Adolescence

A lack of control and autonomy in decision-making, common among all adolescents, is heightened if the individual is poor. The demographic profile of many emerging countries is characterized by an age structure that is either extremely young, or has a rapidly rising proportion of the population in their teens. Add this to a widening window of sexual opportunity as puberty begins earlier and marriage happens later, and the role of adolescent sexual health starts to take centre stage.

Indeed, the sheer size of the populations now moving into their childbearing years is a challenge which can strain many health systems, as this generation will give birth to the largest population increment the world has ever seen.⁴⁶ This increase presents both a challenge and in many countries also an opportunity, as the large cohort of young adults has the potential to yield a demographic dividend.

Adolescents are believed to experience poor SRH in many countries. Obstacles to obtaining good SRH for young adults can be seen at three levels: the individual, the health system, and sociocultural factors.⁴⁶ Adolescents themselves may be hesitant to seek SRH health services due to personal objections, a lack of financial resources, and inadequate knowledge regarding SRH needs and services. At the health systems level, the

infrastructure may not be attuned to the needs of adolescents, with providers who are unwilling or ill-equipped to serve young people, facilities which lack adequate provision to ensure confidential services, and products and services which do not meet the needs of adolescents. The sociocultural environment, such as religion and ethnicity, may dictate that services may not or cannot be provided or accessed by adolescents.

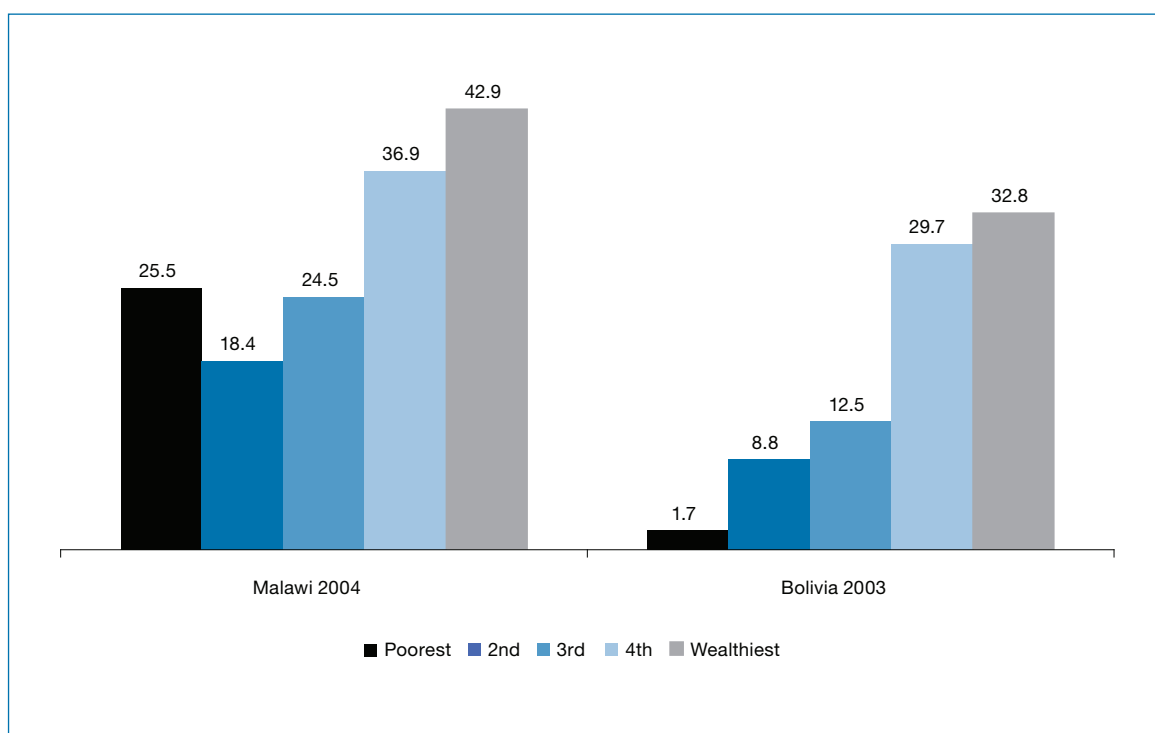
Among adolescents, young girls from the poorest households are least likely to use contraception and as a result have higher fertility levels compared to girls from wealthier households. Condom use at last sexual intercourse is also associated with wealth, with poor, unmarried adolescents being less likely to have used a condom with a partner compared to wealthier, unmarried adolescents (Figure 5).

4.4 Education

The link between education and SRH is bidirectional. Education is closely related to better health, due to better knowledge about the causes, consequences, and methods to reduce risk of poor SRH. As family size decreases, there is more chance of education being made available to all children, increasing knowledge. This virtuous circle continues until education is ubiquitous for both males and females.

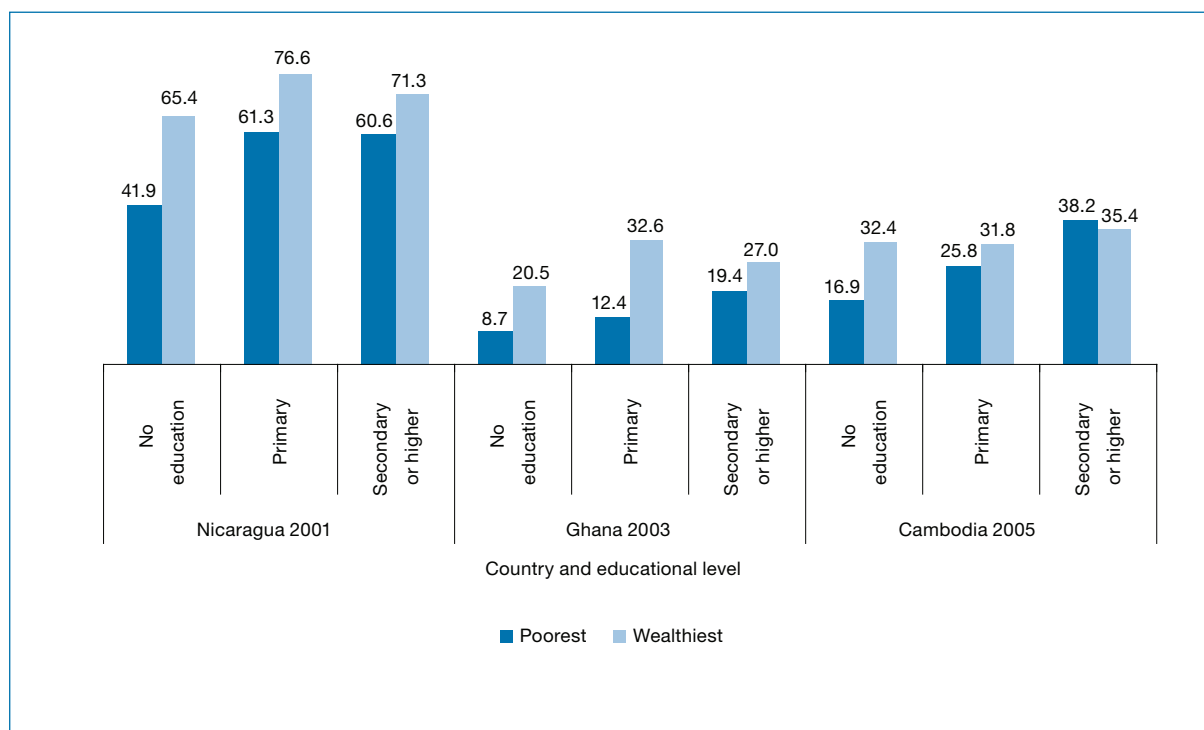
Obviously, there is close synergy between education and wealth, with education having been used as a proxy for wealth in many studies concerning SRH. Poorer families cannot afford to send children to school, both due to the fees associated with education, and also (in rural areas) because children are a resource to be used in the household. Girls are far more likely to miss out

Figure 5. Percentage of unmarried 15–19-year-olds who used a condom at last sexual intercourse, by wealth quintile in Bolivia (Plurinational State of) (2003) and Malawi (2004).



Source: ORC Macro.

Figure 6. Percentage of women using modern contraception by wealth and educational level in Nigeria (2001), Ghana (2003), and Cambodia (2005).



Source: ORC Macro.

on education than boys, as limited household resources are focused on males. This can further entrench traditional gender roles, hindering the spread of knowledge about good SRH. The education of women is known to be a strong determinant of improvements in population SRH.

Contraceptive use is strongly related to the educational level of the woman. More highly educated women are more likely to use modern methods than less educated women. However, wealth moderates this effect. There is less of a differential in modern contraceptive use between rich and poor if the women are educated, as compared to that among women who are not educated, although the differential is not eradicated completely. Education can therefore be seen as 'levelling the playing field' between rich and poor, to a certain extent, with regard to modern contraceptive use (Figure 6).

5. Programme approaches to reach the poor

5.1 Evidence of interventions

There is a vicious circle related to poverty and SRH, with poverty both a cause and an outcome of poor SRH. Breaking this link is vital if the health of women and men in developing countries is to be improved. There have been many calls for interventions to improve SRH to achieve the MDG of reducing poverty,^{48, 49} but there have been relatively few studies which have examined the improvements to SRH that may result through poverty-reduction strategies.

Interventions to improve both poverty and SRH are uncommon, a fact that is further compounded by a lack of evidence on the results of those interventions. A selection of interventions is briefly described below, categorized by the strategy which underpins the intervention.

Conditional cash transfer: promoting utilization through financial incentives

- In Mexico, the PROGRESA programme (now renamed Oportunidades), is an anti-poverty programme which was assessed for its effect on health, education, and nutrition. Benefits include both the in-kind provision of infant foodstuffs, and the transfer of money to women.⁵⁰ The cash transfer was provided to low income households in selected underserved areas if the household provided nutritional supplementation for young children, made regular visits to nutrition and growth monitoring clinics, sought specified preventative medical care, and attended health and nutrition education programmes. The programme has resulted in better service utilization in the poorer strata of the population, with PROGRESA beneficiaries having a 12% higher health clinic utilisation than those in control communities.⁵¹
- In Honduras, a family-allowance programme created in 1990 aimed to increase preventive health care in pregnant women, new mothers, and young children. The scheme involved the distribution of monetary vouchers to vulnerable groups, and increased the coverage of antenatal care and well-child check-ups within these groups.⁵²

Outreach service delivery: improving financial and geographical access

- In Bolivia (Plurinational State of) (before 1996) many women were not obtaining adequate maternity care due to high costs at the point of service. In 1996, a maternal and child national insurance programme was implemented to provide free services to pregnant women and children under the age of five years, leading to reductions in maternal and infant mortality and morbidity.⁵³
- In Bangladesh, although not targeting poverty directly, contraception has been made more accessible through community-based distribution. This approach takes the form

of doorstep delivery of contraceptives and advice,⁵⁴ irrespective of wealth. Between 1983 and 1997, contraceptive use increased from 14% to 42%,⁵⁵ with a large reduction in fertility. The poor are able to obtain contraceptives without charge, helping reduce unwanted births and increasing the contraceptive prevalence rate in this group.⁵⁶

- In Peru, the ReproSalud project targets the sexual and reproductive health needs of urban and rural indigenous populations through empowering women. Most interventions are educational, and engender community participation in SRH. The project selects certain areas of Peru which are currently underserved, and implements reproductive health interventions. The project is mainly concerned with the poorer sections of society.⁵⁷

Social marketing: improving access and affordability

- In Pakistan, social marketing of contraceptives through the use of 'lady health workers' was implemented in 1992. These health workers were village-based, and supplied various contraceptive methods to women in the local area – a group of people who are notoriously concentrated in the poorest levels of society. Between 1995 and 1997, contraceptive use in rural areas rose from 11% to 19%.⁵⁸
- In Mozambique, the JeitO condom social marketing programme has heavily promoted highly subsidized condoms across the country. This programme was associated with higher condom use with non-regular partners.⁵⁹

5.2 Key partners in implementing programmes

Various constituencies have a great influence on the ability of programmes to tackle inequalities. These constituencies include cultural and religious groups, government ministries, professional organizations, organizations of the United Nations, and civil

society. The ways in which each of these groups facilitates or obstructs commitment and buy-in will be discussed in turn below.

United Nations organizations have an important role in highlighting the issue of inequalities in SRH. Schiffman highlights the fact that global advocacy first places a subject onto the agenda, after which programmes and interventions are implemented.⁶⁰ Thus, the United Nations is a key player in tackling inequalities. In a similar way, civil society organizations (CSOs) are vital in raising the profile of poverty and reproductive health. It is crucial that governments work with CSOs to ensure an environment where social policy is openly discussed.

CSOs are often a central provider of health services in developing countries, ensuring that disadvantaged groups obtain the care to which they are entitled and removing barriers that may be restricting access. However, it is important that CSOs buy into the health system's approach to providing care, rather than attempting to offer vertical programmes outside the health system. The aim must be building capacity within comprehensive health systems, rather than fracturing available resources into different projects. A further barrier that sometimes occurs involves mixed messages from various CSOs and the public system – caused by differing ideologies – which may confuse the user.

A central organization – which can either facilitate or erect barriers to SRH – is the government and its individual ministries. A consistent voice throughout the government is required, in order to present a clear message to the public that there is a serious effort to reduce inequalities. The voice needs to be supported by the ministry of finance in promoting programmes which aim to target the poor.

The health workers themselves have an important role to play in presenting a united and consistent

front to the end-user. The acceptance of new techniques and ideas into their working practices, and ensuring that personal prejudices do not affect treatment, are two ways in which professionals can facilitate buy-in. Health workers need to be trusted to administer the level of care to which they are trained, and they need to be trained to their full potential, thereby enhancing the capacity of the health system. The government should ensure that the professional organizations themselves support initiatives. Powerful lobbying groups can obstruct commitment and hinder the implementation of programmes to improve SRH.

Finally, cultural and religious groups can either embrace or reject attempts to improve SRH. Condom use, female genital mutilation, and health-care-seeking behaviour, all have a cultural or religious component. Barriers placed by religious organizations can be extremely difficult to circumvent, and programmes which are implemented with the blessing of religious or cultural groups have a far better chance of success.

6. Recommendations for the future

Globally, it must be stressed to funding bodies and governments that poverty reduction is an important facet in increasing SRH. Poverty reduction has currently achieved a high profile, although improving SRH is not emphasized in the same way. More research is required to underline the synergy between poverty and poor SRH or – conversely and more importantly – between poverty reduction and the achievement of good SRH. Only through a better understanding of the mechanisms and links between poverty and SRH can effective interventions be designed.

Research is required at both the macro and micro levels. For example, understanding the degree to which poor SRH reduces economic growth would

provide an important tool in the advocacy toolkit for placing SRH centre stage. These calculations have been made by the Commission for Macroeconomics and Health for some key diseases, but not (in so far as is known) for SRH. Similarly, understanding how poverty impacts upon access to contraceptive and other SRH services is vital if the health of individuals is to be improved.

One area that is attracting increasing attention across the entire health sector is the equity impact of out-of-pocket payments for health-care services. The issues associated with charging for family planning services were examined by Ross and Isaacs as early as 1988, and many of their findings remain pertinent today.⁶¹ To date, however, there have been relatively few studies that have examined the impact of out-of-pocket payments for SRH, a notable exception being Puri et al.⁶² Further work urgently needs to be conducted on the impoverishing impact of out-of-pocket costs for SRH at the household, country, and regional levels, which will directly inform policy decisions.

Greater emphasis also needs to be placed on the global monitoring and evaluation of poverty reduction and reproductive health programmes. The Health Metrics Network represents a step in the right direction for monitoring, although reproductive health is not a currently high-profile topic and should be made a priority.

At the regional level, there is a need to ensure that the topic of reproductive health is high on the research and political agendas. Much information on this subject is currently obtained from researchers in the more highly developed world. However, there is a need to build up the capacity for conducting research in the developing-world environment. Encouraging south-south collaborations will also ensure that research is targeted towards the areas which are considered most important.

Finally, there is a requirement at the country level to ensure that SRH is an important and integral part of the health system. Encouraging the integration of existing vertical programmes into the wider system will enhance provision and capacity. By integrating SRH services into health systems, rather than running vertical programmes independently of the main health effort, consistent direction of programmes can be assured. Through this approach, the loss of specialized training and skills, common to vertical programmes, is more than mitigated by the increased consistency of effort, economies of scale, and increased promotional opportunities. Furthermore, the programmes are not as reliant on donor whims.⁶³ The integration of services has begun in many countries, although there is still a great distance to go before full integration is achieved.

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6

Migration and women's reproductive health

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1. Introduction

The movement of people within and between countries has always been integral to socioeconomic development, but more recently – in response to globalization and large social and economic inequalities – the pace of international migration has escalated. Current estimates suggest that there are 191 million people living outside their country of birth, and more than 86 million are thought to be labour migrants.¹ As a result of mass rural to urban migration, rapid urbanization is a major concern in developing countries; urban infrastructure (including housing, education, and health care) is becoming overburdened, and more migrants – particularly in cities in Africa – are being pushed into urban poverty.^{2,3}

Demographers have extensively studied fertility and marriage patterns in migrant populations, because of the potential for changes in these behaviours to affect population growth – especially in urban areas.⁴ There is some evidence that labour migration (within and between countries) results in spousal separation and delayed marriage, and subsequently in delayed childbearing and lower fertility rates over time among migrant populations.^{4,5,6} However, studying the effect of migration is restricted by lack of data on demographic variables in migrant populations; statistics are limited to spatial aspects measurable by censuses (i.e. patterns of population movement).

The health implications of migration are increasingly being recognized, and emphasis is shifting away from tackling the effects of migration in terms of infectious diseases such as tuberculosis, towards noncommunicable conditions, mental health, reproductive health, and human rights concerns. Given the growing global trend towards increasing numbers of female labour migrants, it is recognized that much more attention should be placed on understanding the cultural, social, and psychological experiences of migrants from

a gender perspective, and on improving the reproductive health and psychosocial well-being of migrants.^{5,10}

In many countries, available health indicators suggest migrants fare much worse than non-migrants in the same country – a situation brought about largely by unpreparedness of receiving countries and overburdening of infrastructure in rapidly growing cities.^{2,7} However, these data tend to be from small studies and anecdotal reports.^{7,8} In the last decade, many organizations and individuals have called for more attention to be devoted to the determinants of poor health in the context of migration. This chapter summarizes current knowledge, specifically about the reproductive health status of female labour migrants, the factors which influence inequalities in reproductive health status, and what could be done globally, regionally, and nationally to improve reproductive health outcomes among this population.

2. Characteristics of migrants

International migrants tend to originate from developing countries, moving in response to the strong economic conditions in developed countries; moreover, reduced transport and communications costs now make these movements far easier for migrants.⁹ United Nations data on migrant stock estimate that the number of migrants in developed countries has increased continually over the last 30 years, while migration to developing countries has declined.⁹ Large population flows between adjacent countries is common, for example between Mexico and the United States, between countries in North Africa and Spain, and between countries of eastern and western Europe; south-south migration (interregional) in Asia and Africa is also significant.⁹ Within developing countries, movement of people from one area to another for varying periods of time (internal migration) is also increasing.

