

WOMEN AND HEALTH: NEW CHALLENGES



**BEIJING AT 10 :
PUTTING POLICY INTO PRACTICE**

Review and Appraisal of the Implementation of the Beijing Declaration and Platform for Action



Critical Area C. Women and Health

A major barrier for women to the achievement of the highest attainable standard of health is inequality, both between men and women and among women in different geographical regions, social classes and indigenous and ethnic groups. In national and international forums, women have emphasized that to attain optimal health throughout the life cycle, equality, including the sharing of family responsibilities, development and peace are necessary conditions.
- Beijing Platform for Action C. 89

Health, along with education, is essential to individual and consequently social development. Both among and within countries, health status and risk vary widely according to economic status, access to resources, and a host of other variables. Among the most important of these other variables is gender – women face distinct, and often greater health risks simply because they are women, and are accorded a different social, economic and political status.

Globally, women face threats to their physical and psychological well-being from a growing variety of sources: poverty; international and intra-state conflict; population migration and displacement; natural disasters; environmental and occupational hazards; the HIV/AIDS pandemic; infectious diseases such as malaria and tuberculosis; cancer; heart-disease; lack of access to health services, health insurance, social security and other forms of social protection; and perhaps most tragically, motherhood. In the developing world, complications arising from pregnancy, childbirth and abortion are still one of the major causes of female mortality.¹

The *Beijing Platform for Action*² (PfA) specifically recommends eliminating poverty among women under Strategic Objective C.2 ("Strengthen preventive programmes that promote women's health"), and devotes an entire Critical Area (A) to women and poverty.³ This review will not examine the issue of poverty in detail; suffice it to say that among the health risks mentioned above, the greatest global threat to women's health is poverty. Poverty not only deprives women of the resources needed to pay for health insurance and services, including maternal health services,

¹ *Beyond the numbers: Reviewing maternal deaths and complications to make pregnancy safer*. Geneva: World Health Organization, 2004.
<http://www.who.int/reproductive-health/publications/btn/index.html>

² Platform for Action of the Fourth World Conference on Women. New York: United Nations Division for the Advancement of Women, 1995.
<http://www.un.org/womenwatch/daw/beijing/platform/index.html>

³ For more information on the impact of poverty on women's lives, download INSTRAW's *Progress Report on Critical Area A. Women and Poverty* <http://www.un-instraw.org>

it also deprives them of access to nutrition, education, clean water and sanitation, transportation, and security.

Women are increasingly the majority among the world's poor,⁴ making poverty a growing threat to women's health. Poor adolescents between the ages of 15-19 are three times more likely to give birth than wealthier adolescents of the same age.⁵ The wealthiest women are half as likely to be malnourished, four times more likely to be using modern contraceptives, and five times more likely to have a skilled attendant present at the births of their children.⁶ Poverty, like gender, must be treated as a cross-cutting issue as it interacts with gender and other factors such as ethnicity, age, and geography to influence women's ability to enjoy the **highest attainable standard of physical and mental health**.

Women in the developed and developing world face distinct health risks, mainly as a result of access to income and other resources, and the reach and effectiveness of the public health infrastructure. In the developed world for example, women are less affected by communicable disease or complications during pregnancy and childbirth, and more affected by cardio-vascular disease, cancer, and other complications arising during old age such as arthritis or osteoporosis. In the developing world however, women are affected, at much younger ages, by communicable diseases such as malaria or tuberculosis, conditions such as malnutrition, or reproductive health complications; all of which arise from a lack of access to basic resources such as clean water and sanitation, food, and quality health services. In both the developed and developing worlds however, women face health complications as a result of their gendered status in society; in particular the physical and mental consequences of violence.⁷ According to a report from the Johns Hopkins Centre for Communications Programs, 43% of Canadian women injured by their partners had to receive medical care, and 50% of those injured had to take time off from work.⁸ A Nicaraguan health survey found that physical abuse was the most significant risk factor for mental health complications, accounting for approximately 70% of complications among women.⁹

Unlike many of the other issues covered by the Beijing PfA such as violence against women; policies and programmes that address women's health are not guided by a comprehensive legal and policy framework, other than the general provisions contained in such documents as the *Universal Declaration of Human Rights*¹⁰ or the *International Covenant on Economic, Social and Cultural Rights*.¹¹ Two fairly recent documents, the Beijing PfA and the *Programme of Action of the International Conference on Population and Development* (Cairo PoA)¹² are the only international instruments that address women's health from a broad and holistic perspective, moving beyond maternal health to address the impact of gender on women's health

⁴ Ogega Moturi, J. *Trade and the Feminization of Poverty*. Kenya: University of Nairobi, 2003.

http://www.awid.org/members/reports/trade_feminization_poverty.pdf

⁵ *The Wealth Gap in Health: Data on Women and Children in 53 Countries*. Washington DC: Population Reference Bureau, 2004.

<http://www.prb.org/Template.cfm?Section=PRB&template=/ContentManagement/ContentDisplay.cfm&ContentID=11007>

⁶ *The Wealth Gap in Health: Data on Women and Children in 53 Countries*. Washington DC: Population Reference Bureau, 2004.

<http://www.prb.org/Template.cfm?Section=PRB&template=/ContentManagement/ContentDisplay.cfm&ContentID=11007>

⁷ For more information on the issue of violence against women, download INSTRAW's Progress Report on *Critical Area D. Violence against Women* <http://www.un-instraw.org>

⁸ "Ending Violence against Women." *Population Reports Series L* (No.11). Baltimore: Johns Hopkins Centre for Communications Programs, 1999. <http://www.infoforhealth.org/pr/l11edsun.shtml>

⁹ Ibid.