Migrants cross borders (internally or internationally) mainly for economic purposes (labour migration), and in response to inequitable distribution of resources and opportunities; families and individuals make decisions based on the social, economic, and environmental opportunities and constraints they face.^{1,2} Globalization has increased the mobility of labour – as the demographics of countries change, demand for migrant workers is increasing in many developed countries. Within developing countries, the pull of better employment and educational opportunities, higher wages, better quality of life, and social freedom draws people into towns and cities – while reduced social and economic opportunities afforded by small towns and villages serve to push individuals away from rural locations. A smaller percentage of internal migrants are refugees or internally displaced people fleeing conflict, famine, or natural disaster.¹⁰

Decisions to stay or to move are complicated, but census data provide information on the characteristics of labour migrants, indicating that they are usually younger, unmarried, and better educated than those choosing to remain in rural areas.⁵ Internationally, almost as many females migrate from countries as males; in 2005, women accounted for almost 50% of all migrants.¹¹ More women are migrating alone and with others outside their families, usually for work in domestic care, entertainment, and factories – where wages and working conditions are lower than those for men, who are more likely to find highly skilled jobs.

A distinguishing factor in Asian countries is that most labour migrants are women. There are indications from several countries in this region that female migration has increased in recent decades, and that the majority of female migrants are young and unmarried. Young women are attracted by employment opportunities in the manufacturing and service sectors, and in some south-east Asian countries the majority of the workforce in free-trade

zones consists of young females. Temporary migration for economic reasons is a key feature of population movements in China, Indonesia, Thailand, and Viet Nam.¹²

China presents an interesting case-study in labour migration: it has experienced the “largest labour flow in history” over the last three decades, and this has generated an enormous ‘floating population’ which typically consists of young people of reproductive age, and increasingly female.¹⁷ These young people face unique challenges as a result of strict regulations on family size and household status (see Box 1).

Data on gender and migration in countries in Africa are largely incomplete, but there are indications that migration within African countries is increasingly characterized by women moving for formal and informal work.^{13,14} For example, young women (aged 15–39) comprise 53% of Kenya’s urban population, compared to 35% in rural areas.³ Demographic surveillance of rural to urban migration over a decade (1987–1996) in a rural area of Ethiopia suggests increasing rural to urban migration, with young women becoming a larger proportion of those migrating.¹⁵ In one rural area of Senegal, 80% of women aged 15–24 are seasonal migrants, working in the main cities or in neighbouring Gambia.¹⁶

Women also dominate international migrant flows. In Asia, it is estimated that two million women are working in neighbouring countries, and evidence from Indonesia, the Philippines, and Sri Lanka shows that many more women than men are leaving for work abroad.⁵ More women are migrating from Latin America to Europe, North America, and other South American countries for employment opportunities. Increasing numbers of women from African countries are migrating internationally – mostly to other African countries – but large outflows of nursing staff from African countries to Europe, Canada, and the United States are common.⁵

Box 1. Case-study of labour migration in China

The movement of rural people to cities in China since the economic reforms of the 1980s has been described as “the largest labour flow in history”.¹⁷ As a result of this mass movement, a new, highly mobile population group – the ‘floating population’ – has emerged. These are individuals who work in the city for a period of time and return to home villages, or travel seasonally or regularly between the two; they are distinct from migrants who have lived in the city for many years or who have household registration in the city.¹⁸ Official statistics estimate the floating population to be over 100 million and growing as the number of surplus rural workers increases.¹⁹ Estimates from the 2000 Chinese Population Census suggest that there are 79 million migrants moving between provinces or counties (intercounty migrants), and 66 million intracounty migrants moving within counties.²⁰ The floating population typically involves people of reproductive age who are unmarried²¹ and increasingly female.^{22,23,24}

The floating population contends with similar challenges to migrants in other countries in terms of social, economic, and cultural lifestyle adjustments, but labour migrants within China face two important additional challenges. The first relates to the household registration system, or hukou. Originally established to restrict population mobility when central planning dominated in the 1950s, this policy meant people could live and work only where officially permitted. Despite relaxation of mobility laws, and incentives for rural people to move to cities as labour for the growing manufacturing and service sectors, the hukou system is still in place. Institutional barriers make it very difficult for an individual to change from ‘agricultural’ to ‘non-agricultural’ status, therefore many migrants choose to live and work in cities without legal documentation. But without household registration in the city, permanent employment, or health insurance, the floating population is exempt from social welfare benefits available to urban residents, including health services.¹⁸

Strict policies involving fertility (the ‘one-child policy’ introduced in the 1980s) and family planning represent another significant challenge for young labour migrants in China. The one-child policy applies mainly to urban families, and is underpinned by rewards and penalties enforced by local officers. Interpretation of these rules varies greatly.^{25,26} Although family planning has been more accessible and user friendly since the implementation of the Law on Infant and Maternal Health in 1995, services are restricted to married couples. This policy presents access problems among young migrants, where these services are urgently needed. There is increasing evidence that young women migrating from rural areas lack knowledge of reproductive health issues, and that premarital sexual activity increases in this population as they leave behind their traditional family influences and lead independent lives in the city.²⁷

As economic development continues to draw young people – increasingly women – from rural to urban areas and to new opportunities abroad, the public health implications of labour migration are being realized. Particularly among this population, reproductive and sexual health is of greater importance, and the need for appropriate health services is rising.⁵ There is also growing evidence concerning the reproductive health status of labour migrants, and the following section highlights important reproductive health problems among these young people, and among female migrants in particular.

3. Reproductive health status of migrant populations

3.1 Knowledge and use of contraceptives

As with non-migrant populations, use of contraception by migrants is determined by socioeconomic background, exposure to health education, and experience with family planning.³⁹ There is limited information about contraceptive awareness and use among migrants, mainly due to lack of survey data. National surveys of reproductive health or maternal and child health rarely collect both detailed migration status (place of birth and length of stay in current place of residence) and

data on contraceptive knowledge and use.⁸ But with increasing interest in adolescent reproductive health in China, sample surveys of reproductive health knowledge and contraceptive use among young unmarried migrant workers are more widely available.

Several studies in China report poor knowledge of sexual and reproductive health issues among rural-to-urban migrants, and this finding is generally thought to be a result of rural upbringing and lower educational attainment.²⁸ Qualitative research reveals poor knowledge of sexual and reproductive health, of transmission of sexually transmitted infections, and of symptoms and prevention of STIs and HIV. This research shows that young female migrant workers lack even basic knowledge of contraception and reproduction.^{18,29,30} There is some indication that length of stay in host cities in China is associated with increased reproductive health knowledge.^{17,18}

However, there is increasing evidence from specific surveys in migrant populations that contraceptive use is low. For example, a survey of more than 2000 young unmarried migrant workers in Shanghai and Guangdong found that 17% of males and 16% of females had never used contraceptive measures, and less than 20% use contraceptives each time they have sex.²⁷ A study of female migrant factory workers in Shanghai indicates that use of contraceptives at first sexual intercourse is approximately 35% in this population.³⁰ Studies comparing reproductive health status of migrants and local residents in Chinese cities are few, but evidence from one survey of sexual behaviour among female workers aged 18–30 indicated that the premarital sexual behaviour in migrant female workers (55.6%) was much higher than in female workers who are local residents (13.0%).³¹

Access to family planning services for young migrants in China is especially difficult in a country where family planning has traditionally targeted

married couples only. Qualitative research among young female migrant workers reveals that unmarried women do not know about free contraceptive services available to them, and believe that family planning is ‘married women’s business’.¹⁸ Other studies suggest young unmarried women are embarrassed to use public family planning services and to purchase contraceptives from pharmacies or drugstores, and that they are suspicious of free contraceptive products.^{27,30} The location and availability of family planning services are sometimes not compatible with working in factories or employment that requires shift work, and long distances and inconvenient opening hours can be barriers to contraceptive use among young female migrant workers.^{30,27}

Research in Latin America, where the majority of internal migrants are also young females, shows that migrant women have lower contraceptive knowledge and use.⁵ Analysis of data on 971 male and female respondents in the 1999 Guatemalan Migration and Reproductive Health Survey found that rural-to-urban migrants are less educated, have lower levels of contraceptive knowledge and less knowledge of where and what reproductive health services are available. In this sample, contraceptive use among rural-to-urban migrants (36%) was slightly less than that among urban non-migrants (42%), but higher than that among rural non-migrants.⁸ A study of the health status of rural-to-urban migrants in periurban Cochabamba, Bolivia, found that rural origin was a risk factor for lower use of contraceptives.³²

Research on international migrants indicates a similar trend. For example, contraceptive use in Germany is lower among migrants; this finding is attributed to poor family planning information in migrants’ home countries and inadequate outreach services within the German health service.³⁸ Other studies, involving African female migrants in Europe, conclude that contraceptive use is low due to the influence of family as well as fears about

sterility.³⁸ By contrast, migration to another country offers to some women an exposure to urban lifestyles and attitudes, as well as the opportunity to access family planning in a way that was not possible in their home country; studies in Europe show that immigrant women have much higher contraceptive use compared to their counterparts back home.⁵

3.2 Access to reproductive health services and care-seeking

Incoming migrants to cities and urban areas have less access to health care, and there is evidence to suggest that inequities in access exist between migrants and permanent residents. Wang'ombe suggests that the unavailability and inaccessibility of maternal and child health services in unplanned urban slums in rapidly growing cities has resulted in poor child health in these settlements.³³ The shortage of services is in part explained by the geographical clustering of migrants, usually outside the official city area, which places stress on the health infrastructure in these locations.³⁴ Bollini explains access to health care among migrants in terms of reduced entitlements (living and working conditions, access to employment, social security benefits) in the host society, which determine ability to access and purchase health care.³⁵ Selective barriers, such as language, social norms, or concepts of ill-health, can also limit migrants' ability to make use of available services.

Household registration status determines the noticeable differences in access to reproductive health services between locals and the floating migrant population in China.²⁶ There is evidence that without medical insurance and legal urban status, female migrants delay or avoid seeking health care. In a sample of female migrants in Shanghai, Feng found that 90% had no form of medical insurance and tended to delay prenatal examination: 20% waited until the fifth month or

later to visit a doctor, and over 40% of pregnant women did not visit a doctor or visited only once.¹⁷

Other studies indicate unfavourable pregnancy outcomes associated with fewer antenatal care visits among migrant women compared to permanent residents.²⁶ A study on reproductive tract infection-related health-seeking behaviour in Guangdong province showed that 52.8% of migrant women reported having at least one symptom of RTI but only 64.8% of them went to see doctors.³⁶ In China, the floating population often distrusts the health system in cities; they are afraid of discrimination due to their rural registration status and because they are outsiders and sometimes cannot speak the local dialect.¹⁷ Social status of migrants determines access to health services in other countries as well: in a sample survey of poor urban street and slum dwellers in Calcutta, Ray et al found that of 108 mothers who gave birth in the last year, 40% received three or more antenatal check ups, and only 16% received postnatal care.³⁷ The authors of the study suggest that urban health programmes are inaccessible to poor migrants as they are not recognized as residents of Calcutta.

There is evidence that poor language skills represent a significant obstacle to accessing reproductive health care among female migrants in Europe. For example, poor communication between migrants and health-care providers in Denmark was found to be associated with delayed use of obstetric care services. In Sweden, another study reports young migrant women delayed prenatal care registration for more than 15 weeks.³⁸

Other studies indicate that cultural factors (including personal experiences as well as ethnic and sociocultural background) can influence reproductive health-seeking behaviour. Studies conducted with migrants in Europe report low use of specialized health-care services for cultural reasons. In addition, a tendency to use informal

medical care before specialized health care delays access and use of that specialized health care – particularly among Moroccan and Turkish migrants.³⁸ A study of migrant workers in Shanghai revealed that reluctance to seek treatment for symptoms of STIs was associated with cultural interpretations of ill-health; migrant women believed they were more resilient than the urban population and they “don’t go to hospital for minor illness”, and some expressed their non-belief in modern medical practices.¹⁷

However, there is some evidence that longer duration of residence is associated with more contact with health services and increased knowledge of reproductive health. Research in the United States indicates that for international immigrants, duration of residence has a strong effect on likelihood and number of physician contacts.³⁹ Likewise, research in rural Guatemala suggests that urban migration experience and social ties to out-migrants lower the barriers to utilization of formal maternal health services among indigenous women through acquisition and diffusion of new ideas and practices.⁴⁰

3.3 Maternal health outcomes

An analysis of available data from several developed countries concludes that pregnancy outcomes for many international migrants are worse than for native women, especially among recent arrivals.³⁵ Carballo and co-workers studied extensively the health of migrants crossing borders to live and work within Europe, and highlights problems with antenatal care, gestational age, birth weight, perinatal health, and postnatal care.^{38,53} Among migrant women in the United Kingdom, several studies suggest lower birth weight among Asian women and higher perinatal mortality rates among immigrants from the Caribbean and Pakistan.³⁸ In Belgium, perinatal and infant mortality rates among the Turkish community are estimated to be 3.5 times that of the Belgian population.³⁸ Trends in

low birth weight and pregnancy complications are similar for African and Latin American immigrant groups in Spain; for example 8% of babies born to mothers from Central and South America are underweight and 6.3% are premature.³⁸ This could be explained to some extent by pre-existing health conditions of migrant women, but is also likely to be linked to social exclusion and inaccessibility of health services.^{38,53} Limited evidence from China suggests that maternal mortality is much higher in the floating population. From 1996 to 2005, the maternal mortality ratio (MMR) of local Shanghai residents was 11.58/100 000, but in the floating population it reached 57.98/100 000, five times higher than that of the local residents.⁴¹

3.4 Sexually transmitted infections and HIV

For internal migrants in developing countries, estimates of sexually transmitted infection rates are crude and limited to data collected via small qualitative studies or self-reporting in sample surveys, which usually underestimate prevalence. In a sample survey of more than 1000 female migrants in Shanghai’s special economic development zone (Pudong), self-reported symptoms of RTIs, STIs, and women’s health problems were very low; only one woman reported having an STI and overall 14% reported having at least one symptom.¹⁷ Another large sample survey of unmarried migrants in Guangdong and Shanghai found self-reporting of STI morbidity to be very low (3%), but more than 10% of women reported vaginal discharge and more than 20% lower abdominal pain – both common symptoms of reproductive tract infection.²⁷ Other studies suggest much higher prevalence of RTIs (55%) and STIs (10%) among young unmarried migrant women (who are seeking abortion) in urban China.⁴²

In recent years, human mobility has emerged as an important factor in the spread of STIs – including HIV.⁴³ Research from China suggests a migratory

lifestyle is consistent with risk factors for STIs^{24,44,45} and that residential mobility significantly increases vulnerability to HIV/STIs.⁴⁶ It has also been reported that HIV prevalence is 1.8 times higher among migrants than rural non-migrants.⁵⁰ Infections are more common among female migrants, and this is thought to be due to the increased likelihood of risky behaviour in workplaces that attract female migrants, including hair salons, massage parlours, and night clubs.²⁹ Qualitative studies, such as that by Hong et al, highlight the vulnerability of migrant populations to STIs and HIV, and emphasize the influence of a rural upbringing where premarital sex is not tolerated and sex is rarely discussed.⁴⁴

There is growing evidence from other countries that circular or seasonal migration has important implications for the spread of HIV, as infected migrants return home and unknowingly pass the infection on to sexual partners. For example, research in Mexico suggests that an increasing proportion of AIDS cases is related to returning male migrants who have become infected in the United States and subsequently infect their wives; it is suggested, however, that social norms and married women's commitment to an illusion of fidelity can result in women ignoring or denying the risks they face.⁴⁷ In rural Nepal, there is also evidence that migrant men act as a bridge for HIV and STI transmission into their home communities; a study conducted in western Nepal found 11% of rural women had untreated STIs, and having a husband who migrated to India or within Nepal for work was a significant risk factor.⁴⁸

In Africa, patterns of increased risk of STIs/HIV among more mobile populations are similar. In Kenya, increased sexual risk-taking has been observed among male rural-to-urban migrants as well as among female rural-to-rural migrants.⁴⁹ In Uganda, it is estimated that people moving residence within the last five years are three times more likely to be infected with HIV than those remaining in the same place for 10 years.⁵⁰

In a cross-sectional study of migrant men and their rural partners in South Africa, Lurie et al. found that being a migrant man and having lived in four or more places were independent and significant risk factors for HIV infection and that the odds of a migrant man being infected was 2.4 times that of a non-migrant man.⁵¹ However, the findings of descriptive studies of migrants in the United Republic of Tanzania run counter to these arguments, suggesting that Maasai rural-urban migrants – both married and unmarried – are not having sex in town. As the authors of the study point out, this finding is important because it challenges the view that in sub-Saharan Africa, HIV is predominantly spread to rural areas by return migrants.⁵²

3.5 Induced abortion

Available research suggests that the induced abortion rate is high among the floating population in China, and this is mainly attributed to lack of knowledge about contraception and mistaken belief that induced abortion is a method of contraception.^{17,28} A qualitative study of sexual behaviour and reproductive health outcomes among young unmarried female migrants in five cities with large floating populations (Beijing, Guangzhou, Guiyang, Shanghai, and Taiyuan) found that pregnancy was not uncommon in this population where most premarital sex was unprotected; and participants believed abortion was the only option for unmarried women.¹⁸ Most women in this population knew about induced abortion, and did not think having more than one abortion would hurt them. Other reports suggest that the rate of pregnancy in unmarried floating populations is much higher than in married couples with permanent residence.¹⁷ One study of over 2000 unmarried migrants working in manufacturing and service industries in Guangdong and Shanghai reports that of women having sex before marriage, 33% had been pregnant; of those who had been pregnant, 93% chose to have an induced abortion.²⁷

Elsewhere, there is evidence that requests for abortion are higher among immigrant women. For example, the highest rates of abortion in Sweden are among women with low socioeconomic status, especially migrants. In Norway, over 25% of abortion requests come from women whose origins are other than industrialized countries.³⁸ Throughout Europe, the trends are similar. In Switzerland, abortion-seeking is 23 times higher among non-Swiss women; in Italy, the likelihood of induced abortion is an estimated three times higher among foreign-born women (34.8/1000 women) than local Italians (10.5/1000 women); and in Spain, requests for abortion are twice as common among immigrant women – especially those from North and sub-Saharan Africa.⁵³

4. Addressing the sexual and reproductive health needs of migrants

The growing pace of labour migration and population mobility within countries is presenting new health and social challenges. The reproductive health needs of an increasing number of female migrants are of particular concern, and the question arises as to whether services can respond in a way that enhances equity while respecting national-resource limits.⁵³ Migrant health policies will differ among countries depending on the prevalent type of migration and population movement, but national government responses can be classified generally as ‘passive’ or ‘active’.⁵⁵

Mainly applied in the context of international migration, this classification distinguishes between governments who expect migrants to make use of existing health services, with minor modifications usually provided by nongovernmental organizations (NGOs); and those who acknowledge the special health needs of migrants, strive to provide specific services, and make changes to the mainstream health system to accommodate

migrants. More countries are working to improve the reproductive health of migrant women.⁵

Examples of interventions vary from policy reform and attempts to reduce barriers to migrant legal status, to interventions that bring health services closer to migrant populations and include human rights approaches to migrant health. This section explores some of these approaches and the difficulties in implementing them.

4.1 Policy reform

In China, inadequate access to health services and underutilization of health care among the internal migrant or ‘floating population’ have been recognized by the Government. At the policy level, awareness has been raised to the fact that rural-to-urban migrants have specific needs that are not currently met.⁴⁴ Policies that address “measures of family planning management in floating population” and “several provisions of family planning management and service in floating population” were issued successively in 2003, and the first health-promotion activity targeting migrants took place in Beijing in 2004. However, recent interventions targeted specifically at migrants have mainly involved HIV/AIDS prevention, delivered through health education, educational materials, and condom-use promotion – especially among high-risk groups.⁵⁴ Some have called for the Government to require all employers to provide health insurance coverage to migrant employees; to provide subsidies for health services for migrants or low-income populations; and to conduct community-based health-promotion campaigns which specifically target migrant communities, to raise awareness of available health-care services.⁴⁴

Others suggest that sexual and reproductive health education for young unmarried migrants is best delivered through existing services. For example, relevant offices that register incoming migrants to cities could provide information on family planning services and locations; employers could provide

family planning and reproductive health services in their workplace clinics; and local government family planning workers could provide family planning counselling in outreach visits to workplaces that employ large numbers of migrants.¹⁸ However, more effort is needed to translate this concern into concrete policies and implementation.²⁷

To a large extent, addressing the health needs of migrants living in urban poverty in developing country cities is a broader economic development issue; many migrants are compelled to move from rural areas due to lack of economic opportunities and poverty. Alleviation of the causes of internal migration requires policies that not only serve to meet the needs of urban poor, but also processes that help spread economic development more equitably within countries and thereby stem the outflow from rural populations.² United Nations agencies such as the United Nations Human Settlements Programme (UN-HABITAT) and others are helping governments, particularly in Africa, to develop national agendas for decentralization and to deal with urban poverty.²

National governments face many challenges which affect their ability to respond to the needs of immigrants. Most of these challenges relate to tolerance among the national population and integration policies.^{1,5} Xenophobia and discrimination against migrants are common; migrants are blamed for unemployment and social and economic problems in host countries, and there is often mistrust between migrants and host populations.⁵

To counter the marginalization of migrants, many governments have adopted integration policies which serve to foster understanding of the respective rights and roles of migrants and the host society. Although integration is variously defined, it is frequently applied within the context of interactions between refugees or asylum seekers and host populations, and is described as a process

that counteracts social exclusion by removing social, cultural, and language barriers.⁵⁵ It is also recognized that integration is a two-way process which is long term and multidimensional. Given the fact that integration programmes can be costly to governments, some have called for systematic reviews in this area to ensure that decisions are based on good research.⁵⁶

4.2 Placing service delivery closer to migrant populations

Workplace interventions

One way of meeting the specific reproductive health needs of young labour migrants is to bring health services closer to them, therefore facilitating access to care in this hard-to-reach population. One of the first attempts to bring sexual and reproductive health education and services to unmarried female migrants in a private factory in Shanghai found many difficulties in implementing such an intervention in a rapidly changing economic environment with frequent and sudden changes in human resource requirements (see Box 2).³⁰ The intervention was comprehensive and included training factory doctors in family planning service provision, lectures on reproductive physiology and contraceptive use, tailored educational materials, and contraceptives and a family planning counselling service provided free.

The research confirmed that privacy and anonymity are important to young female migrant workers, and that this factor should be considered in any policy reforms to make services more accessible to migrants. An important barrier to the adoption of safe-sex practices by unmarried women in China is, according to Tu et al, the ambivalence of family planning workers in providing services to unmarried young people. A survey of almost 2000 family-planning workers in China found that although these workers were concerned about unwanted pregnancies, disease, and abortion

among unmarried young people, they were not comfortable in providing targeted services to young people at employment sites or educational institutions.⁵⁷ This finding could be related to the long history of family planning services which

have targeted only married couples. Training programmes are urgently needed to reorient the attitudes and approach of the entire family planning service, so that it can provide appropriate services to young unmarried migrants.¹⁸

Box 2. Practical problems encountered in implementing a workplace reproductive-health intervention for unmarried migrants in Shanghai

- Young migrant women change jobs frequently. During the intervention period, many women left for employment elsewhere.
- Factory managers require that young women work their allocated shifts, and department leaders often refuse women permission to attend the outreach lectures and participate in the intervention.
- In privately owned factories in Shanghai, doctors are employed to provide basic first aid and have less experience providing reproductive health services and counselling for young unmarried women.
- Factory doctors know the young female employees well, and it is unclear whether this is the right approach for delivering family planning services to female migrant workers; migrant women were embarrassed to use the service, because their privacy was compromised.
- The young women at this factory were hesitant about using the free contraceptive service; findings suggest that young women seek help based on need, and not simply because a service is provided free of charge.

Workplace interventions can facilitate access to appropriate services for migrants, but the commitment and cooperation of governments and other international players, including multinational corporations, are essential to ensure that the health needs of employed migrants are met. An example of this approach is the provision of a comprehensive HIV/AIDS programme by Anglo American for its employees, many of whom are migrants.⁵⁸

Community outreach

Bulut et al report on a pilot project established to provide comprehensive maternal and child health care to migrants in a new settlement area in Istanbul, Turkey.⁵⁹ The report suggests that the service was well attended for infant immunization, but had a modest impact on maternal health (antenatal care attendance and family planning users). The report also found that women who did not attend criticized the physical appearance of the service facility, believed a free service was not a good service, and did not have a need to attend since they sought care privately.

In Central America and the Caribbean, a regional programme supported by the United Nations Population Fund and the Organization of Petroleum-Exporting Countries is reaching out to young migrants, as well as to other hard-to-reach groups, with messages about HIV prevention.⁶⁰ This programme involves young people as educators and counsellors to reduce the stigma and discrimination associated with HIV. In Nepal, interventions targeting labour or seasonal migrants include STI treatment and support services for migrants and their families as part of an HIV/AIDS initiative set up by Save the Children and local NGO partners. This service also trains providers in the specific needs of migrant families.⁴⁸

There are examples of projects that support migrants' reproductive health needs before departure or while en route to new locations. The UNFPA works with the House of Migrants, an NGO in Tecun Uman (a northern border town in Guatemala), to provide education in HIV prevention and condom use to migrants passing through

on their journey north to the United States. The programme provides shelter for three days, which affords an opportunity for outreach workers to raise awareness about HIV and STIs. It also facilitates HIV testing, counselling, condom distribution, and prenatal care. In 2005, over 32 000 migrants passed through the House of Migrants, and funders claim the activities are also reaching local populations.^{5,61}

In Tajikistan, where most families have at least one member who is a migrant worker in Russia or neighbouring states, the Government – with assistance from the International Organization for Migration (IOM) – has established an information resource centre for migrants. The centre provides advice and information on economic, social, and health-related issues, tailored to the needs of economic migrants.¹ The Government of Sri Lanka also provides pre-departure training for migrant workers. In recognition of the vulnerable position of female migrants and with support from the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organization, the training now includes awareness of social, economic, and health aspects of HIV/AIDS, specifically for female migrant workers.⁶²

Many of these examples of bringing health care closer to migrants involve collaborative efforts between international NGOs and national governments in the provision of sexual and reproductive health services to marginalized communities. This approach offers an appealing model to increase access and strengthen service delivery. Yet some caution is needed against reliance on donor- or NGO-driven service delivery plans – which can result in successions of short-term projects that prop up national government efforts, but reduce the likelihood of integration within national structures and sustainability through local funding sources.³³

4.3 Culturally sensitive health care for migrants

Some countries are responding to the health needs of their migrant populations by providing tailor-made services, or improving existing services so that they provide culturally sensitive care that is accessible. In India, for example, the South Asian Study Centre in New Delhi provides an estimated 200 000 migrants from Nepal with information about education, health, labour rights, financial management, and remittances.^{5,63}

For many international migrants, language and cultural barriers are significant impediments to service access, and there are examples of policies implemented to address these barriers. In Sao Paulo, the Municipal Health Secretariat provides maternal and child health outreach in the local languages of Bolivian migrant women, Aymara and Quechua.⁵ In Europe, Canada, and Australia, the UNFPA notes that pregnancy outcomes for immigrant women are improving – thanks to broad-based efforts to tackle cultural and linguistic barriers, including provider training and social and political integration of migrants.⁵ The European Union initiative on migrant-friendly hospitals being implemented in 12 member states is a good example of regional commitment to strengthen the provision of culturally sensitive health care for migrants.⁵ In China, ten normal-birth delivery facilities have been established in Shanghai to provide culturally sensitive and low-cost maternal-care services for the floating population.⁶⁴

4.4 A human rights approach to migrant health

NGOs and civil society organizations have been playing an increasing role in advocating and protecting the human rights of migrants, particularly women. In Asia, the many organizations promoting the rights of female migrants include the Asian Domestic Workers Union in China, Hong Kong Specialized Administrative Region (Hong Kong SAR) and United Filipinos of Hong Kong

SAR, both of which have members from countries throughout South-East Asia. In Costa Rica, the Household Worker's Association (ASTRADOMES) provides migrant domestic workers with support services, including legal and social guidance, shelters, and access to sexual and reproductive health services.⁵

At the international level, it is acknowledged that an integrated global approach to migrant health is needed, and health and migration officials are beginning to engage in a dialogue concerning the key issues.^{35,65,66} Organizations such as the International Organization for Migration, the International Labour Organization (ILO) and the United Nations Development Fund for Women (UNIFEM) have started to develop guidelines and standards for protecting female migrant rights, in collaboration with governments and NGOs. A human-rights approach is increasingly considered to be an important pillar in all aspects of migration policy-making. Accordingly, various countries have begun to make explicit their commitment to ensuring the health rights of their migrant populations.⁵⁸

4.5 Collecting data on migrant health needs

Any change in health-service organization or policy implementation to consider the needs of migrants, requires accurate and reliable data – particularly concerning health and reproductive health needs. Achieving this goal requires effective systems to gather, analyse, and exchange reliable data; these systems should include comparable definitions and variables so that regions and countries can learn from each other.²

The wheels for this approach were set in motion following the International Conference on Population and Development in Cairo (1994), when governments recognized the necessity of reliable migration data.² Since then, attempts have been

made to strengthen data-gathering systems, but recommendations from the United Nations have focused on detailing the flow of international migrants with little emphasis on the health and well-being of migrant communities.^{2,35} There is a need for better and more systematic surveillance of the health and reproductive health needs of migrant populations. Specifically, there is an urgent need for defined indicators for identifying health needs of migrants, mechanisms for reporting needs and health status, and increased exchange of experiences among national governments.³⁵ UNFPA outlines several obstacles to collecting comprehensive and accurate migration data. Obtaining data on migrant health will be equally challenging, given the marginalized status of many immigrants, and their high mobility and infrequent contact with formal health services.

Some countries take advantage of existing data collection exercises – including censuses, demographic, health and household surveys – to collate migrant data disaggregated by age and sex. For example, Norway collects detailed demographic, education, labour, and economic data on first- and second-generation migrants, including refugees; Canada was the first nation to undertake a comprehensive gender analysis of immigration policies; and the Statistical Information System on Central American Migration compiles sex-disaggregated information and is one of the most advanced data sets.⁵

In Nepal, UNFPA reports that the Government started to incorporate the concerns of women migrants into the country's 10th National Plan (2002–2007). In addition to these efforts, it may be possible for international bodies to encourage existing national maternal and child-health surveillance systems – such as the National Centre for Birth Defects Monitoring and the National Centre for Maternal and Infant Health at Beijing Medical University – that already routinely collect

data on maternal and child health to include, as far as possible, data on migrant populations.

Given the evidence for delay in health-care seeking, and the use of maternal- and-child health-care services among migrants, the social, cultural, and psychological aspects of reproductive health behaviour probably deserve more attention. Sample surveys of migrant health could yield richer and more policy-relevant data on migrant health by shifting emphasis from a health belief (Knowledge-Attitude-Practice) model of reproductive health behaviour, towards an ecological model of health which explores the influence of personal, family, community, and societal (political/economic systems) factors on sexual and reproductive health.^{67,68} International donors and decision-making bodies could support research to explore the application of this model.

included in the agenda for the High-Level Dialogue on International Migration and Development.⁶⁹

Once on the agenda, non-profit organizations, such as the International Centre for Migration and Health, which have experience in formulating policies relevant to international migrant health, may be important in ensuring that policies are developed and implemented effectively.⁷⁰

Conclusion

In collaboration with intergovernmental organizations such as the International Organization for Migration, United Nations agencies clearly have a role to play in bringing migrant health and reproductive health to the forefront of the dialogue at the international and regional levels. This role should extend beyond discussion, to formulating sound solutions and policies to promote the reproductive health of migrants.⁵⁸ Other key international players include the United Nations Population Fund, which actively supports the International Migration Policy Programme (an interagency programme founded in 1998) in its work to foster regional and international cooperation and to strengthen the capacity of governments to deal with migration issues.⁶⁰ UNFPA and IOM have been instrumental in bringing together experts and representatives from governments, international agencies, and NGOs to discuss female migration, and ensuring that mainstreaming of female migrant health needs was

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7

The role of schools in promoting sexual and reproductive health among adolescents in developing countries

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1. Introduction

Successful transitions to adulthood, whether they be transitions to work, to marriage and parenthood, to household management, or to citizenship, depend fundamentally on the twin building blocks of good education and good health.¹ Healthy children are more likely to go to school and if they go to school, to learn effectively and acquire knowledge and skills for life. Educated children are better able to manage and, when they grow up, sustain their own health as well as the health of their families.

To date, research on the effects of education on health has focused primarily on the cross-generational links between parents' education and their children's health; much less attention has been devoted to the contemporaneous links between being a student and remaining healthy or being a student and acquiring specific health-related knowledge and skills. As children age, not only do they gain more control and influence over their own health, but they confront changing health issues. After puberty, particularly in the case of girls, sexual and reproductive health become key components of overall health. Even for boys, in contexts where HIV/AIDS is widespread, sexual behaviours can be important determinants of basic health, both during adolescence and later in adulthood.

This chapter reviews the state of knowledge about relationships between schooling and adolescent reproductive health. With the spread of mass schooling and the growing share of adolescents who attend school, the opportunities for synergies between health and education policy are growing. Data on cross-country variations in health conditions on the one hand, and variations in school attendance and attainment patterns and school systems on the other, provide a framework for assessing alternative approaches to the promotion of adolescent sexual and reproductive health in various contexts.

2. Patterns and trends in adolescents' school attendance

School participation and attainment among adolescents have been rising rapidly throughout the developing world. At the same time, sexual and reproductive behaviours among adolescents have been changing within rapidly shifting environments – both in terms of health risks and health services and in changing perceptions of risk, changing fertility preferences, delays in the timing of marriage, and changing structure of opportunities for education and employment. While the directionality of change has been consistent across most countries in the case of schooling, with the greatest improvements among girls and in the lowest income countries, changes in sexual and reproductive behaviours appear to have been more context-specific. Given the enormous variability in school systems and conditions across countries, it is possible that some of the cross-country differences observed could be explained by the very different educational environments experienced by young people throughout the developing world. The discussion that follows documents some of the changes that are taking place with respect to both schooling and adolescent sexual and reproductive health.

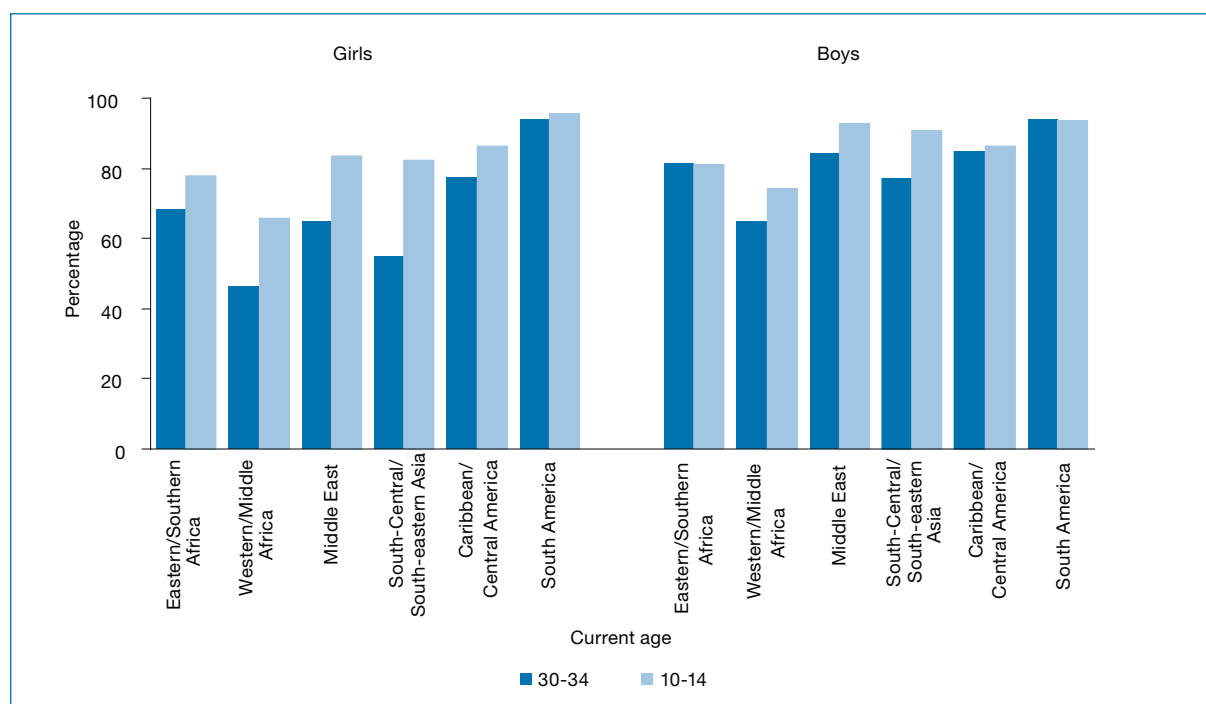
One of the most dramatic trends in developing countries over the last two or three decades has been the rapid rise in both school participation and grade attainment, particularly for girls. This has occurred both in countries that have prospered economically and in those that have not. Indeed, throughout the developing world the pace of change has been more rapid than the pace of change that occurred during the transition to universal schooling among today's developed countries.² These changes have meant that an increasing percentage of adolescents in every country attend school during some part of their adolescent years, with growing numbers still attending beyond the age of 15. Nonetheless, school participation and grade attainment rates lag

behind for the poor, with poor and “excluded” girls at the greatest disadvantage.³

Figure 1 summarizes estimates of regional trends in the percentages of the youngest adolescents who ever attended school during the past 20 years, by comparing the percentages of current 10–14-year-olds ever attending school to those among 30–34-year-olds who had ever attended school 20 years earlier.^a These estimates are based on recent household survey data collected in 50 developing countries representing roughly 60% of the population (aged 10–24) of the developing world as a whole, and 88% of the population (aged 10–24) living in countries defined as low income by the World Bank.¹ Given the attention of the United Nations' Millennium Development Goals to extreme poverty, these data provide particularly good coverage of the contexts where new policy efforts will be most needed.