¹⁰ Universal Declaration of Human Rights <http://www.unhcr.ch/udhr/index.htm>

¹¹ United Nations. *International Covenant on Economic, Social and Cultural Rights*, 1966. <http://www.ohchr.org/english/law/cescr.htm>

¹² *Programme of Action of the International Conference on Population and Development*. New York: United Nations Fund for Population Activities, 1994. <http://www.unfpa.org/icpd/docs/index.htm>

throughout the life cycle. These two instruments also look past the physiological determinants of health (such as exposure to viruses or level of nutrition) at other, often more significant determinants of health¹³ such as access to preventive health services, availability and reliability of health information, access to education, employment and other forms of income, women's level of autonomy and their influence over household, local and national-level decision-making, and health services' response to women themselves.

Both the Cairo PoA and the Beijing PfA set specific targets for improving women's health, such as "...a reduction in maternal mortality by one half of the 1990 levels by the year 2000, and a further one half by 2015."¹⁴ Five years later, these commitments to improving maternal health were reiterated in the Millennium Development Goals (MDGs), which committed States to "Reduce by three quarters the maternal mortality ratio," between 2000 and 2015.¹⁵ The Cairo PoA also committed States to "strive to make accessible through the primary health-care system, reproductive health to all individuals of appropriate ages as soon as possible and no later than the year 2015,"¹⁶ using a holistic definition of reproductive health care that encompassed the health of women and men of reproductive age, including but not limited to women's maternal health.¹⁷

Ten years after the Beijing PfA and five years after the MDGs, the world is still a long way from meeting these commitments, and at present the goals set for 2015 look unachievable with most of the regions of the world still reporting moderate to very high levels of maternal mortality¹⁸ and poor coverage of reproductive health care services. The Beijing PfA, through its own recommendations and by reaffirming the importance of the Cairo PoA contains the necessary actions for improving and securing women's health. As with the other critical areas of the Beijing PfA however, the failure to move from recommendations to achievements lies with the inadequate and often non-existent implementation of many of the PfA's actions to be taken.

Strategic Objective C.1

"Increase women's access throughout the life-cycle to appropriate, affordable and quality health care, information and related services"

Actions to be taken by governments, international and non-governmental organizations and other actors include to: support and implement the Cairo PoA; allow women access to social security systems; provide more primary health care services, including sexual and reproductive health care, and maternal and emergency obstetric care; ensure that health workers, health services, and health information are gender-sensitive; address unsafe abortion as a major public health concern; address the specific health needs of girls and older women; alleviate occupational and environmental health hazards;

¹³ "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." (Beijing PfA – par. 89)

¹⁴ Cairo PoA (paragraph 8.21)

¹⁵ Millennium Development Goal #5 "Improve maternal health", Target #1 <http://www.un.org/millenniumgoals/>

¹⁶ Cairo PoA (paragraph 7.6)

¹⁷ *Reproductive health care in the context of primary health care should, inter alia, include: family-planning counselling, information, education and communication and services; education and services for pre-natal care, safe delivery and post-natal care, especially breast-feeding and infant and women's health care; abortion as specified in paragraph 8.25, including prevention of abortion and the management of the consequences of abortion; treatment of reproductive tract infections; sexually transmitted diseases and other reproductive health conditions; and information, education and counselling, as appropriate, on human sexuality, reproductive health and responsible parenthood.* (Cairo PoA, paragraph 7.6)

¹⁸ *Millennium Development Goals: Progress Report.* New York: United Nations Department of Economic and Social Affairs and Department of Public Information, 2004. <http://www.un.org/millenniumgoals/mdg2004chart.pdf>

integrate mental health services into primary health care systems; ensure national and household food security; ensure the availability of safe drinking water and sanitation; and ensure full access to health services for indigenous women.

Everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international co-operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality.
- Universal Declaration of Human Rights (article 22)

By far the most comprehensive international agreement to addresses women's health, the Cairo PoA provides a list of objectives and actions to be taken in order to improve population health, and women's health in particular. Eleven years after the Cairo PoA was developed, the world is still a long way from implementing these recommended actions, or from achieving the holistic visions of population health and gender equality that were discussed and established during the Conference. By re-iterating the importance of the Cairo PoA, the Beijing PfA once again establishes the importance of women's health for their personal and social development, and highlights the importance of addressing women's health from a perspective of gender equality and respect for women's human rights.

The United Nations Population Fund (UNFPA)¹⁹ is responsible for monitoring the implementation of the Cairo PoA at the national and international levels, and in 2003 conducted a global survey of national experiences and progress that was completed by 169 countries. The questionnaires were compiled and included in the global ICPD monitoring report: *Investing in People: National Progress in Implementing the ICPD Programme of Action 1994-2004*.²⁰ The objective of the report was to present an overview of progress made at the national level in the implementation of the Cairo PoA over a ten-year period. The report's findings show a "marked improvement" from the findings of the survey conducted in 1998 as part of the five-year review of the Cairo PoA.

As a counterpart to the official review of the Cairo PoA, which was completed primarily by national governments, Family Care International (FCI), the International Planned Parenthood Federation (IPPF), and Population Action International (PAI) have established *Countdown 2015: Sexual and Reproductive Health and Rights for All*.²¹ The aim of this initiative is to monitor progress on the implementation of the Cairo PoA and establish priority actions for the achievement of the goals set out by the PoA for the year 2015 from the perspective of civil society. To mark the tenth anniversary of the Cairo PoA, Countdown 2015 published the *ICPD at 10: Report Card*,²² a data-based global review of the progress made in 133 countries. The report acknowledges that significant progress has been made since the Cairo PoA was first adopted in 1994, particularly in the areas of contraceptive use and school enrolment rates. However the report also warns that the obstacles that remain to improving women's health should not be underestimated.

¹⁹ ICPD at 10. United Nations Fund for Population Activities. <http://www.unfpa.org/icpd/10/index.htm>

²⁰ *Investing in People: National Progress in Implementing the ICPD Programme of Action 1994-2004*. New York: UNFPA, 2004. <http://www.unfpa.org/publications/detail.cfm?ID=179&filterListType=>

²¹ Countdown 2015: Sexual and Reproductive Health and Rights for All <http://www.countdown2015.org>

²² Report Card: ICPD at 10. New York: Family Care International, International Planned Parenthood Federation and Population Action International, 2004. <http://www.populationaction.org/2015/reportCard>

Throughout their life cycle, women have differential and often more need for health services as result of several factors: their reproductive function, their longer life span, their increased morbidity, and their responsibilities as care-givers for other family and community members. Despite this reality, women around the world have unequal access, not just to health services, but to all of the resources necessary for the achievement and maintenance of good health: nutrition, literacy and education, information, employment, income, autonomy and freedom of movement, and all forms of social security such as health insurance or pensions.

Some of the major obstacles to women's access to health services include: inability to pay either user fees/service charges, health insurance premiums or the cost and availability of medications; inability to make decisions about the allocation of household resources to health care; location of health services in predominantly urban areas and inadequate transportation systems serving rural areas; lack of participation in national and local decision-making about the allocation of health-sector resources and the placement of facilities; and the attitudes and abilities of health service-providers. In Tanzania, a recent evaluation of the Community Health Fund (CHF), established to facilitate poor people's access to health care, revealed that the very poor cannot always afford the CHF starting fees. Moreover, health service users in Tanzania cited the poor quality of services, abuses of power, financial mismanagement and corruption as additional impediments to their ability to access health care.²³ For those that were able to afford the initial CHF fees however, the evaluation showed that membership in the CHF made a positive difference to their overall health status.

Simple access to health services is insufficient to guarantee an improvement in women's health; the quality and delivery of health services must be monitored to ensure that women are receiving appropriate and effective health care from skilled health workers in a non-discriminatory, gender-sensitive environment. In the '*So What?*' Report, the Inter-Agency Gender Working Group examined over 400 reproductive health interventions to determine whether or not the integration of a gender perspective really made a difference to reproductive health outcomes.²⁴ The conclusion of the report was a conservative yes; the integration of a gender perspective does make a positive difference to reproductive health outcomes, particularly in STI/HIV prevention programmes. However the report also highlighted the need for more and longer-term evaluations of gendered reproductive health programmes in order to measure the real impact on attitudes and behaviour.

The Mexican Secretariat of Health, through its Women's Health Programme, has been delivering training and capacity-building activities to health workers with the aim of increasing gender sensitivity and respect for women's health, and promoting gender equity in the development and implementation of health policies. In particular, the Government has been focused on integrating a gender perspective into the health sector budget.²⁵

Maternal mortality remains one of the most significant causes of death for women of reproductive age in the developing world, as a result of both lack of access to

²³ *Poor People's Experiences of Health Services in Tanzania: A Literature Review*. Dar es Salaam: Women's Dignity Project, 2004.
http://www.womensdignity.org/Peoples_experience.pdf

²⁴ The '*So What?*' Report: A Look at Whether Integrating a Gender Focus into Programmes Makes a Difference to Outcomes. Washington DC: Inter-Agency Gender Working Group

²⁵ UNFPA, 2004.

maternal health services, and the poor quality of many existing services. Though the number of births attended by a skilled health worker has risen over the last decade, in many regions of the world numbers are still low (see Table 1). The importance of skilled care, not only during delivery but before, during and following pregnancy is fundamental to ensuring the health of both mothers and their children.²⁶

Maternal mortality is also one of the major challenges to gender equality as many of the determinants of maternal health; access to contraception, family planning and safe abortion services, access to information about fertility and reproduction, age of first marriage and motherhood, and access to health services are strongly influenced by gender norms. Thus, policies and programmes designed to improve maternal health must be conceived and implemented from a gender perspective if they are to achieve the maximum impact. In 2005, World Health Day (April 7th) will focus on maternal and child health with the slogan "Make every mother and child count," emphasizing that maternal health is not a high enough priority in many countries of the world. The 2005 World Health Report, scheduled for release on April 7th 2005 by the World Health Organization will also address the global progress made on improving maternal and child health.²⁷

Table 1 - Maternal mortality, lifetime risk of maternal death (2000) and coverage of care for women at delivery (1990-2000)²⁸

	Maternal deaths per 100,000 live births	Lifetime risk of maternal death 1 in: ^a	Deliveries with a skilled attendant (%) ^b		Deliveries with a doctor (%) ^c	
	2000	2000	1990	2000	1990	2000
Developing countries	20	2,800	42	52	15	23
Northern Africa	440	61	39	64	27	54
Sub-Saharan Africa	130	210	40	43	7	7
LAC	920	16	76	85	46	58
Eastern Asia	190	160	53	72
South-central Asia	55	840	27	35	16	28
South-Eastern Asia	520	46	36	59	9	13
Western Asia	210	140	59	64	26	36

^a The lifetime risk of maternal death is the chance that a woman will die in pregnancy or childbirth at some point in her life, and is a function of both the total fertility rate (i.e. the number of times a woman gets pregnant) and the maternal mortality rate (i.e. the chance that she will die each time she gets pregnant).

^b Based on 62 countries with trend data covering 75 per cent of developing countries' births.

^c Based on 37 countries with trend data covering 59 per cent of developing countries' births (excluding China for which no data are available). Trend data for Latin America and the Caribbean cover only 24 per cent of the region's births.