Overall, these data show a gain in attendance levels of 10 percentage points for boys (from 79% to 89%) and 21 percentage points for girls (from 61% to 82%). The gains for girls are particularly striking in western and middle Africa, the Middle East, and South Asia. As a result, the gender gap has narrowed considerably and is likely to continue narrowing over the next decade. This expectation is based on actual changes that have already taken place in the percentage who have ever attended, as implied by recent differences between ever-attendance rates of those aged 10–14 and those aged 20–24 (data not shown¹). Growth rates for girls in ever-attendance rates and, by extension, grade attainment are five times the growth rates for boys, suggesting an accelerated pace at which the gender gap in attendance is narrowing, as growth rates in attendance for boys slow down.

Figure 1. Trends over 20 years, in the percentage of adolescents who ever attended school.



Source: NRC/IOM 2005; DHS Surveys, 1994–2001.

^a The percentage of 10–14 year olds who were attending school 20 years ago is not precisely known, because data are not available concerning current enrolment but only concerning ever enrolment. Some members of the older cohort might have attended school, but dropped out before reaching the age of 10.

By age 15, most adolescents have reached sexual maturity and are potentially exposed to the dual risks of sexually transmitted diseases and – in the case of girls – unwanted pregnancy. Figure 2 presents recent data from Demographic and Health Surveys collected from 1998 to 2006 concerning the percentage of 15-year-olds who are still attending school^b. The dark-shaded bars represent boys and the light-shaded bars represent girls; data are ranked from low to high within each region according to attendance rates for boys.

Two observations can be made on the basis of these data. The first observation is that the percentage of adolescents who are students at age 15 varies enormously among developing countries. From the data depicted here, we can see that the school enrolment of sexually mature adolescents ranges from 13% in Niger to 94% in South Africa for boys, and from 10% in Niger to 92% in the Dominican Republic for girls. In roughly two thirds of the countries, the percentage of boys in school at age 15 exceeds the percentage of girls in school at the same age. Exceptions include Madagascar, Rwanda, Lesotho, and Namibia in Africa; Bangladesh, Indonesia, and the Philippines in Asia; and Nicaragua, Honduras, Colombia, and the Dominican Republic, in Latin America (countries listed in order of appearance in Figure 2). The second observation is that, with few exceptions (mostly in West Africa), a majority of both boys and girls are still attending school at age 15. While female students represent a majority of 15-year-olds in fewer countries than do male students, the rapid growth in attendance rates among 10–14-year-olds will inevitably lead to further increases in the percentage of girls and boys still attending school at age 15.

^b These data are based on the response to a question as to whether a child resident in the household was attending school any time during the current academic year. In some surveys, however, the question was posed slightly differently. In surveys conducted in Bangladesh, Côte d'Ivoire, Gabon, Guatemala, India, Indonesia, Niger, South Africa, Togo, Turkey, and Viet Nam, the household respondent was asked whether each resident child was "currently attending."

The distribution of 15-year-old students across grades varies enormously as a result of differences in starting ages and patterns of repetition. Figure 3 shows the cross-country variation in grade distribution of female students aged 15, across countries grouped into five categories: those attending grade 6 or below, grade 7, grade 8, grade 9, and grade 10 or above. Normally, if a child started grade 1 no later than age 7 (the latest recommended age for entry into grade 1) and progressed steadily each year from grade to grade, she/he should be in either grade 8 or 9 by age 15. It is clear from the data presented in Figure 3 that 15-year-old girls occupy a broad range of grades in most countries. While in some countries the majority of 15-year-olds are in grade 6 or below, in a few (India, Turkey, and Viet Nam) the majority are in grade 10 or above (suggesting a starting age of 5). Not only does the median or modal grade vary enormously across countries, but in many countries no one grade captures more than about 20% of adolescents of this age (data not shown in Figure 3). The distributions depicted in these data capture the basic challenges of teaching students at a particular stage of development about sexual and reproductive health in settings where same-age adolescents are widely distributed across many grades.

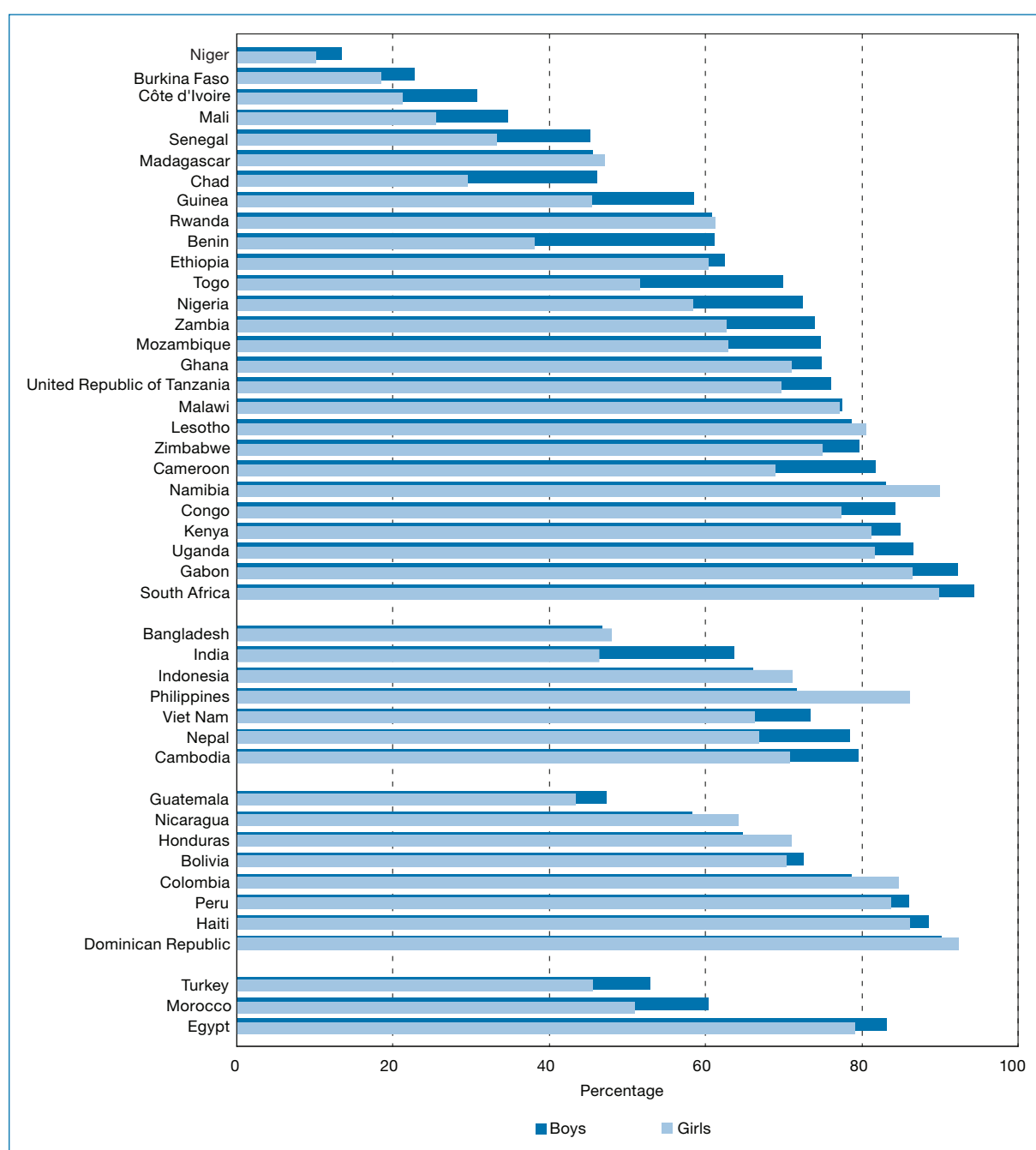
The diversity across Africa is striking, with the percentage of 15-year-olds who are 'behind' (in grade 6 or below) varying from over 90% in Rwanda to less than 10% in South Africa. In Latin America and in the Middle East, students tend to have progressed to higher grades by age 15, probably because of earlier starting ages. Nonetheless, even in many of these settings, the median or modal grade captures a relatively small percentage of students in this age group.

Figure 4 compares the percentages of 15-year-old boys and girls who are significantly behind grade for their age, defined as in grade 6 or below. Each line represents the size of the gender gap for a

particular country, and the positioning of the line shows the lowest and highest percent behind grade for age. The extent to which students are over age for their grade varies enormously across countries. In most cases, more boys than girls are behind grade for age. Countries with large gender gaps in the percentages behind grade for their age (over 10 percentage points in favour of girls) include

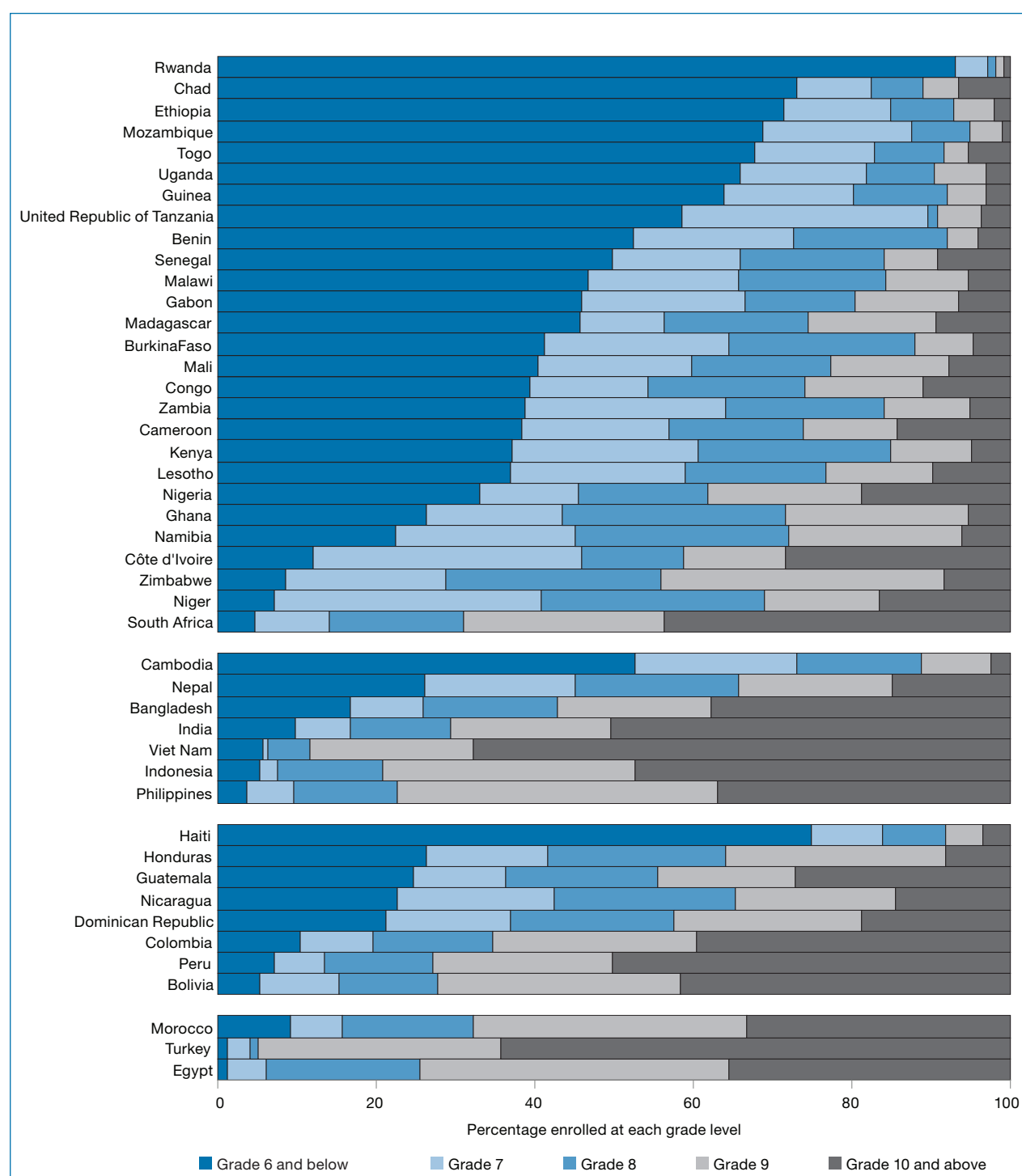
Lesotho, Zambia, Malawi, Madagascar, the United Republic of Tanzania, the Dominican Republic, Namibia, Mali, South Africa, and Nicaragua (countries list in order of gap size). These differences represent an additional source of diversity within the classroom with respect to adolescent development.

Figure 2. Percentage currently enrolled among 15 year olds, by country.



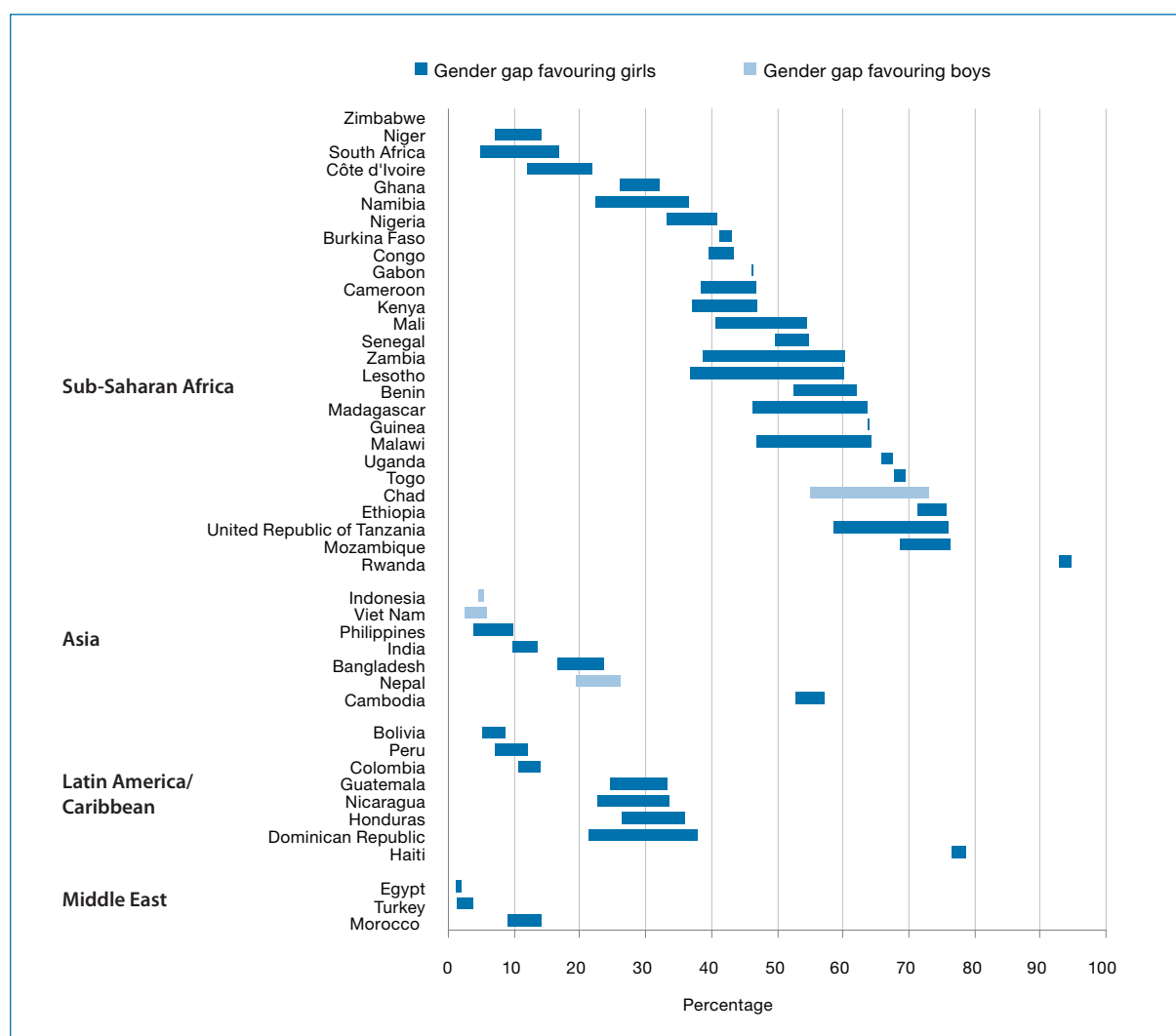
Source: Tabulations from DHS, 1998 to 2006.

Figure 3. Grade distribution for 15-year-old girls attending school, by country.



Source: Tabulations from DHS, 1998 to 2006.

Figure 4. Gender gap in the percentage of students (aged 15) behind grade for their age.



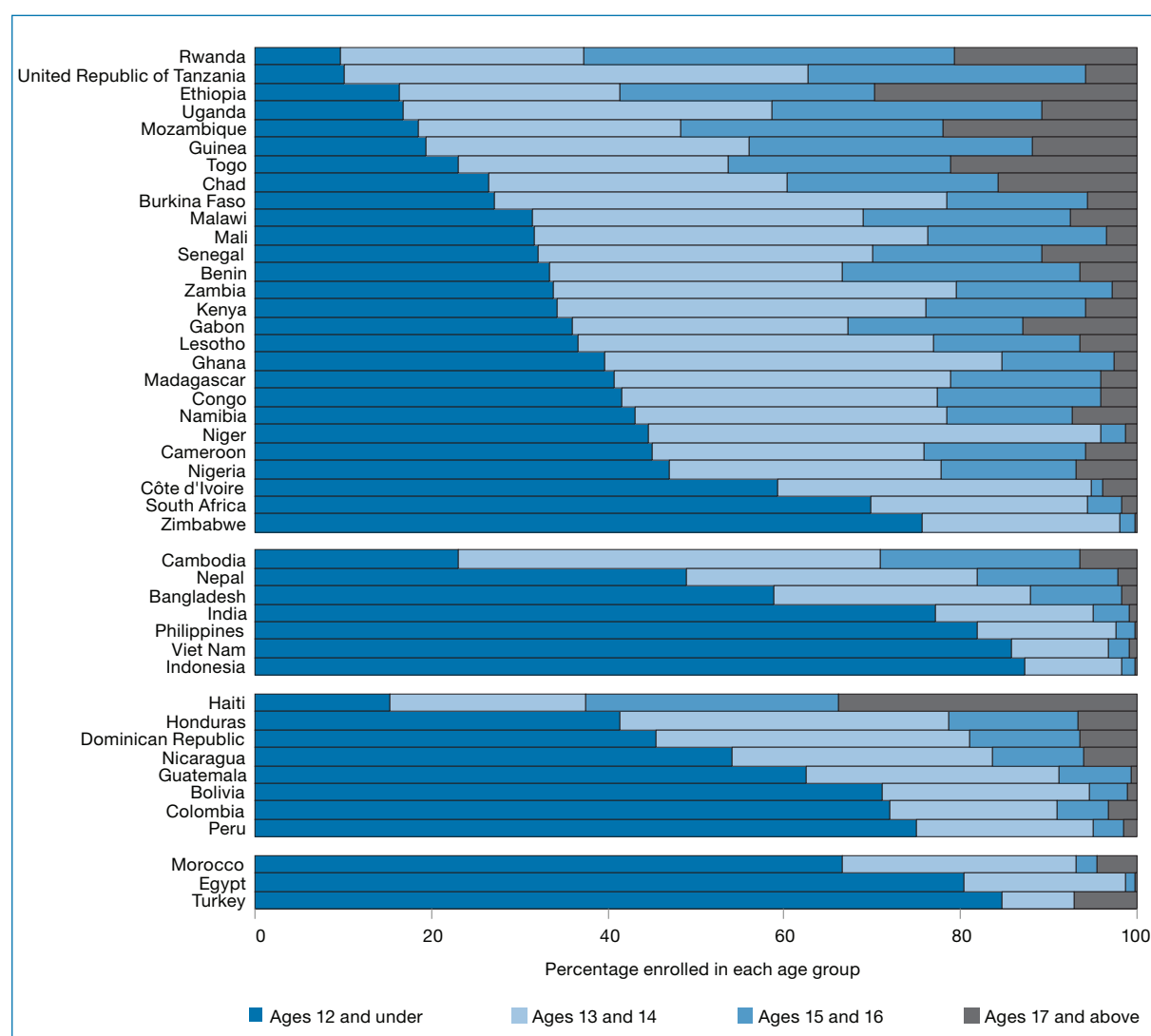
Source: Tabulations from DHS data, 1998 to 2006.