By 2050, it is estimated that 20% of the world's population will be over 60 years of age, and the majority of them will be women.²⁹ Though older men and women tend to be affected by the same diseases (heart disease, cancer, arthritis, mental illness, etc.) they experience these diseases differently. Older women tend to experience higher rates of morbidity, meaning that their need for health services during old age

²⁶ "Skilled care refers to the care provided to a woman and her newborn during pregnancy, childbirth and immediately after birth by an accredited and competent health care provider who has at her/his disposal the necessary equipment and the support of a functioning health system, including transport and referral facilities for emergency obstetric care." *Making Pregnancy Safer: The Role of the Skilled Attendant*. Joint statement by WHO, ICM and FIGO. Geneva: World Health Organization, 2004. http://www.who.int/reproductive-health/publications/2004/skilled_attendant.pdf

²⁷ Official World Health Day Website (WHO): <http://www.who.int/world-health-day/2005/en/>

²⁸ Compiled using data from: Progress Towards the Millennium Development Goals 1990-2004. New York: United Nations Department for Economic and Social Affairs, Statistics Division, 2004. http://millenniumindicators.un.org/unsd/mi/mi_coverfinal.htm

²⁹ "Gender, Health and Ageing." Geneva: World Health Organization, 2003. <http://www.who.int/gender/documents/fact/en/>

will be considerably higher than men's.³⁰ Men's earlier mortality also leaves a large number of women as widows, often without their own incomes or access to health insurance or other forms of social protection.

The demand for a greater focus on the health needs of older women will increase significantly over the next decades, making it imperative to address this issue sooner rather than later. In Seychelles for instance, the Government has implemented a universal pension for people over the age of 63. In 1997, a home care service programme was established to help meet the needs of economically deprived older people whose families are unable to assist them, and the Government also provides home-care assistance and housing for older people who have no family support. Finally, the Government is in the process of establishing a Council for the Elderly in order to provide information on ageing and support to older people.³¹

There is an urgent need to focus health programmes and services on other key population groups such as indigenous women, migrant women and adolescent women, whose health needs are often overlooked and therefore unmet. While the health of indigenous women at the global level varies widely according to geography and socio-economic status; in every country with a significant indigenous population, indigenous women have poorer physical and mental health profiles than both non-indigenous women and indigenous men.³² Largely as a result of indigenous women's own activism, the development and implementation of targeted health services and facilities has increased in recent years, but much remains to be done. In Otavalo, Ecuador for example, the Federación Indígena Campesina de Imbabura and UNFPA have combined traditional and modern medicine through the Jambi Huasi ("House of Health" in Quechua); a health centre with a pharmacy, delivery rooms, a laboratory, medicinal plant gardens, a midwife, an outreach and education programme, a reproductive health program, medical doctors, a traditional healer ("yachag"), an ambulance and a dentist's office. By 1998 the centre was serving approximately 10,000 patients annually in indigenous communities; leading to an increase in contraceptive use from 10% to 40% within those communities. The end result has been a notable decline in maternal and infant mortality in Otavalo.³³

Health programmes and services that are appropriately tailored to the needs of their clients can have a profound effect on health knowledge and behaviour, and consequently on health status. The Family Planning Association of Kenya implemented the Nyeri Youth Health Project, a programme designed to provide young people with reproductive health information and services, in collaboration with local service providers, community leaders and youth themselves with the aim of designing an intervention that worked with, instead of against local cultural traditions. A recent behaviour-change evaluation of this project showed that when service provision and information dissemination efforts took into account both the needs of clients and the attitudes of the larger community (in this case the Kikuyu ethnic group), the resulting health messages and services were positively received

³⁰ Morbidity refers to any departure from a state of physical and mental well-being, whereas mortality refers to death. While men tend to experience higher rates of (earlier) mortality, women tend to live longer in states of disabling or incapacitating illness.

³¹ UNFPA, 2004 (example taken from the official response of Seychelles to the UNFPA 1998 questionnaire on the implementation of the Cairo Declaration and Programme of Action).

³² *Gender, Equity and Indigenous Women's Health in the Americas*. Washington DC: Pan American Health Organization, 2004.

³³ <http://www.paho.org/English/DPM/GPP/GH/IndigenousWomen-Hughes0904.pdf>

³³ Ibid.

by youth and community leaders, and the project was associated with changes in the sexual behaviour of young people.³⁴

The importance of training health workers of all types – doctors, nurses, home-care workers, traditional birth attendants (midwives), etc. – is fundamental to ensuring that women receive appropriate and effective care throughout the life-cycle. Training for health workers can encompass a variety of issues, including technical skills, sensitivity training, and the incorporation of new issues into existing medical practices. The training of health workers has been particularly important to addressing the issue of violence against women, which is detected primarily through routine health care visits.³⁵ The technical knowledge and attitude of the health worker who first observes and addresses the signs of abuse in a patient is fundamental to a patient's willingness and ability to seek help. The Brazilian Ministry of Health developed a set of guidelines for the prevention and treatment of injuries sustained as a result of gender-based violence which have been distributed to health facilities, women's organizations and universities. In 1997, Brazil had 17 Referral Services for Comprehensive Assistance for women victims of violence, whereas in 2004 these services existed in 85 hospitals and 113 ambulatory health facilities.³⁶

During 2003-2005, the Women's Global Network for Reproductive Rights (WGNRR) is coordinating the *Women's Access to Health Campaign*,³⁷ which demands that: governments take responsibility for women's health; governments develop more gender-sensitive health policies; health budgets be increased, with specifically earmarked budgets for women's sexual and reproductive health; quality of health-care and services be improved; and health be recognized and addressed in a holistic and integrated manner.

Areas for Future Action:

- More instruments to effectively monitor the quality of existing health services should be developed to ensure that patients are receiving appropriate and effective care;
- The effectiveness of existing initiatives to integrate gender into health education and training should be evaluated with a view to establishing a set of best practices for replication in other contexts;
- More information about the health needs of specific groups of women, such as older women, adolescents, indigenous women, lesbians, migrant women and others should be collected and used to tailor health interventions;
- Both governments and the private sector should establish mechanisms and facilitate spaces to include women in decision-making processes related to the decentralization, privatization or elimination of public health services.

Strategic Objective C.2

³⁴ Erulkar, A et al. "Behaviour Change Evaluation of a Culturally Consistent Reproductive Health Program for Young Kenyans." *International Family Planning Perspectives* 30(2), June 2004. <http://www.guttmacher.org/journals/toc/ifpp3002toc.html>

³⁵ *Violence against Women: The Health Sector Responds*. Washington DC: Pan American Health Organization, 2003.

<http://www.paho.org/English/DPM/GPP/GH/VAWHealthSector.htm>

³⁶ UNFPA, 2004.

³⁷ Women's Access to Health Campaign <http://www.wgnrr.org/frameset.htm>

“Strengthen preventive programmes that promote women’s health”

Actions to be taken by governments, international and non-governmental organizations and other actors include to: prioritize formal and informal educational programmes for both men and women; eliminate poverty among women; encourage men to share equally in household work and child-care; ensure the conditions necessary for women to exercise their reproductive rights; disseminate information through public health campaigns; address the specific needs of adolescents through information and services; develop policies that reduce the disproportionate burden of women with multiple roles; develop information and other campaigns that address specific health risks for women such as substance abuse, osteoporosis, breast and cervical cancer, environmental hazards and tobacco consumption; and protect women from any form of abuse.

Governments have a responsibility for the health of their people which can be fulfilled only by the provision of adequate health and social measures. A main social target of governments, international organizations and the whole world community...should be the attainment by all peoples of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life.

- Declaration of Alma Ata (paragraph V), 1978

The type of health services being offered, not just to women but to populations as a whole, can have a dramatic impact on overall population health. The importance of primary health care³⁸ has been established by existing studies and data, and affirmed through international agreements like the *Declaration of the International Conference on Primary Health Care* (Alma Ata Declaration).³⁹ Primary health care emphasizes preventive health programmes - immunizations, regular screenings, blood tests and other services designed to monitor health, ensure the creation of healthy behaviour, and prevent health problems or identify them at early stages - as well as effective dissemination of health information, which have the capacity to safeguard population health and reduce the burden of illness and morbidity on both public and private health systems (see Table 2). Sadly, due to the lack of emphasis on preventive health programmes, and an inadequate production and dissemination of public health information, the majority of people still rely on curative health services, which can only attempt to resolve or alleviate an existing problem and are significantly more expensive both for individual patients and the public/private health system.

Table 2 - Preventive programmes for women address a variety of health issues

Breast and cervical cancers	Regular screening (e.g. self-exams, mammograms, pap smears, etc.)
Communicable diseases	Information about clean water and sanitation, immunizations, etc.
Heart Disease	Information about diet and exercise, monitoring blood pressure, cholesterol, etc.
High fertility	Contraceptives and information
HIV/AIDS	Information campaigns and distribution of condoms
Lung cancer	Information about the risks of tobacco consumption
Maternal mortality	Information about pre and post-natal care, nutrition, etc.
Osteoporosis	Early information about nutrition

³⁸ Primary health care...“addresses the main health problems in the community, providing promotive, preventive, curative and rehabilitative services accordingly” (Alma Ata, par. VII, article 2)

³⁹ *Declaration of the International Conference on Primary Health Care*. Alma Ata: World Health Organization, 1978.
http://www.paho.org/english/dd/pin/alma-ata_declaration.htm

Primary health care also emphasizes the importance of addressing other determinants of health, such as access to food, income and social protection which are not necessarily within the mandate of the health sector; highlighting the importance of inter-sectoral collaboration to ensuring population health and well-being. A woman's degree of autonomy and her access to financial resources affect her ability to seek health care, as data from a recent global survey by the Population Reference Bureau (PRB) indicate.⁴⁰

Areas for Future Action:

- Re-visit the Declaration of Alma Ata and encourage States to re-affirm their commitment to providing primary and preventive health care programmes as a cost-effective way of addressing women's health, particularly within the context of health-sector reforms and cost-saving measures;
- The causes of the most health issues affecting women must be identified through research and addressed through inter-sectoral preventive programmes.

Strategic Objective C.3

"Undertake gender-sensitive initiatives that address sexually transmitted diseases, HIV/AIDS, and sexual and reproductive health issues"

Actions to be taken by governments, international and non-governmental organizations and other actors include to: ensure the participation of women in decision-making related to HIV/AIDS policies and programmes; amend or eliminate laws and practices that increase women's vulnerability to HIV/AIDS; recognize the extent of the HIV/AIDS pandemic and its distinct effects on women; develop community strategies that will protect women from HIV and other STIs; create and improve gender-sensitive policies and programmes on HIV/AIDS; increase women and health workers' access to information about HIV/AIDS, pregnancy and breast-feeding; design specific programmes for adolescent and adult males that encourage responsible sexual behaviour; and ensure universal access to preventive services, expand counselling and diagnostic services, and increase the availability of condoms and treatment drugs; initiate research that address women's needs, including for microbicides.

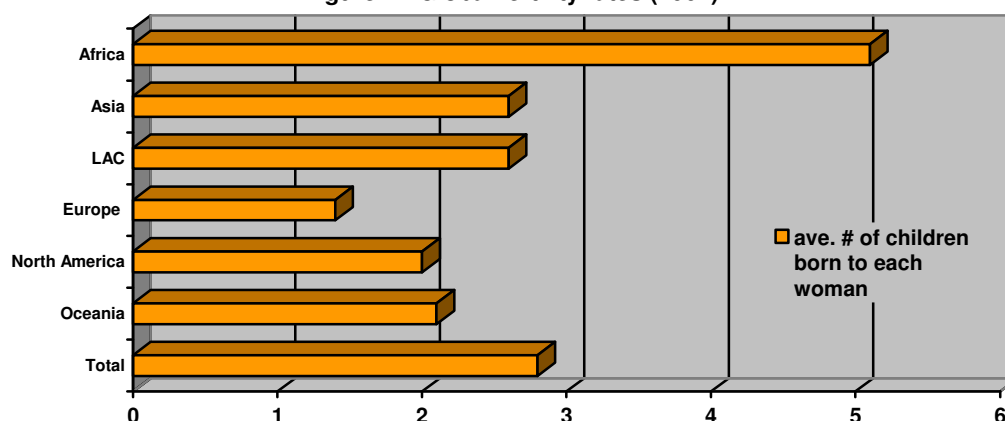
Reproductive health is a *sine qua non* for women's health, as well as their ability to enjoy and exercise their other human rights. The reproductive years (15-49) represent the longest stage of most women's lives and the behaviours that women develop during these years, as well as their access to health care and other factors will largely determine their health status during later years. Reproductive health includes maternal health but also encompasses the full range of issues that affect women's health during their reproductive years: HIV/AIDS and other sexually transmitted infections (STIs); the availability of treatments for reproductive health complications such as pelvic inflammatory disease; unwanted pregnancy and the health consequences of unsafe abortions; etc. In May 2004, the Bolivian National Congress approved the *Ley Marco sobre los derechos sexuales y reproductivos* (Legal Framework for Sexual and Reproductive Rights), which guarantees that women and