Evidence from a meta-analysis of evaluations of school-based HIV prevention programmes for African youth⁴ suggests that programmes implemented in primary schools are typically more effective in terms of changes in knowledge and behaviours – in particular abstinence and the use of condoms.^c These findings led the authors of the study to conclude that programmes can be more effective when targeted to students at an earlier stage of development, particularly to students

prior to their becoming sexually active. However, the study does not present data comparing the average age of students across studies, or the age diversity of participants in different programmes. The authors' conclusions are based on certain assumptions about differences across grades and schooling levels (primary versus secondary) in age and sexual experience, given the absence of relevant data.

As more and more school-based sex education and HIV-prevention programmes are introduced in primary schools in response to these findings, we need to understand the demographic make-up of primary school classrooms. Figure 5 presents

^c The analysis of 11 school-based interventions includes four in primary schools. However, two of the programmes in primary schools took place in grade 8; most school systems end the primary cycle at grade 6.

Figure 5. Age distribution of female students in Grade 6 by country.

Source: Tabulations from DHS, 1998 to 2006.

data on the age distribution of students in grade 6, which is typically the end of primary school in most school systems and often a grade at which students receive some exposure to family-life education.

The distribution is divided into those aged 12 (typically perceived to be an ideal age for intervention, given the typical age of puberty for girls and the fact that very few have experienced first sex by this age) and under; those aged 13–14; those aged 15–16; and those aged 17 and above. In some countries, the overwhelming majority of children in grade 6 are aged 12 or younger and

thus a common sexual and reproductive health curriculum could be appropriate for almost all the students in the grade. Zimbabwe, India, the Philippines, Viet Nam, Indonesia, Peru, Egypt and Turkey – where 75% or more of female students in grade 6 are aged 12 or younger – would be included in this category (countries listed in order of appearance in Figure 5). In many other settings, however, the age diversity of the classroom would present challenges to the teaching of a common curriculum, even when properly calibrated to the academic levels appropriate to the setting and grade.

3. Sexual and Reproductive health among adolescents

Overall, the health of young people in developing countries has improved in recent years. Children enter their adolescent years healthier than in the past and with improved expectancy of reaching adulthood. Continued reductions in mortality in this age group are likely in most parts of the developing world – with the major exception of those countries in sub-Saharan Africa which have been hardest hit by the HIV/AIDS epidemic.¹

Behaviours that young people adopt during adolescence have important implications for their future health and mortality. Indeed, the recent National Academies' report, *Growing up global*, concluded that “unprotected sex is one of the riskiest behaviours that young people can undertake, particularly in settings where HIV/AIDS is widespread”.¹ In sub-Saharan Africa, HIV/AIDS is now the leading cause of death among young people (even more so for young women than young men); it is one of the least important causes of death for young people in other regions. At the same time, in all developing-country regions, mortality and morbidity related to pregnancy and childbirth, including unsafe abortion, remain among the most significant risks to young women's health.

While first sex is not necessarily occurring at an earlier age than in the past, in most countries an increasing proportion of adolescents are experiencing first sex premaritally, often due to later ages of marriage.¹ The changing context of first sex has implications for certain reproductive-health outcomes, in particular the incidence of unwanted pregnancy. These trends could also have implications for the incidence of unsafe abortions, given that the desire to stay in school is a common reason given for an induced abortion among adolescent girls.⁵

Detailed cross-country analysis of sub-Saharan Africa, based on surveys from 27 countries, sheds

further light on these trends.⁶ Rates of early marriage have been falling, and in many African countries where recent data are available, these trends are accompanied by rising proportions of young people experiencing their first sex premaritally before the age of 18.⁶ In some cases these trends can be explained by a longer period of exposure to the risk of premarital sex, given delays in marriage with no change in rates of premarital sex; in other cases these trends are due to a rise in the rate of premarital sex. At least in Africa, however, where HIV among adolescents is most widespread, there is no evidence from these data that there is any association between changes in the timing and context of sexual initiation and rates of HIV among adolescents.⁶

What is not known is whether there has been a change relative to the past in the extent to which these sexual transitions are occurring while adolescents are still attending school and the extent to which these changes are occurring primarily after adolescents leave school. Furthermore, it is not immediately obvious whether students are more or less likely than their non-enrolled peers to engage in behaviours that compromise reproductive health.

4. The relationship between school attendance and sexual and reproductive health

Poor health is the outcome of many forces beyond a young person's control, including the disease environment, family circumstances, and personal vulnerability. However, individual behaviour becomes a factor of growing importance to health during adolescence. In particular, unprotected sex and/or early marriage – which can lead to STIs, HIV/AIDS, and pregnancy – carry many risks for young people, including most immediately the risk of school dropout. Thus, it would be expected that students with better-off and more supportive families – as well as those doing well academically

and receiving encouragement from their teachers – would be more likely than others to take steps to avoid the risk of dropout by either avoiding sex, engaging in protected sex, terminating unwanted pregnancies before detection, or negotiating with parents to refuse or delay early offers of marriage.

Similar individual and family factors may simultaneously encourage school success and the avoidance of risk or early marriage among some students, and school failure and risk-taking or early marriage among others. Thus, we cannot necessarily assume that observed differences in behaviour between students and non-students are caused by differences in school exposure and experience. Nonetheless, differences in the duration of school exposure and experience between students and non-students are likely to be among the factors influencing the behaviour of adolescents during their teenage years. The mean grades attained by students currently enrolled typically exceed the mean grades attained among the currently non-enrolled by 50% or more, suggesting that differences in exposure to the school environment – and by extension differences in academic skills – are important.⁷

4.1 Sexual and reproductive outcomes by student status

Figure 6 compares the percentage among unmarried 15–17-year-old girls reporting that they have ever had premarital sex, according to enrolment status.^d Because the likelihood of premarital sex rises sharply with age and the percentage enrolled falls with age, rates are age standardized.^e While reported rates of premarital sex vary widely among countries, it would appear that – with the exceptions of Benin and Mali – girls still attending school at these ages are much less

likely to have had premarital sex than are their same-age peers who are not attending school. Further support for these findings comes from more in-depth analysis in Burkina Faso, Ghana, Malawi, and Uganda.⁸ Age-standardized comparisons of sex among boys according to school status are not possible, given small sample sizes.

Because students are a selective sample of all adolescents, it is possible that differences between students and non-students in reported sexual experience vary according to the overall percentage attending school at this age. The higher the percentage in school, the less selective students are, relative to non-students. It is reassuring to note that the strong relationship between delayed sexual initiation and current enrolment persists across countries and at varying levels of enrolment, suggesting that the relationship is not the result of selectivity among students (in countries with low levels of enrolment) or among non-students (in countries with high levels of enrolment) (data not shown). On the contrary, the behavioural benefits associated with being a student seem to strengthen with a rise in overall enrolment rates at these ages.⁷ Furthermore, there is evidence to suggest that the percentage of girls dropping out of school because of pregnancy or early marriage has declined relative to the past, at least in West Africa, as ages of marriage and first birth are rising.⁹

Contraceptive use among sexually active unmarried girls can also be compared by school status (Table 1). The main problem here, however, is that because of the relatively low levels of sexual activity at this age, sample sizes become much smaller in many countries. After eliminating data from countries where the sample size falls below 30, we are able to compare contraceptive use among 15–17-year-olds who are sexually active and unmarried according to school status for 26 countries.^f Rates of contraceptive use for girls are

^d This figure is based on data collected from reproductive-age women. Countries which conducted surveys with ever-married women only were excluded.

^e Rates are age standardized by giving single-year-of-age rates equal weight. Sample sizes for 15-, 16-, and 17-year-olds are sufficiently large to permit calculation of individual rates.

^f For this comparison, the calculated percentages are not standardized by individual ages because the Ns are too small, but contraceptive use is less strongly associated with age than is first sex.

typically higher among the enrolled; less consistent patterns are apparent for boys (data not shown). However, this finding for boys involves fewer countries because of sample size constraints. These data suggest that those who are enrolled in school – particularly girls – are likely to be both better informed and more motivated to avoid pregnancy and sexually transmitted diseases through the use of contraception than their non-enrolled peers.

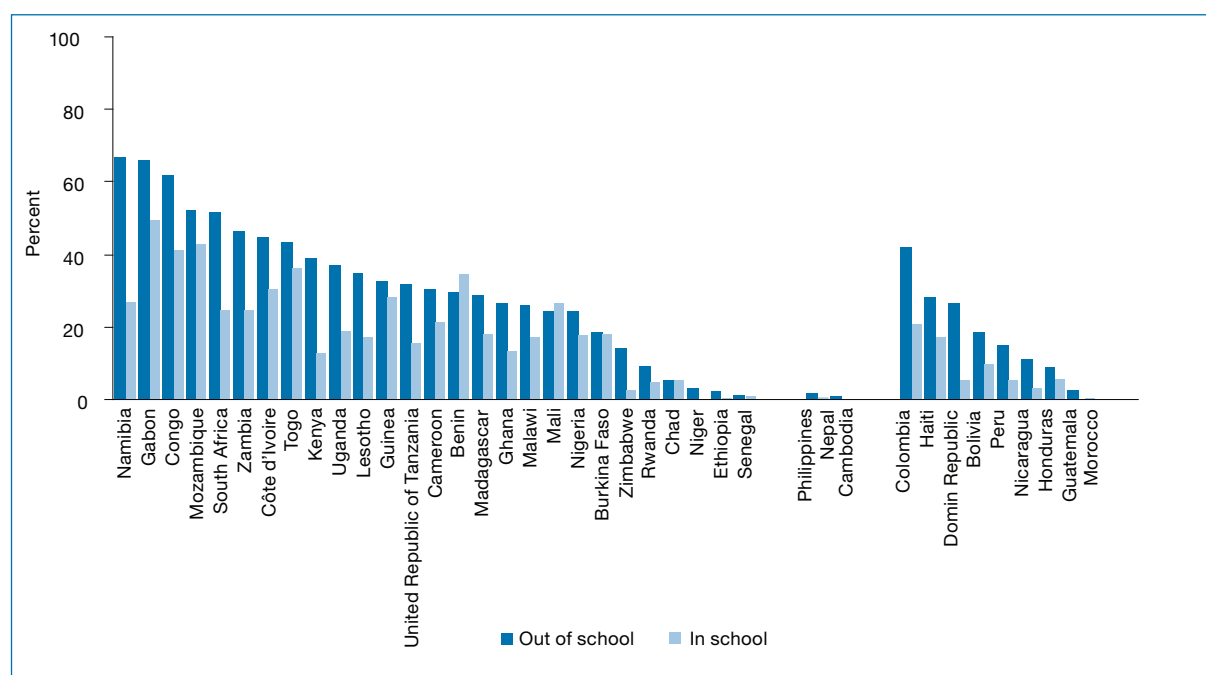
4.2 School quality and adolescent sexual and reproductive health

Typically, school quality is defined to encompass those elements – such as time to learn, school resources, and pedagogical practices – that directly contribute to the acquisition of basic learning skills (including literacy, numeracy, critical thinking, and knowledge of particular subjects). While an extensive literature has measured the relationship between school quality and various academic outcomes, including the acquisition of cognitive competencies as measured by performance on standardized tests as well as grade attainment,

there has been little research linking school quality and academic performance to other adolescent outcomes such as sexual initiation, pregnancy, and marriage.

Several recent studies using two different longitudinal data sets from South Africa have documented the associations between academic achievement and sexual initiation and pregnancy.^{10,11} These studies show that students who do better in school are less likely to initiate sex, more likely to use a condom if sexually active, and (for girls) less likely to become pregnant or drop out if pregnant. A comparative analysis of five West African countries also showed that female students who progress through school at an appropriate age for grade are less likely to drop out either for reasons of pregnancy or early marriage.¹² These relationships go both ways, in that those adolescents (particularly girls) who do have premarital sex while in school are more likely to drop out; thus adolescent risk behaviours can compromise school progress.⁸

Figure 6. Percentage of 15–17 year old unmarried girls who have had sex, by enrolment status.



Source: Tabulations from DHS, 1998 to 2006.

Table 1. Percentages using a modern method of contraception among 15–17-year-old girls who report ever having had sex, by region, country, and school status.

Region/country	Survey year	In school	Out of school	Ratio out/in school
Africa				
South Africa	1998	71.1	63.4	0.9
Burkina Faso	2003	68.2	41.1	0.6
Cameroon	2004	66.1	50.8	0.8
Namibia	2000	65.1	69.8	1.1
Gabon	2000	59.1	45.6	0.8
Lesotho	2004	54.0	41.2	0.8
Mozambique	2003	53.7	31.1	0.6
Congo	2005	51.1	50.1	1.0
Uganda	2000–01	47.9	47.4	1.0
Togo	1998	44.3	26.6	0.6
Ghana	2003	40.6	40.4	1.0
Mali	2001	35.3	7.6	0.2
Guinea	2005	33.9	16.9	0.5
Nigeria	2003	33.2	19.2	0.6
Benin	2001	28.3	7.8	0.3
Zambia	2001–02	24.6	22.3	0.9
Malawi	2004	21.4	14.1	0.7
Madagascar	2003–04	12.0	9.3	0.8
United Republic of Tanzania	2004	10.5	20.5	2.0
Kenya	2003	9.9	25.3	2.6
Rwanda	2005	3.6	11.3	3.1
Latin America/Caribbean				
Colombia	2005	78.9	72.3	0.9
Honduras	2005	52.9	42.1	0.8
Bolivia	2003	33.8	12.8	0.4
Haiti	2005	33.1	19.5	0.6
Peru	2000	24.1	25.8	1.1

Source: Tabulations from DHS data.

The literature has seen an expansion in definitions of school quality to encompass elements supportive of other life skills (including health and reproductive health), vocational skills, decision-making, and the development of pro-social values.^{1, 13} School, as the institution outside the family that plays the most important role in the socialization of the young, has the potential to influence directly students' aspirations, motivations, and risk-taking behaviours. Teacher attitudes and skills are often critical inputs to these aspects of school quality.

In-depth studies of the role of school quality in exam performance, school dropout rates, and premarital sex in Kenya found that the attitudes and behaviours of teachers towards their students can affect the likelihood of premarital sex while in school as well as performance on examinations and the likelihood of dropout, particularly for girls. Appleton¹⁴ found that variations in gender differences in the results of primary-school-leaving examinations among schools, with boys on average scoring better than girls, could be partially explained by differences between schools in the extent to which teachers expressed negative attitudes towards the learning ability of girls relative to boys.

A subsequent study in Kenya^{1,5,16} that combined direct observations of teacher and student behaviour in the classroom with a community-based survey of adolescents and their families, found that girls were more likely to engage in premarital sex and more likely to drop out if they attended schools where they reported that they were not treated equitably. This effect was not found for boys. Other factors noted in this study influencing the dropout rates for girls but not boys included whether or not teachers in the school took the importance of more difficult subjects like mathematics less seriously for girls, whether boys were free to harass girls, and whether or not boys were reported to be favoured in class and were

offered a more supportive environment in terms of advice.

Reliable information on sexual harassment and gender-based violence in schools is generally not available; the data that have been collected on gender-based violence do not differentiate between experiences within and outside of school settings. Anecdotal evidence suggests that sexual, physical, and psychological abuse of girls is common and occurs in the community, in schools, and within the family. Researchers give accounts of girls being bullied and touched in inappropriate ways by their male peers, being pressured to have sex by boys and by their teachers, and exchanging sex for grades or money.¹⁷⁻²² Nonetheless, as seen in Figure 6 above, students are less likely to report having had sex than non-students – suggesting that even bad schools may provide at least some protection. Indeed, to our knowledge, the second Kenyan study cited above is the only study that has quantified the extent of sexual harassment from school to school to allow comparisons across schools in students' performance according to experience of sexual harassment.

5. School-based policies and programmes to promote sexual and reproductive health

During childhood and adolescence, learning and maintaining good health are mutually reinforcing, in that healthy children learn better and children who achieve literacy, language, and critical thinking skills are better able to make informed choices and acquire the information needed to maintain good health both during school and in later years. Indeed, we have found in a variety of developing-country settings that the links between education and health are not just correlational but causal. In studies in countries as diverse as Ghana, Guatemala, Nepal, and South Africa, evidence is mounting that literacy skills (when acquired in school and retained

after school exit) are strongly linked to subsequent fertility and child-health outcomes.²³⁻²⁶ While rates of literacy improve with levels of schooling, the correlations are far from perfect because of variations in school quality. Thus the longer-term health benefits of schooling require the acquisition and retention of basic literacy and language skills, not just the completion of a certain number of grades.

These findings would suggest that the implementation of health-related curricula have little chance of success in schools where teachers lack adequate training and motivation and where students have not attained basic learning levels. There is growing evidence that many schools in developing countries fail to meet minimum learning standards, producing primary-school graduates without basic reading and numeracy skills.^{1, 13} Furthermore, the persistence of gender bias – particularly among teachers, both in terms of sexual double standards and of attitudes towards the capabilities of boys and girls – further undermines the effectiveness of many school-based adolescent sexual- and reproductive-health programmes.

5.1 Health-related programmes in schools

Some school systems provide certain basic preventive or curative health services to students. These include school meal programmes (which are increasingly common), inoculation programmes, de-worming programmes and, in some systems, basic health care (e.g. Egypt, where a nurse or doctor is assigned to each school). Meanwhile, hygiene in many schools is well below minimum standards due to lack of running water and unsanitary toilet facilities (e.g. Mensch and Lloyd for evidence from Kenya²⁷).