⁴⁰ *The Wealth Gap in Health: Data on Women and Children in 53 Countries*. Washington DC: Population Reference Bureau, 2004.
<http://www.prb.org/Template.cfm?Section=PRB&template=/ContentManagement/ContentDisplay.cfm&ContentID=11007>

men, without distinction, have the right to exercise and enjoy a healthy, freely-chosen, and responsible sexuality that includes integrated sexual and reproductive health care.⁴¹

Globally, fertility rates have declined rapidly over the last half of the twentieth century, though this trend masks significant regional differences, as shown in Figure 1.⁴² 62% of women in Latin America and the Caribbean use a modern form of contraceptive, whereas in Asia that figure drops to 43% and in sub-Saharan Africa it reaches only 14%.⁴³ The principal factors that explain the global differences in fertility levels are contraceptive use and abortion.⁴⁴

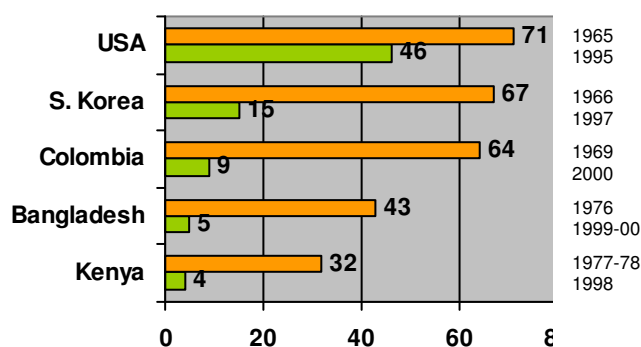
Figure 1 - Global fertility rates (2004)



One of the major threats to both women and children's health is early pregnancy (before age 18) because young women do not usually possess the information or financial resources needed to care for themselves during pregnancy or for their children after delivery. Since the Cairo PoA was adopted in 1994, fertility levels have remained fairly constant among married and unmarried adolescents. A review of efforts to address this problem show that when early pregnancy is made a political priority, as it was in Ghana where the government adopted an Adolescent Reproductive Health Policy, adolescent pregnancies do decline.⁴⁵

Despite the global progress made in the use of modern contraceptives (see Figure 2),⁴⁶ many women are often unable to

Figure 2 - Increase in Modern Contraceptive Use



⁴¹ RED-ADA. "Los derechos sexuales y reproductivos son los mas humanos de los derechos." *Cronica Azul* 48, 2004.

⁴² Data compiled from 2004 World Population Data Sheet. Washington DC: Population Reference Bureau, 2004.

⁴³ http://www.prb.org/pdf04/04WorldDataSheet_Eng.pdf

⁴⁴ 2004 World Population Data Sheet. Washington DC: Population Reference Bureau, 2004.

⁴⁵ http://www.prb.org/pdf04/04WorldDataSheet_Eng.pdf

⁴⁶ Source: "Transitions in World Population." *Population Bulletin* 59(1). Washington DC: Population Reference Bureau, 2004.

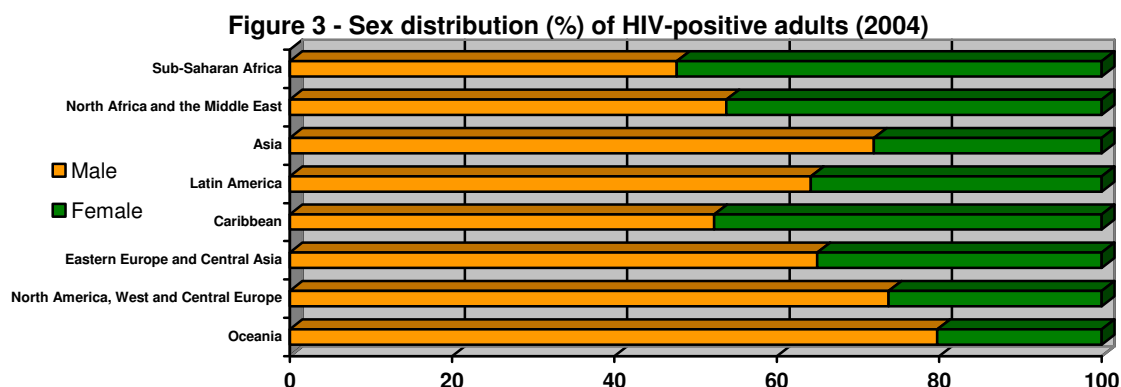
http://www.prb.org/Template.cfm?Section=Population_Bulletin1&template=/ContentManagement/ContentDisplay.cfm&ContentID=11692

⁴⁵ FCI, IPPF and PAI, 2004,

⁴⁶ Source: Ibid.