The provision of sexual and reproductive health services within the school system, however,

is undocumented and likely to be very rare, given parental and community sensitivities. In certain instances, in-school adolescent and sexual health programmes have arranged with local health facilities to visit the school and to encourage students to attend their facilities. In one programme in rural United Republic of Tanzania, a special sexual- and reproductive-health curriculum was taught to students in the last three years of primary school. As part of the programme, once or twice a year teachers took the students to visit a local health facility to familiarize them with the services available and to allow them to see condom demonstrations which were not allowed in the classroom.²⁸ The formation of health clubs within the school can also serve to bring health services into closer proximity to the school, but the direct benefits for adolescent reproductive health have not been measured.²⁹

Much more typical of school-based health investments is the provision of information on sexual and reproductive health as part of a life-skills, family-life education, or AIDS prevention curriculum. However, it is rare that achievement in these subjects is graded or examined, or that teachers are specially trained to teach the material or rewarded according to the quality of their work. Evaluations of various programmes which have attempted to overcome some of these barriers, through special teacher training (including peer educators) or through in-school lectures by outside experts, have shown some effects on knowledge and attitudes but rarely effects on self-reported behaviour or biological outcomes such as HIV status.^{1,4,30}

A recently completed and carefully documented and implemented randomized in-school adolescent sexual health intervention in rural United Republic of Tanzania found positive effects on knowledge, attitudes, and self-reported sexual behaviours but did not find effects on HIV rates after three years.³¹ Indeed, this study has raised a range of questions

about the efficacy of such programmes in poor rural settings. In an evaluation of the intervention in the United Republic of Tanzania, the authors speculated about whether the programme's low measured impact might be partially due to difficulties in its implementation, given constraints within the school and the community. The authors concluded: "When introducing an intervention into a context in which both implementers and participants have very limited educational levels and resources, basic standards of teaching and information must first be established before more complex and interactive work can be done".²⁸ This evaluation revealed that while participants gained better understanding of adolescent reproductive-health issues than did their peers in comparison schools, this understanding did not translate into changed behaviour or even greater perceived self-efficacy in implementing lessons learnt.

One problem with all of these school-based programmes may be that their messages primarily emphasize abstinence and do not help adolescents distinguish between more and less risky behaviours. An interesting experiment in Kenya in a set of randomly selected schools found that the provision of information to girls that HIV prevalence is higher among adult men than among teenage boys led to a 65% decrease in the incidence of pregnancies with adult partners relative to the comparison group after one year.³² Information was provided to primary-school students in grade 8 by a trained officer from a local NGO, rather than by an in-school teacher. By contrast, the provision to in-school teachers of special training concerning the Kenyan Government's basic HIV/AIDS education curriculum (which primarily emphasizes abstinence as the only risk avoidance strategy) had no impact on pregnancy rates and little impact on other outcomes such as students' knowledge and attitudes.²⁹

5.2 Education policies with health benefits

In the most general way, any investments in improvements in school access or quality in settings where learning outcomes remain poor is likely to have beneficial effects on adolescents' sexual and reproductive health for all the reasons discussed above. Improved academic performance is associated with delayed sexual initiation and a reduced likelihood of pregnancy. For example, a three-armed randomized trial of alternative school-based HIV/AIDS intervention strategies in western Kenya included training teachers in the Kenyan Government's HIV/AIDS education curriculum; encouraging students to debate the role of condoms, and to write essays about how to protect themselves; and reducing the cost of education through the distribution of free uniforms. This trial found that the most effective intervention in reducing teen marriage and childbearing was a programme to subsidize the cost of schools through the provision of school uniforms for girls in grades 6–8, thus encouraging school attendance during the teen years and reducing incentives for early dropout and childbearing.²⁹ The intervention designed to support the further education of girls through lowering the cost of school was more effective in eliciting positive health behaviours than either of the alternative interventions (which were designed to affect health behaviours more directly, by improving the quality of sexual and reproductive health education in the schools).

The acquisition of basic literacy and numeracy in primary school is a critical building block for the development of healthy behaviours during adolescence and beyond. Results from a longitudinal study of adolescents in Cape Town, South Africa¹¹ show that the higher the level of literacy and numeracy scores, the more likely an adolescent will be to delay sexual initiation. The acquisition of basic learning skills by a certain age depends not only on the quality of the school

but also on the age at which a child begins school. Policies to encourage students to start school on time are likely to reap multiple benefits for adolescent reproductive health, given the importance of peer influences (particularly for girls) and the difficulties of presenting sensitive material to age-diverse classrooms.

6. Conclusions

Boys and girls, particularly when they become adolescents, represent a challenging client population for both schools and health-service providers. They become even more challenging as clients if they reach adolescence without the requisite literacy, language, and critical-thinking skills to negotiate this complex phase of their lives. It is at this point that they are expected to take on increasing responsibility for their own health, through the proper assessment of risk and the adoption of a healthy lifestyle. Without an adequate educational foundation, many of the school-based sexual and reproductive health programmes designed for adolescents are bound to fail. Thus, basic school quality at the primary level becomes a necessary building block for the achievement of good health during adolescence and beyond – both for those who end their formal educational careers in primary school, and for those who continue to secondary school or beyond.

School quality varies both among and within countries. In some poor countries, primary schools are systematically failing in their principal task of teaching children basic literacy and numeracy. In most settings, the quality of schools varies – with some schools being excellent, many being adequate, and some failing completely. Typically, the population groups which suffer the greatest ill-health are the same groups that lack access to quality schools. For these reasons, the design of adolescent health policies will depend on careful

contextual analysis of the circumstances and needs of specific adolescent subpopulations, including an assessment of the learning environment and the demography of the classroom. Adolescents with the greatest health needs will be those who are most disadvantaged educationally. For these young people, improvements in basic school quality may in and of themselves be the most promising and cost-effective intervention for adolescent reproductive health.

To the extent that health agencies continue to invest in school-based adolescent reproductive health programmes in settings where school quality is sub-par, further innovation is essential – as is impact evaluation. Results to date have been disappointing. For example, community-based adolescent reproductive health programmes may confer more benefit than school-based interventions – because community programmes do not rely on the same teachers who are already overstretched in the classroom. Furthermore, alternative groupings of children, taking into account both age and grade distinctions are possible outside the structure imposed by the formal and graded classroom.

Indeed, it would be informative to compare alternative programme approaches using randomization across settings with similar levels of school quality. For example, the provision of teacher incentives for improved learning outcomes could be compared to the provision of a community-based and age-graded reproductive health programme, or the provision of school-based information about the health consequences of alternative sexual risk strategies.

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8

Sexual violence and coercion: implications for sexual and reproductive health

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1. Introduction

The World Health Organization recognized the prevention of sexual violence as an international public-health priority as early as 1996.^{1,2} A large body of research indicates that sexual violence and coercion can have long-lasting mental and physical health consequences, particularly for sexual and reproductive health (SRH).³ SRH consequences of sexual coercion range from unintended pregnancy and unsafe abortion to gynaecological disorders and sexually transmitted infections including HIV/AIDS. Sexual abuse in childhood and adolescence has been linked to subsequent risk behaviours such as higher rates of substance abuse, early consensual sexual debut, unprotected sex, and multiple sex partners.⁴ Moreover, the inability of many girls and women to negotiate when, with whom, and how they have sex, plays a significant role in the spread of HIV/AIDS.⁵

This chapter reviews recent efforts by researchers and activists to increase knowledge about the patterns, prevalence, and consequences of sexual coercion – both as a public-health issue and as a violation of human rights. This chapter draws heavily from several recent reviews of the literature and from the report of the *WHO multi-country study on women's health and domestic violence against women*.⁶⁻⁸

Researchers have identified many different types of sexual violence and coercion (e.g. sexual intimate partner violence, 'date rape', transactional sex, early forced marriage, child sexual abuse, sexual harassment in workplaces and schools, and gang rape). This chapter focuses on certain types of sexual coercion that are most common or of particular concern to the international public health community, namely sexual coercion against

women at sexual debut, in childhood, within intimate partnerships, and in conflict situations; and sexual coercion against boys and men. More comprehensive reviews can be found elsewhere.⁶

2. Defining and measuring sexual violence and coercion

Many international definitions imply that the terms "sexual coercion" and "sexual violence" are interchangeable. For example, the World Health Organization defines "sexual violence" as any sexual act that is coerced, specifically:

any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic or otherwise directed against a persons' sexuality using coercion, by any person regardless of their relationship to the victim, in any setting, including but not limited to home and work.⁶

In practice, however, "sexual coercion" often has a broader meaning than "sexual violence", since researchers and survivors often do not recognize sexual coercion as violence unless the incidents involved physical force or fear of physical violence.^a For example, the *WHO multi-country study* developed an operational definition that classified an act as sexual violence if the respondent said she:

was physically forced to have sexual intercourse when she did not want to; had sexual intercourse when she did not want to because she was afraid of what partner might do; was forced to do something sexual that she found degrading or humiliating.⁸

This chapter will use the broad definition of sexual coercion developed by Heise, Moore and Toubia

^a The *WHO multi-country study* report uses the term "sexual violence" to refer to sex that involved force or fear, while "coerced" sex includes a broader set of circumstances, including sex that was unwanted but did not occur in the context of force. For example, the report says: "respondents were asked whether they would describe their first experience of sexual intercourse as something that they had wanted to happen, that they had not really wanted to happen but that had happened anyway (coerced), or that they had been forced to do. Only the results for forced sex are presented here".⁸

in 1995. This definition acknowledges a wide range of sexual acts (from verbal harassment to forced penetration) and a wide range of types of coercion (from physical force to social pressure and intimidation of all kinds). Sexual coercion is defined as:

[the] act of forcing (or attempting to force) another individual through violence, threats, verbal insistence, deception, cultural expectations or economic circumstances to engage in sexual behaviour against her/his will. As such, it includes a wide range of behaviours from violent forcible rape to more contested areas that require young women to marry and sexually service men not of their choosing. The touchstone of coercion is an individual woman's lack of choice to pursue other options without severe social and physical consequence.⁹

The knowledge-base concerning sexual violence and coercion has many gaps. Because of shame, denial, fear of retaliation, and other reasons, respondents often underreport coercive experiences. Those who experience or perpetrate coercion do not always consider sex to be 'forced' if it occurs in a long-term relationship, even when the person is physically held down or threatened with violence.^{10,11} Researchers have only recently begun to understand how to protect respondents' safety and how to increase disclosure rates.^{8,12-14}

With few universally accepted operational definitions for specific types of coercion, researchers often construct and word their questionnaires in ways that make data difficult to compare across studies. Moreover, many studies on sexual violence and coercion have been small-scale or unrepresentative. These include small qualitative studies with convenience samples, analyses of crime data that include only select types of violence, and facility-based surveys among survivors seeking medical care. Moreover, until recently most population-based surveys

concerning sexual violence came from a small number of countries, such as the United States and South Africa.

In the past few years, however, researchers have expanded knowledge about sexual violence. Demographic and Health Surveys in many countries have incorporated modules that ask about physical and sexual violence by intimate partners.¹⁵ In addition, the *WHO multi-country study* has published findings on sexual violence from 10 countries.⁸ Both of these sets of data focused primarily on intimate partner violence against women of reproductive age, so they provide only a partial view of the situation. More research is needed to understand the full range of sexual violence and coercion that women experience; nonetheless, these recent studies represent progress in the quest for comparable multicountry data.

3. Patterns and prevalence of sexual violence and coercion

3.1 Sexual violence and coercion at sexual debut and/or during childhood

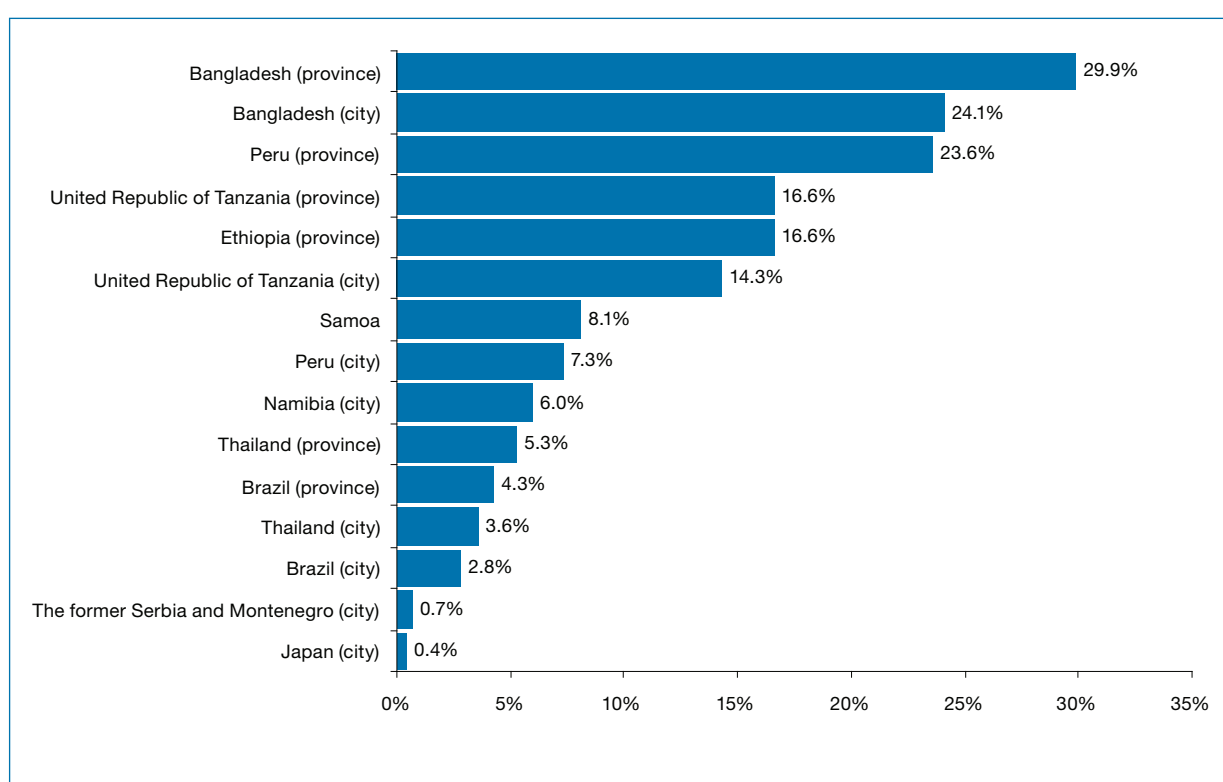
Studies from many countries have asked women whether their first sexual intercourse was "unwanted" and/or "forced". A review of 10 population-based surveys found that young people reported forced sexual debut at rates that ranged from 7% in New Zealand to 48% in the Caribbean.^{b,16,17} In the *WHO multi-country study*, women reported that their first sexual intercourse was forced at rates that ranged from less than 1% in Japan to nearly 30% in rural Bangladesh (Figure 1).⁸ Globally, there are wide differences in the average age of marriage, norms about social mixing between girls and boys, and patterns of premarital

^b The results from the Caribbean study included those who said first sex was "somewhat forced" as well as those who said it was "forced" – a wording difference that may contribute to the relatively higher reported rate compared to other studies.

sex; as a result, the typical profile of early sexual partnerships varies depending on the setting. In settings in which early marriage is common (e.g. South Asia), women's sexual debut occurs largely within marriage, often as young girls. For example, in the *WHO multi-country study* over 40% of women interviewed in provincial Bangladesh

had experienced sexual debut within marriage before age 15, and 35% of those said it was forced. In other settings, young women often experience first sex within premarital partnerships.¹⁸ In nearly all settings, however, sexual debut is more likely to be forced the earlier it occurs.⁷

Figure 1. Percentage of sexually-experienced girls and women of reproductive age reporting that first sexual experience was "forced".



Source: *Multi-country study surveys* conducted between 2000 and 2003.⁸

Beyond the scope of this paper, there is a vast research literature on child sexual abuse from industrialized settings and a small but growing literature from developing-country settings.¹⁹⁻²⁴ Prevalence studies on child sexual abuse are methodologically challenging and often hard to compare because of widely varying definitions of what age constitutes a child, whether or not age or power differences between victim and perpetrator are included in the definition, what types of

acts constitute abuse, and whether child abuse excludes forced sex by husbands (in settings where girls are often married during childhood or early adolescence).

Nonetheless, the international literature reflects a broad consensus concerning some key patterns. For example, child sexual abuse has been found in every country where it has been rigorously studied; victims include boys as well as girls; girls

tend to report higher rates of abuse than boys; and perpetrators are likely to be close to the victim, including relatives, family friends, acquaintances, and authority figures such as teachers, employers, and religious leaders.

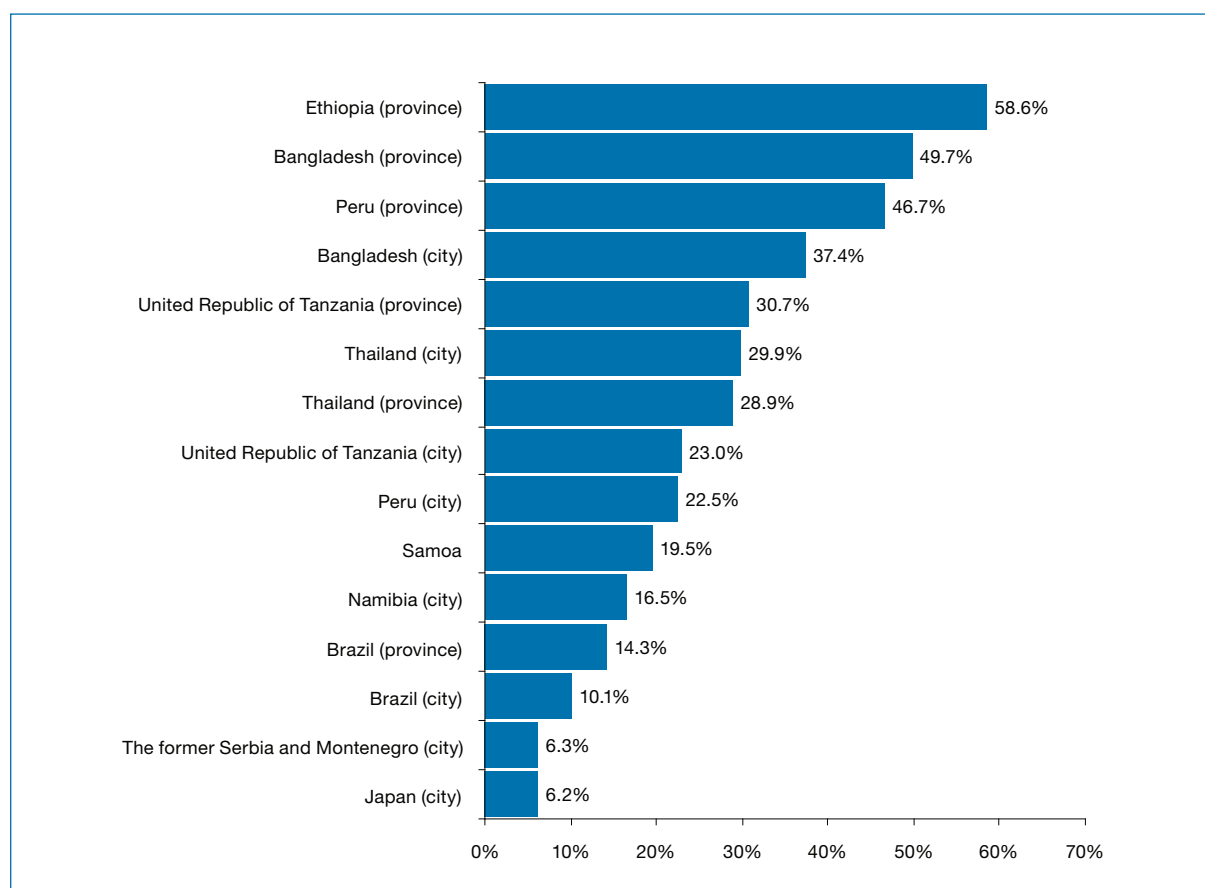
3.2 Lifetime experiences of coercion by intimate partners

Women who report lifetime experiences of forced sex are most likely to identify intimate partners as the perpetrators.⁸ A study of DHS surveys from six countries found that women reported rates of sexual intimate partner violence (IPV) ranging from 4% in Cambodia to 17% in Haiti.¹⁵ The *WHO*

multi-country study found that women reported sexual IPV (ever) at rates that ranged from 6% in Japan to 59% in Ethiopia (Figure 2).