negotiate the use of condoms or other forms of contraception and family planning to protect themselves from early or unwanted pregnancy and STIs. This is partly a result of women's subordinate social status, but it also stems from cultural and religious norms prohibiting the use of contraception, or from simple lack of information about the existence and availability of family planning. Recent surveys from sub-Saharan Africa of men's attitudes towards fertility and contraceptive use found that men are more likely than women to know about family planning and contraception through radio and television announcements, but are less likely to approve of it, and that men are more likely than women to want more children.⁴⁷ One of the biggest challenges to contraceptive use is not attitude but supply – across the world many clinics face increasing "stock-outs", or a shortage of the supplies necessary to ensure that women's demand for contraceptives is met.⁴⁸

As Figure 3⁴⁹ indicates, the global incidence of HIV infection among women is rapidly approaching the incidence of infection among men. In sub-Saharan Africa and the Caribbean, women now represent more than fifty percent of people infected with HIV, and in many other regions women are the largest group of newly-infected people.⁵⁰ Women are particularly vulnerable to HIV/AIDS infection as a result of their increased physical susceptibility to HIV and their subordinate social status, which makes it difficult for them to negotiate sexual relations and the use of condoms. Though it was highlighted ten years ago by the Beijing PfA, women's increased vulnerability to HIV/AIDS is a reality that has only recently received significant media coverage and exposure.⁵¹ The 2004 World AIDS Campaign focused specifically on women and girls' vulnerability to HIV, calling for specific actions aimed at empowering women to protect themselves, and encouraging responsible sexual behaviour among both men and women.



In addition to the Cairo PoA, and the Beijing PfA, the *Declaration of Commitment* of the UN General Assembly Special Session on HIV/AIDS (2001)⁵² makes a number of specific recommendations for addressing and responding to women's increased vulnerability to the HIV/AIDS pandemic, including:

⁴⁷ "Men's Surveys: New Findings." *Population Reports Series M* (18). Baltimore: Johns Hopkins University Centre for Communications Programs, Spring 2004. <http://www.infoforhealth.org/pr/m18/index.shtml>

⁴⁸ FCI, IPPF and PAI, 2004.

⁴⁹ Compiled using data from the AIDS Epidemic Update 2004. Geneva: UNAIDS, 2004(a) <http://www.unaids.org/en/default.asp>

⁵⁰ 2004 *Report on the Global AIDS Epidemic*. Geneva: UNAIDS, 2004(b). <http://www.unaids.org/en/default.asp>

⁵¹ Paragraph 98

⁵² <http://www.unaids.org/en/default.asp>

- challenge gender stereotypes and attitudes, and gender inequalities in relation to HIV/AIDS, encouraging the active involvement of men and boys;
- ensure that eighty percent of pregnant women accessing antenatal care have information, counselling and other HIV-prevention services available to them;
- develop and accelerate the implementation of national strategies that promote the advancement of women and women's full enjoyment of all human rights;
- empower women to have control over and decide freely and responsibly on matters related to their sexuality to increase their ability to protect themselves from HIV infection.

In 2004, the Global Coalition on Women and AIDS⁵³ began a broad public information campaign around the slogan "Have you heard me today?" The Coalition was formed to address women's increased vulnerability to HIV/AIDS and promote effective action around seven specific areas: preventing HIV in young women and girls; violence against women; property and inheritance rights; access to treatment; education for girls; home-based care; and female-controlled preventive methods.

Evaluations of initiatives to address the transmission of HIV suggest that targeted interventions, those that address the behaviours and needs of specific groups, are the most successful. In Brazil, the Population Council's Horizons Program⁵⁴ is conducting an evaluation of Program H, an initiative developed by the Instituto Promundo to address young men's behaviour with regard to their sexual activities and relationships. The program brings young men together in study groups, using a variety of methodologies to encourage young men to question gender norms of masculinity and controlling behaviour. The preliminary findings of the evaluation are positive, indicating that the Program's interventions have fostered a change in attitudes and behaviours among the young male participants.

In Nicaragua, the military (Centro Superior de Estudios Militares) was targeted for an educational programme on sexual and reproductive health and rights, especially HIV/AIDS in 1995. Since then, information and education activities have addressed gender, rights and sexual and reproductive health in both the armed forces and the national police.⁵⁵

Areas for Future Action:

- Based on existing successful initiatives, develop reproductive health programmes and services that are appropriately targeted to specific population groups such as, among others, young men, young women, armed forces personnel, and commercial sex-workers;
- Design reproductive health and HIV/AIDS interventions from a gender perspective so that they take into account women's specific vulnerabilities, realities and priorities;
- Involve men in initiatives to address women's reproductive health and HIV/AIDS through information campaigns, discussion groups and training for health workers;

⁵³ Global Coalition on Women and AIDS - <http://womenandaids.unaids.org/>

⁵⁴ "Involving Young Men in HIV Prevention Programs: Operations research on gender-based approaches in Brazil, Tanzania, and India." Horizons Report. Washington DC: Population Council, December 2004.

[http://www.populationcouncil.org/horizons/newsletter/horizons\(9\)_1.html](http://www.populationcouncil.org/horizons/newsletter/horizons(9)_1.html)

⁵⁵ UNFPA, 2004.

Strategic Objective C.4

“Promote research and disseminate information on women’s health”

Actions to be taken by governments, international and non-governmental organizations and other actors include to: train researchers in and build systems for the collection of sex-disaggregated data; promote gender-sensitive and women-centred health research, treatment, and technologies; increase the number of women in leadership positions in the health sector; inform women about the risk factors for specific diseases; conduct research on how gender inequalities affect women’s health; provide support to research on safe and effective reproductive technologies; conduct research to better understand and address the determinants and consequences of abortion; encourage beneficial traditional health care; disseminate available data and research findings.