These and other studies indicate that physical and sexual IPV are closely intertwined. In both the DHS and WHO studies, a majority of women who reported sexual IPV also reported physical IPV in all sites except Haiti and Thailand. Moreover, many would argue that the prevalence of sexual IPV should be understood in the context of other types of IPV, because forced sex is often part of a broader pattern of control and abuse that includes physical and emotional violence.³

Figure 2. Percentage of ever-partnered women aged 15–49 who reported sexual intimate partner violence ever, after age 15.



Source: *Multi-country study surveys* conducted between 2000 and 2003.⁸

3.3 Women's lifetime experiences of coercion by non-partners

Evidence suggests that a substantial minority of women experience sexual violence by non-partners over the course of their lives. For example, the *WHO multi-country study* found rates of non-partner sexual violence ranging from <1% in Ethiopia to 12% in the United Republic of Tanzania. Contrary to the popular stereotype that rape is usually committed by strangers, most studies indicate that women are likely to know the perpetrator.³ A national survey in the United States found that in 8 out of 10 rape cases, the woman knew her attacker.²⁵ In the *WHO multi-country study*, strangers made up a minority of non-partner perpetrators in all but a few urban sites, such as urban Bangladesh and Japan. One key exception is that rape by non-partners is often endemic during and after situations of armed conflict and forced displacement (see below).

3.4 Sexual violence against women in situations of conflict and displacement

In recent years, the international community has paid increasing attention to high rates of sexual violence during and after situations of armed conflict. In settings such as the Democratic Republic of Congo, Kosovo, Liberia, Rwanda, and Sierra Leone combatants have committed systematic, mass rape.^{26,27}

Research from Liberia provides a case-study. A WHO-sponsored, population-based survey among more than 1200 women found that about 75% of women reported having been raped during the 14-year-long civil war.^{28,29} In some villages, soldiers systematically raped every female over the age of seven. According to respondents, assailants often targeted young girls (aged 7 to 12) believing them to be free of STIs/HIV. During the conflict, soldiers often abducted girls and forced them into sexual slavery; many of those women are now shunned by

their original communities. The prevalence of non-partner sexual violence often remains high in many post-conflict settings, along with partner violence. For example, in the Liberian study, many women reported 'survival sex' (having sex in return for necessities) because of economic devastation and/or forced displacement.

3.5 Sexual violence and coercion against men

Sexual coercion against boys and men is a highly sensitive and under-researched area. Most data on sexual coercion against males come from a relatively small number of studies among young men, with highly diverse samples, study designs, and definitions of coercion.⁷ The enormous heterogeneity of these studies may contribute to the wide variations in reported prevalence rates, in addition to underlying differences in actual prevalence that may exist from setting to setting. For example, a longitudinal study from New Zealand found that less than 1% of young men aged 21 reported forced sexual intercourse ever, while a survey from nine Caribbean countries found that 32% of male adolescents reported some kind of pressure or force in their first sexual experience.^{16,17} Little is known about the reliability of these data, or even how to interpret men's responses to different types of questions about coercion, except that the stigma of being a male victim of sexual violence is likely to reduce disclosure rates.^{10,30,31} In nearly all studies, however, males report sexual coercion at much lower levels than females; sexual coercion and violence are more common against boys than against adult men; and rates of forced sexual debut are higher the earlier it occurs.⁷

Research indicates that sexual coercion against males occurs in a myriad of contexts. Boys and men sometimes report being coerced into sex by older women, being 'deceived' or 'tricked' into sex

by partners, or pressured by women to have sex through actions such as undressing, touching and commenting on their penises, or taunting their lack of virility.^{10,32} In other cases, males report pressure from male peers or family members to have sex with girls or women, sometimes with commercial sex workers.³²⁻³⁴

Some studies have found that a substantial proportion of sexual violence against males is perpetrated by other males.^{4,33-36} A national survey in the United States, for example, found that 70% of adult male rape victims reported a male perpetrator, as did 89% of men raped as children or adolescents.²⁵ Researchers have also documented sexual violence by combatants against boys and men in situations of armed conflict, for example, in the Democratic Republic of Congo.³⁷ In addition, sexual violence by guards and inmates may be prevalent among incarcerated male prisoners in some settings. For example, one of the few rigorous surveys of sexual abuse in Midwestern United States prisons found that as many as 7% of male prisoners reported being raped in their current facility, and 21% had experienced at least one incident of pressured or forced sexual contact since incarceration.³⁸

4. Consequences of sexual violence and coercion

Forced sex is often unprotected and accompanied by emotional trauma or physical violence. As a result, sexual coercion has a host of physical and mental health, behavioural, and social consequences, depending on the circumstances (Box 1).

These consequences can be severe, long-lasting, and sometimes fatal. Evidence suggests that for *individual* survivors of sexual violence, the mental health, behavioural and social consequences may be similar for men and women, depending on the severity of the incident.^{4,36} However, girls and women bear the overwhelming burden of injury and disease from sexual violence and coercion, not only because they comprise the vast majority of victims but also because they are vulnerable to sexual and reproductive health consequences such as unwanted pregnancy, unsafe abortion, and a higher risk of HIV/AIDS transmission during vaginal intercourse. Even in the case of child sexual abuse (which appears to affect males at higher rates than other types of sexual coercion) some researchers estimate that women bear at least two thirds of the burden of injury and disease.³⁹

Box 1. Examples of consequences of sexual coercion	
Mental health	Depression, post-traumatic stress disorder, sleep difficulties, somatic complaints, suicidal behaviour.
Reproductive health	Gynaecological trauma, unintended pregnancy, unsafe abortion, pregnancy complications, sexual dysfunction, STIs/HIV/AIDS.
Behavioural	Subsequent high-risk behaviour (e.g. unprotected sex, early consensual sexual initiation, multiple partners, alcohol and drug abuse); a higher risk of perpetrating or experiencing subsequent sexual violence.
Fatal outcomes	Death from pregnancy complications, unsafe abortion, AIDS, murders of women (femicide) during rape or in the name of honour (victim killed by family), infanticide of a child born of rape, suicide.
Social outcomes	Unwanted childbearing, withdrawal from school, inability to form adult relationships, rejection by partner or family.

4.1 Sexual and reproductive health consequences

Sexual violence and coercion may produce adverse sexual and reproductive health outcomes through direct and indirect pathways, as follows.^{40,41}

Direct. Unprotected coerced sex may lead to outcomes such as unintended pregnancy, unsafe abortion, STIs (including HIV/AIDS), and gynaecological disorders (among others).

Indirect. In addition, sexual violence and coercion may disempower girls and women, making it harder for them to negotiate sex and condom/contraceptive use, or to access services such as HIV testing and counselling. This may indirectly result in adverse sexual and reproductive health outcomes. Moreover, sexual abuse in childhood and early adolescence has been linked to high-risk sexual behaviour in adolescence among both girls and boys.

4.2 Unprotected sex and unintended/unwanted pregnancy

Evidence suggests that women who live in situations of intimate-partner violence often experience forced sex and are generally less able to negotiate protected sex, leading to higher rates of unintended pregnancies.^{42,43} The few studies that have considered whether these outcomes result directly from forced sex, or indirectly from living with physical and emotional violence, suggest that both pathways play a role.⁴⁴

Numerous studies have found an association between forced sexual debut, lack of contraception/condom use, and unintended pregnancy. A longitudinal study of 1130 sexually-experienced young women in South Africa found that young women who reported forced sexual debut were significantly more likely to report an unintended pregnancy than those who had not been coerced at first sex.⁴¹ Similarly, a study among girls in Uganda found that non-consensual

first sex was significantly associated with a lower use of modern contraception and with early and unintended pregnancy.⁴⁰ Other research suggests that adolescent girls with a history of sexual abuse appear more likely than other teens to become pregnant in adolescence.³

A few studies have measured the proportion of rape cases (usually defined by survivors as forced sex by non-partners) that result in pregnancy, and they report rates ranging from 5% in the United States (Box 2), to 17% among adolescent girls in Ethiopia, to 15%–18% by girls and women seeking help at rape crisis centres in Mexico, the Republic of Korea, and Thailand.^{45–47} In studies from Costa Rica and Lima, Peru, the vast majority of pregnant girls younger than age 12 and 15 (respectively) reported that their pregnancy had resulted from rape or incest.⁴⁷

4.3 Induced abortion

Many girls and women who become pregnant as a result of forced sex decide to terminate their pregnancies, whether or not safe abortion is available in their communities. In the study described in Box 2, almost one third (32%) of rape survivors who became pregnant opted to keep the infant; half (50%) underwent induced abortion, and smaller proportions (6% and 12%, respectively) gave the infant up for adoption or miscarried. Research from southern Nigeria, where induced abortion is common and often unsafe, found that young women who had experienced transactional or forced sex were significantly more likely than other women to report ever having an induced abortion.⁴⁸

Similarly, the *WHO multi-country study* found a statistically significant association between intimate partner violence and induced abortion. In nearly all sites, women who disclosed physical or sexual IPV also reported higher rates of induced abortion than women who said they had not experienced such violence.⁸

Box 2. Research on pregnancy outcomes following rape in the United States

Researchers carried out a three-year longitudinal survey on the incidence and outcomes of rape among a national probability sample of 4008 women aged 12–45 in the United States. Five per cent of reported rapes resulted in pregnancy. Most pregnancies occurred among adolescents, many of whom were assaulted by known, often-related perpetrators. Only 12% of victims who became pregnant had received immediate medical attention; 47% received no medical attention related to the rape; and 32% did not discover they were pregnant until they had already entered the second trimester. Researchers used these data to estimate that over 32 000 pregnancies result from rape each year in the United States.⁴⁵

4.4 Sexually-transmitted infections, including HIV/AIDS

Many studies have found an association between sexual coercion and STIs, including HIV/AIDS. A longitudinal study of 1130 sexually-experienced young women in South Africa found that nearly 46% reported that their first sexual encounter had been coerced, and those reporting coerced sexual debut were significantly more likely than others to have had an STI.⁴¹ Studies from various settings (Rwanda, South Africa, the United Republic of Tanzania, the United States) have found that HIV-positive women are more likely to have experienced sexual coercion than HIV-negative women.^{11,49}

Unprotected forced sex may expose those coerced (whether female or male) to the risk of STIs, including HIV/AIDS. Moreover, forcible rape may tear the vagina or rectum, increasing the risk of HIV transmission.⁵⁰ But much research on sexual coercion and HIV suggests an indirect pathway. Women in relationships characterized by violence and coercion may find it difficult to negotiate condom use, a factor that appears to play a major role in explaining the transmission of HIV/AIDS among young women in sub-Saharan Africa.⁵¹ For example, research from South Africa found evidence that sexual coercion within intimate partnerships played a role in increasing women's vulnerability to HIV/AIDS – primarily because it was associated with inconsistent condom use.⁵²

4.5 Gynaecological disorders

Sexual violence and coercion can produce gynaecological disorders such as vaginal bleeding, chronic pelvic infection, pelvic pain, urinary tract infections, and (subsequent) painful intercourse.³ In situations of armed conflict, militants sometimes assault girls and women with objects in the vagina, which can result in traumatic gynaecological fistula.⁵³

4.6 Subsequent high-risk behaviours

A large body of evidence from both developing and industrialized countries suggests that sexual coercion in childhood and early adolescence is associated with high-risk behaviours later in life. These behaviours include early consensual sexual debut, substance abuse, multiple sex partners, choosing abusive sexual partners, and lower rates of contraceptive/condom use.^{4,9,23,34,36,54,55-60}

Young people who experienced early sexual abuse also appear to be more likely than other young people to report feelings of worthlessness and difficulty distinguishing sexual from affectionate behaviour, maintaining appropriate personal boundaries, and refusing unwanted sexual advances.⁹ Sexual coercion in childhood and adolescence has been consistently associated with a higher risk of experiencing or perpetrating sexual violence later in life.^{4,56,61} In a study from Kenya, for example, young males aged 10–19 who reported being victims of coerced first sex were significantly more likely than others to admit that they had subsequently coerced someone else into having sex.⁶²

4.7 Social consequences of sexual violence and coercion

Social consequences of non-consensual sex can be severe, ranging from withdrawal from school, inability to build adult partnerships, poor marriage prospects, early and/or unwanted childbearing, social condemnation for premarital pregnancy, and rejection by family or friends who sometimes blame the victim.^{36,46,63-66} In some settings, female survivors are at risk of being shunned, beaten, or even murdered by relatives to save the 'honour' of the family.⁶⁶

5. Factors associated with sexual violence and coercion

To study factors associated with sexual violence and coercion, researchers have used an ecological model which operates at four levels: individual, relationship(s), community, and society³ (Figure 3). Use of this model is complicated both by the fact that individual-level factors for victims and perpetrators differ, and by the diversity of forms and contexts in which sexual coercion occurs. For example, factors associated with gang rape may be different than factors associated with forced sex within intimate partnerships.

At the *individual level*, researchers have found associations between experiencing sexual coercion and factors such as young age, alcohol and drug consumption, economic destitution, and early age of marriage. For example, research from settings as diverse as Kenya, Nicaragua, and Thailand suggests that girls who marry young (ages varied) are at greater risk of sexual violence than older married women and unmarried young women.^{57,61,34} As noted above, a history of sexual abuse in childhood and adolescence has been associated with subsequent victimization and perpetration.

Community-level factors that have been linked to higher rates of sexual violence and coercion include

patriarchal norms that justify sexual violence and discourage women's rights, poor responses from key local institutions (e.g. schools, religious authorities, health centres, and police), and lack of security in public places.^{6,7} At the *societal level*, key factors associated with higher levels of sexual violence and coercion include armed conflict and legal systems that fail to prosecute sexual violence or protect women's civil rights.^{6,7}

5.1 Poverty and sexual violence and coercion

There is substantial evidence that poverty increases the vulnerability of girls and women to *non-partner sexual violence*, such as forced prostitution, survival sex (having to exchange sex for necessities such as food), forced marriage, sexual harassment in schools and workplaces, and even gang rape.⁶ Poverty may also make it more difficult for girls and women to avoid unsafe public places in communities which are generally characterized by high levels of violence. In many cases, however, the effect of poverty appears to be mediated by social and economic upheaval at the household or societal level. For example, in 2002, Human Rights Watch documented how children orphaned by AIDS in Zambia were often vulnerable to sexual abuse and exploitation due to economic destitution linked to the loss of their parents and family protection.²⁰ Similarly, in some parts of the world, girls often report being forced to marry against their wishes because of an economic setback within their family such as the death of a parent.^{6,7}

Few studies have looked specifically at the relationship between poverty and *sexual intimate partner violence*. A rare study from India found that women living in low-income households were significantly more likely to experience sexual coercion within marriage compared to those living in more affluent households.⁶⁸ There is, however, a substantial body of research on the relationship between poverty and *physical intimate*

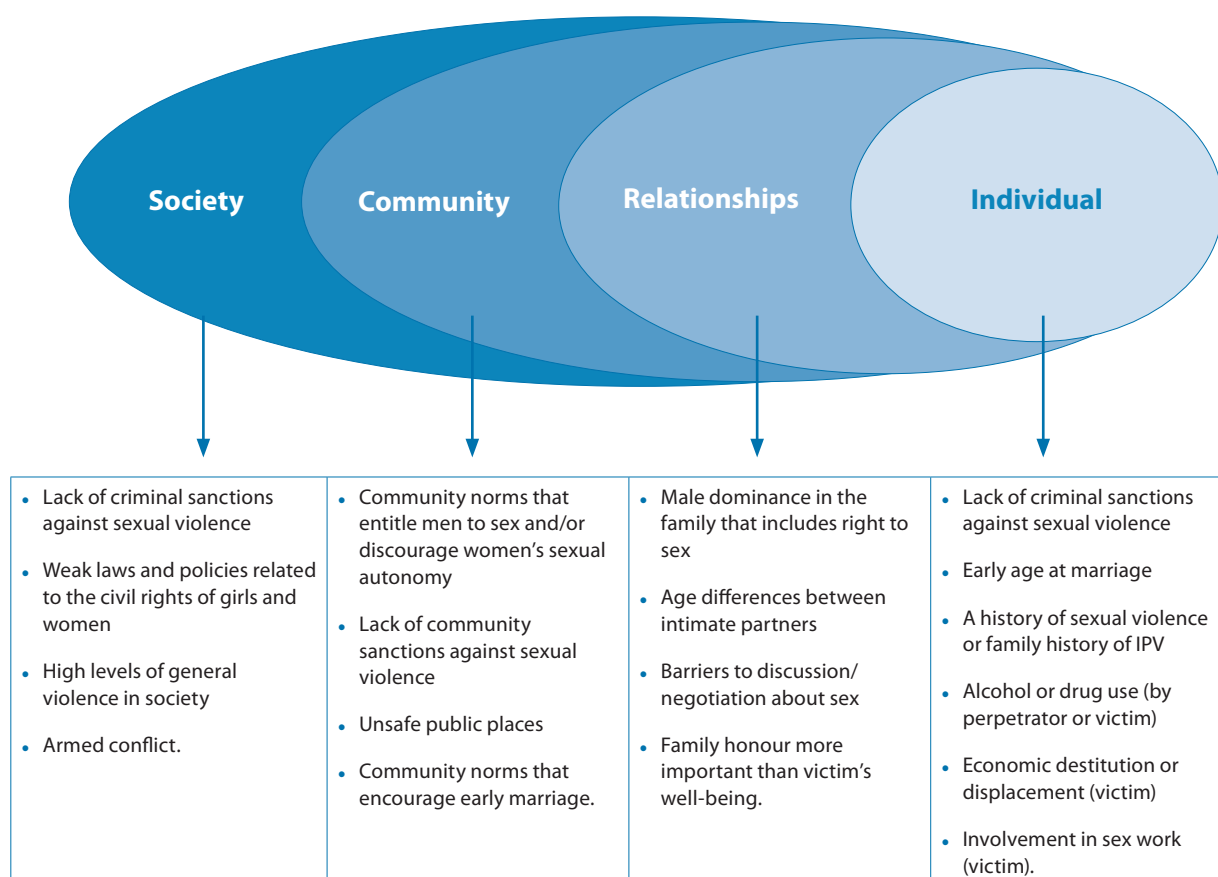
partner violence from settings as diverse as India, Nicaragua, South Africa and the United States.⁶⁹ This research suggests a complex relationship between poverty and intimate partner violence. While very high levels of income and education do appear to protect women from violence to a certain extent, the relationship between income and violence is not always linear. In some settings, the poorest or least-educated women report somewhat lower levels of violence than those who are slightly better off, and rates of physical violence sometimes appear to rise when women begin to challenge traditional gender roles.⁶⁹ Jewkes and others argue that the effect of poverty on violence may be mediated through increased stress, marital conflict, and threats to masculine identity; and the unequal social and economic status of women may

have a greater influence on levels of violence than absolute levels of income.

Similarly, cross-cultural anthropological analyses of family violence found a number of societies that were relatively free of physical and/or sexual violence within marriage, none of which were high-income (most were small-scale hunter-gatherer or agricultural communities).^{70,71} In 1989, Levinson identified four factors that seemed to protect women from family violence – all of which relate to women's relative status vis-à-vis men, rather than overall material well-being:

- women and men sharing responsibility for family decision-making
- women and men having equal rights to divorce

Figure 3. Selected examples of factors often associated with sexual coercion.



Sources: Jewkes, Sen & Garcia-Moreno;⁶ and Jejeebhoy & Bott.⁷

- marriage being monogamous
- the lack of a double standard regarding premarital sex for girls and boys.

In sum, this research suggests that while poverty may exacerbate women's vulnerability to sexual violence, gender inequality may play a greater role in levels of violence than income levels alone.

5.2 Gender norms and forced sex in marriage

While women's status, attitudes about gender roles, and levels of sexual violence vary from setting to setting, unequal gender norms appear to be a consistent factor underlying non-consensual sex throughout the world. Violence against women – both physical and sexual – appears to be more common in settings where unequal gender roles are rigidly enforced, where masculinity is associated with aggression and femininity with submission, and where women experience severe economic and social inequality relative to men.^{3,69,72}

In many settings (notably South Asia and sub-Saharan Africa), gender norms often support a husband's unfettered right to sex within marriage.^{11,68,73-75} Historically, marital rape was not considered a crime in most countries, and when it is criminalized, changes in attitudes often lag behind changes in the law.⁷⁶ In some settings, norms about husbands' entitlement to sex are so strong that substantial proportions of women and men say that a husband is justified in beating his wife if she refuses to have sex, as reported by over 73% of women in Mali compared to 3% of women in Nicaragua (Figure 4). Researchers are still exploring the reasons for differences between male and female responses.^{77,78,c}

^cIn some DHS surveys, women appear to be even more likely than men to support wife-beating for refusing sex.⁷⁸ The reasons for these differences are unclear but some qualitative research suggests that these survey questions may measure women's perceptions about community norms rather than their own personal beliefs about whether men should use violence.⁷⁷

Moreover, gender norms may facilitate sexual coercion within marriage even without condoning physical violence. In settings where families often marry daughters off while they are still children, families may not inform girls about sex before marriage – leaving them unprepared to negotiate with husbands on sexual matters.⁷⁴ In many settings, married women feel they must comply with their husband's sexual demands because they fear abandonment or simply have no where to go.^{61,75,79,80} As a woman from India explained, "But where does one go? ... the only place is the parental home but parents will always try and send you back".⁸¹

5.3 Gender norms and premarital sexual coercion

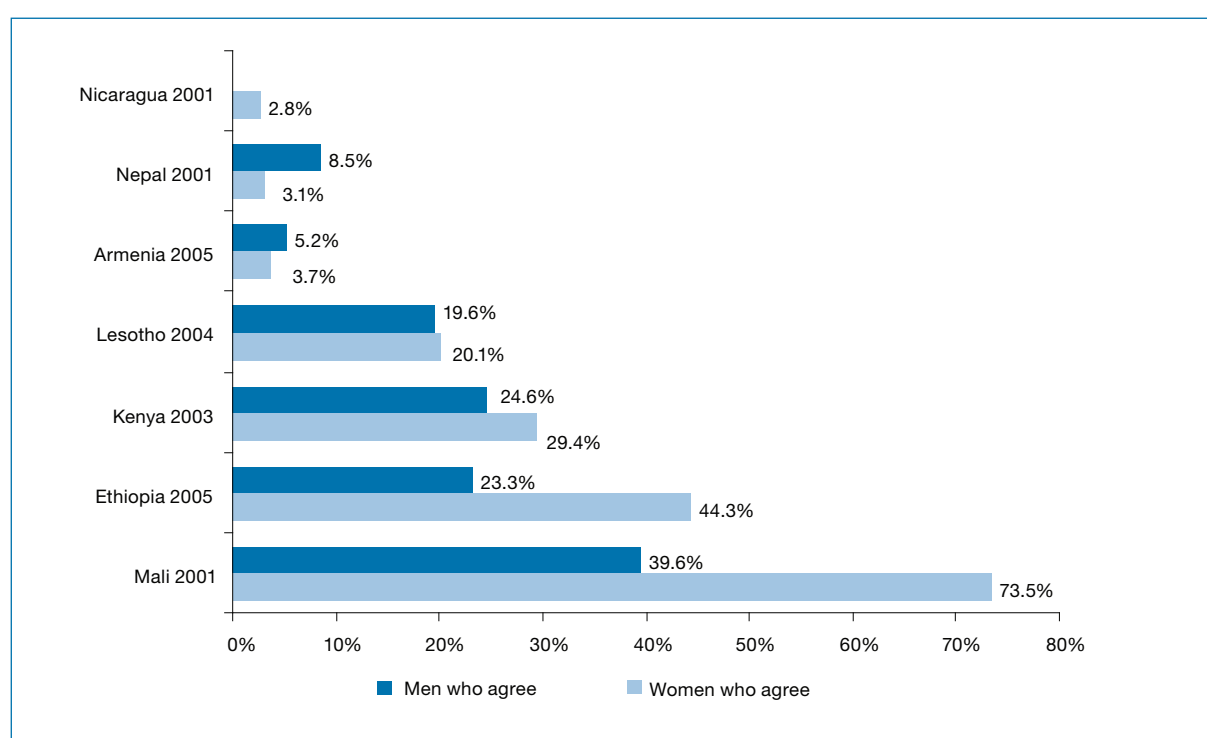
In many settings, gender norms view sexual coercion as part of 'normal' adolescent male behaviour or an integral part of the premarital seduction process.^{62,64} Gender norms often perpetuate the belief that males are entitled to force sex because their sexual needs are beyond their control and require immediate satisfaction.^{32,33,82} In other cases, men use sexual violence to enforce gender norms. For example, in a study from Nigeria young men described rape as a way to "teach a haughty/unwilling girl a lesson".³¹ Young male respondents often cite a need to 'prove' their masculinity as a factor encouraging them to use coercion to obtain sex. Male bonding activities appear to play a role in forced sex, including gang rape in many settings.^{31,33,58,62,75,82}

In many settings, young people believe that young women who resist sexual advances are simply conforming to traditional role expectations and in fact enjoy the coercive incident.³² Young men from Kenya explained, "Girls want sex as much as boys but they have to say 'no' to maintain their reputation".⁶² Case-studies from diverse settings report that girls sometimes tolerate non-consensual sex in premarital relationships as a mark of

commitment from the partner.^{75,83} Women often report that prior sexual experience compromises their ability to negotiate sex. For example, young women in Mexico explained that once they had engaged in sex with a boyfriend, they were expected to continue doing so, and it was difficult to avoid sex with a new partner if he knew that she

was not a virgin.¹⁰ In other cases, social norms make it difficult for girls and women to refuse *unprotected* sex. A review of studies from several sub-Saharan African countries found that girls often felt they had no right to insist on condom use after accepting gifts or money.⁸⁴

Figure 4. Proportion of women and men who agreed that wife-beating is justified when a wife refuses to have sex (selected DHS surveys).



Note: DHS surveys in many countries collect this information from women only. In Nicaragua, for example, the DHS did not collect this information among men, but the women's answers are provided simply to give an example from a different region.

Source: Measure DHS statcompiler (<http://www.statcompiler.com/>).

5.4 Gender norms and the response to sexual coercion by families and communities

Norms also influence the community response to coercion, often by blaming the victim and minimizing the responsibility of the perpetrator. Gender norms that entitle men to sex, condemn premarital sex for women, or generally blame victims of sexual violence can undermine support for violence survivors – leading to secondary victimization. Studies from many settings document a widespread belief that girls ‘provoke’

coercion or that rape victims ‘asked for it’. Classic justifications for forced sex include ‘provocative’ dress; acceptance of gifts, food, or money; the belief that girlfriends and wives should always be available for sex, or that ‘easy’ women including sex workers are free game.^{30,33,58,79,82,85-88} Male survivors of sexual violence often experience shame, stigma, and blame because their experiences violate traditional ideas about masculine dominance.³³ In many parts of the world, negative attitudes about survivors are common among health and law-enforcement professionals to whom survivors may turn for help.³

Pervasive attitudes that blame the victim often make it difficult for young people to seek help from their families when they experience unwanted sexual advances.^{23,32} In some settings, the taboo against discussing sex with parents makes it difficult for girls to ask parents for help when they feel threatened. Girls sometimes believe that parents will accuse them of inciting the coercive incident.⁸⁵ A study from Zambia found that girls who reported sexual abuse to their families were sometimes silenced and warned not to bring shame upon the family.²⁰ Peers may not be more supportive than parents.^{31,58} In some traditional communities in South Asia and the Middle East, disclosing experiences of sexual coercion may put young women at risk of being shunned or even killed by their own relatives in the name of ‘honour’.^{66,89-91}

6. Promising strategies for prevention and response

Sexual coercion falls at the nexus of many sectors and disciplines, including justice, health, education, economic development, and human rights. In recent years, international agencies across all these sectors have identified a substantial body of knowledge about how to provide an adequate, comprehensive, and multisectoral *response* to sexual violence once it occurs – although the reality lags far behind the ideal in most developing settings.⁹² Less is known about effective ways to *prevent* sexual violence and coercion before it occurs. Several key reviews have recently synthesized knowledge about promising strategies for the prevention and response to sexual violence and coercion, and some of these lessons are summarized below.^{6,93-95}

6.1 Building and disseminating the knowledge base

Building the knowledge base through local and national research can serve to convince

policy-makers and programmers that sexual coercion is a public health problem, and to guide them in designing appropriate interventions. Meanwhile, the existing global evidence needs to be translated into information that programmers and policy-makers can put into practice and that can inform their work.

Knowledge about the magnitude and patterns of sexual violence has recently expanded with the publication of key research including the *WHO multi-country study*.⁸ WHO has also supported research on the prevalence and the medico-legal response to sexual violence in settings such as Central America, Egypt, Liberia, and the Philippines.^{28,29,96} One key gap involves research to identify interventions that can effectively prevent sexual violence and coercion; support is needed for rigorous, ethical, and outcome-oriented evaluations of prevention strategies.

The Sexual Violence Research Initiative is an example of a *network* of experts working to promote research and action concerning the topic of sexual violence. As a global initiative, it is coordinated by an international group of researchers and activists who work to increase knowledge, awareness, and the capacity to address sexual violence around the globe – particularly in developing countries (see www.svri.org).

International organizations have produced many *reports* and *guidelines* in recent years to guide programmers and researchers, including guidelines for medico-legal care for victims of sexual violence;⁹⁷ methodological, ethical, and safety recommendations for researching violence against women in general^{13,98} and trafficked women in particular;⁹⁹ guidelines for preventing and responding to sexual violence in humanitarian settings;¹⁰⁰ and ethical and safety guidelines for researching sexual violence in humanitarian settings – among many others.¹⁴

6.2 Preventing sexual violence and coercion

Entertainment-education programmes using radio and television have been shown to produce behavioural change related to numerous public health issues.¹⁰¹ Organizations have begun to use these strategies to address violence against women, including sexual violence. Population-based evaluations of the Soul City Institute (South Africa) and the radio programme “Sexto Sentido” (Nicaragua) suggest a positive impact on attitudes and norms, if not actual behaviour.^{102,103}

Many life-skills and school-based prevention programmes have tried to prevent unwanted sex by educating girls to protect themselves. While some report positive findings, decades of research from the United States suggests that programmes that focus only on helping potential victims avoid coerced sex almost always fail in the long term.^{104,105} This may be because these programmes overlook those responsible for sexual violence: the (mostly) male perpetrators.¹⁰⁶ To that end, a number of life-skills programmes for boys (such as the New Visions Program in Egypt and the Better Life Options for Boys in India) have tried to promote gender-equitable norms and non-violence. Evaluation data suggest a positive impact on attitudes and beliefs (although there are virtually no long-term data on behaviour change).¹⁰⁷

There are a growing number of *programmes to promote gender equity* and non-violence among young men. A systematic review of these programmes suggests that some appear to change attitudes and behaviours related to gender-based violence, particularly when they target younger men and use a community-wide approach with multiple programme strategies (such as Program H in Brazil).^{95,108} Few programmes have moved beyond the pilot phase, however, and evaluating these programmes poses challenges. Most rely on attitudes, beliefs, and occasionally self-reported behaviour as indicators of success, but it is unclear

how well these indicators reflect actual levels of violence.

Community-based efforts to improve the social and economic status of women have been the focus of numerous programmes. Recent evidence from a randomized cluster trial indicates that a combination of microfinance, gender, and HIV education has been effective in reducing levels of physical and sexual violence in rural South African communities. The study found a 55% reduction in self-reported experiences of physical or sexual intimate partner violence in the past 12 months among participants in the intervention.¹⁰⁹ Other efforts to empower women through microfinance (alone) have produced mixed results with regard to rates of violence however and it remains to be seen whether the South Africa findings can be sustained, replicated, and scaled up.^{110,111}

A number of programmes have used *community mobilization strategies* to promote changes in attitudes and behaviours related to gender norms and violence against women. Evaluation studies suggest that community-level approaches, such as those used by Stepping Stones in the Gambia, Reprosalud in Peru, and Raising Voices in Uganda, can be effective in changing violence-related attitudes and behaviours, particularly among young men.^{112,113}

6.3 Promoting a comprehensive service response to sexual violence

Ideally, those who experience sexual violence should be able to seek help from health-care providers, social services, and law enforcement. Often, they need compassionate counselling, emergency contraception, STI treatment, and care for other health problems. Those who want to bring a perpetrator to justice need access to a competent and sensitized police force and judicial system. Unfortunately, throughout the developing world and in some industrialized countries, the

institutional response to sexual violence is woefully inadequate. Health-care providers and law enforcement officials often hold negative attitudes about victims; laws sometimes fail to criminalize marital rape, forced oral sex, penetration with fingers or objects, child sexual abuse, and/or rape of boys or young men. Moreover, in many settings, existing laws are not enforced.^{3,66,114,115}

Evidence suggests that the best way to improve the health service response to sexual violence is a ‘*systems approach*’ that involves broad reforms throughout a health care organization.³ One rigorously evaluated example was carried out by the International Planned Parenthood Federation. An evaluation demonstrated that a systems approach improved the quality of care for women who had experienced violence in member associations in the Dominican Republic, Peru, and Venezuela.^{116,117}

Reviews of efforts to improve the broader health sector response repeatedly return to a number of themes.¹¹⁸ First, growing evidence suggests that integrating attention to violence into sexual and reproductive health programming may produce more effective programmes in the areas of family planning, adolescent health, and HIV/AIDS prevention and treatment. Second, the best way to ensure that health professionals understand the dynamics of sexual coercion, recognize it as a public health issue, and are prepared to address it in their work may be to integrate violence against women into the academic curricula of medical, nursing, social work, and public health schools. Until that occurs, however, health professionals may need ongoing training in conjunction with institution-wide reforms aimed at integrating attention to sexual violence into broader sexual and reproductive health programmes.

Recent years have seen *criminal justice sector reforms* related to sexual violence in countries as diverse as India, Mexico, South Africa, and the

United Kingdom.⁹⁴ These reforms have included strengthening and expanding laws defining rape and sexual assault (e.g. South Africa’s Criminal Law Amendment Bill of 2003), sensitizing and training police and judges about gender-based violence, and broad reforms of police and judicial policies and procedures. Key lessons from these efforts are that broad institutional reforms that address the entire criminal justice sector are more effective than piecemeal approaches and changing the law is just the first step – enforcement often lags far behind.

After a situation analysis documented poor treatment of sexual assault survivors in South Africa, the Government implemented *medico-legal system reforms* that aimed to increase survivors’ access to appropriate medical care (e.g. emergency contraception, STI and HIV prophylaxis) and to improve coordination between health providers, social services, and police.^{119,120} One key strategy was to introduce a system of forensic nurses – prior to these reforms, the only professionals authorized to collect evidence of rape admissible in court were district surgeons, who were difficult to access and known for providing inadequate care. Comprehensive, holistic post-rape care is now available in many sites across the country, though evidence suggests that many gaps and barriers remain, and there are efforts to weaken the original reforms.^{121,122}

Beginning in the mid 1990s, international humanitarian programmes began to launch *multisectoral efforts* to address sexual violence against women in conflict or post-conflict settings such as the Democratic Republic of the Congo, Kosovo, Liberia, Sierra Leone, and Timor-Leste. Often these programmes include counselling, medical services, and legal aid for survivors; sensitization and training of law enforcement and peace-keeping personnel; legal reform efforts; women’s empowerment programmes; and efforts to improve the safety and design of refugee camps.⁹³

7. Conclusions and recommendations

WHO has played a leadership role in funding, sponsoring, and collaborating with researchers studying sexual violence at the global, regional, and national levels. These efforts should continue to ensure that future research addresses all types of sexual coercion and their implications for public health – including the patterns and prevalence of sexual coercion against young married adolescents, unmarried girls and boys, displaced populations, sex workers, and other vulnerable groups. In addition, support for outcome evaluation research is urgently needed to build the knowledge base concerning effective prevention and response strategies.

Both research and advocacy can encourage policy-makers and programme managers to develop a comprehensive service response to physical and sexual violence against women. For example, the Sexual Violence Research Initiative is replicating and refining instruments and methods for situation analyses similar to the work done in South Africa. That work was effective in encouraging policy reform of the service response to sexual violence.⁹²

Evidence suggests that sexual coercion has implications for all aspects of sexual and reproductive health programming, including prevention and health-care services. Therefore, governments and health organizations should seek to integrate attention to sexual coercion into a wide range of women's health services. A first step in this process is to ensure that international norms and guidelines on sexual and reproductive health issues (e.g. STIs, family planning, HIV/AIDS) consider the implications of physical and sexual violence.

While policy-makers in many parts of the world have paid increasing attention to the issue of sexual violence, more can be done to convince key stakeholders that this is an important public health problem in its own right – as well as a contributing factor to many other health issues, such as the HIV/AIDS pandemic. Moreover, because sexual violence is influenced by and has consequences for issues beyond health, an effective prevention and service response to sexual violence will require collaboration among a broad range of actors from many different sectors.

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