Unlike the other critical areas covered by the Beijing PfA, basic population and health data are more widely available and generally more reliable than, for example, data on violence against women or poverty. That said, a significant quantity of the data gathered on health is still not disaggregated by sex, which makes it impossible to understand or address the distinct impact of different health complications on both women and men. Moreover, health data is not always comparable across countries or regions, making the development of a global picture of women’s health extremely difficult. A number of initiatives are underway to strengthen the capacity of national statistical offices to collect, analyze, compare and strategically disseminate sex-disaggregated quantitative and qualitative health data, including a project by United Nations Development Programme’s Regional Bureau for the Arab States (UNDP/RBAS) that aims to: create awareness of gender statistics among national statistical offices and decision-makers; prepare a publication of gender statistics for each country in the region; assess gaps in available gender data at the national level; and develop a statistical database on Arab women.⁵⁶

Several organizations are already involved in the construction of regional or global gender information systems - some of which are focused specifically on health - though most of these systems rely exclusively on quantitative data. The Pan American Health Organization (PAHO) and the Population Reference Bureau (PRB) have developed *Gender, Health and Development in the Americas*, a biennial statistical brochure on women’s health.⁵⁷ The World Bank’s *GenderStats Database*⁵⁸ brings together data on gender and development issues such as education and literacy, health, employment and political participation. The Latin American and Caribbean Women’s Health Network (LACWHN) maintains the *Atenea Database* of reproductive and sexual health indicators in order to monitor the implementation of the Cairo PoA at the regional level. The United Nations Economic Commission for Europe (UNECE) maintains a *Gender Statistics Database* for Europe and North America in which health is one of the key areas.⁵⁹

Understanding and effectively addressing women’s health requires sex-specific research, testing and clinical trials; yet the majority of health research is still not conducted separately on women and men, and women remain a minority in the

⁵⁶ RBAS national Gender Statistics Programme - http://www.sdn.undp.org/gender/about/rbas_programmes.html#stats

⁵⁷ *Gender, Health and Development in the Americas 2003*. Washington DC: PAHO and PRB, 2003.

<http://www.paho.org/English/DPM/GPP/GH/GenderDatabase.htm>

⁵⁸ GenderStats - <http://genderstats.worldbank.org/home.asp>

⁵⁹ UNECE Gender Statistics Database <http://www.unece.org/stats/gender/web/welcome1.htm>

development and testing of new drugs and other health technologies, with the obvious exception of female-controlled contraceptive methods. In the United States, the Society for Women's Health Research advocates for the inclusion of women in medical research, encourages and carries out studies on sex differences that affect the prevention, diagnosis and treatment of disease, and works to raise funds for research into women's health issues.⁶⁰ A number of studies from the United States and other countries have shown that women are less likely to receive appropriate care for heart complications because health workers do not understand that in women, heart attacks and heart disease have different symptoms.⁶¹

In particular, specific research on the impact of gender inequality, differential power relationships and persistent discrimination on women's health is essential, both for improving women's health and as concrete evidence to support the call for gender equality. The Institute of Gender and Health, part of the Canadian Institutes of Health Research (CIHR), focuses on integrating both sex and gender into health research in order to differentiate between the biological and socio-cultural differences in women and men's health.⁶² Studies from several countries have shown that women with verifiable health complications are more likely to be dismissed by health workers as "hysterical" or "psychosomatic" which delays their treatment and can worsen their condition.⁶³

Appropriately targeted, culturally sensitive, and timely information on specific preventive measures or threats to health can be instrumental in reducing the spread of HIV/AIDS and other sexually transmitted infections, the incidence of childhood diseases, adolescent pregnancy, cardiovascular disease caused by poor diet and lack of exercise, cancer and other diseases caused by the use of tobacco, and environmental health hazards. Health information can be conveyed through public campaigns (posters, flyers, dramatizations, and television and radio announcements) and through health services themselves. In India, reproductive health information is conveyed through radio programmes like "Kalyani," which foster debate on reproductive health issues by using quizzes, discussions and real-life stories.⁶⁴

The Johns Hopkins Centre for Communications Programs has prepared the *Gender Guide for Health Communications Programs*,⁶⁵ which focuses on helping programme managers identify how gender roles and inequalities may restrict both women and men's access to health information, develop targeted and culturally appropriate health information that does not reinforce existing gender inequalities and stereotypes, and evaluate the impact of that information both in terms of health outcomes and change in gender attitudes and behaviour.

Areas for Future Action:

- Based on existing successful experiences, promote the development of regional information systems on women's health that are comparable across countries, sub-regions and regions in order to construct a global statistical picture of women's health;

⁶⁰ Society for Women's Health Research - <http://www.womens-health.org/>

⁶¹ Fact Sheet: Research on Cardiovascular Disease in Women. Maryland: Agency for Healthcare Research and Quality (AHRQ), 2003. <http://www.ahrq.gov/research/womheart.htm>

⁶² Institute of Gender and Health <http://www.cihr-irsc.gc.ca/e/8673.html>

⁶³ AHRQ, 2003.

⁶⁴ UNFPA, 2004.

⁶⁵ Gender Guide for Health Communications Programmes. Baltimore: JHUCCP, 2003. <http://www.jhuccp.org/pubs/cp/102/102.pdf>

- Increase capacity-building in the strategic dissemination of health data - which have far more impact as part of a contextual analysis than as mere numbers - and include information targeting the media to increase mainstream coverage of women's health issues;
- Conduct sex-specific health research that examines in particular the impact of gender inequality and discrimination on women's health;
- Targeted health information is more effective: design health information campaigns around specific audiences - young women, older women, indigenous women, etc. - and specific health issues - adolescent pregnancy, osteoporosis, tobacco use, malnutrition, etc.

Strategic Objective C.5

"Increase resources and monitor follow-up for women's health"

Actions to be taken by governments, international and non-governmental organizations and other actors include to: increase budgetary allocations for primary health care and social services; develop innovative approaches to financing health services; develop local health services; develop goals and time-frames for improving women's health; and establish mechanisms for monitoring the implementation of women's health policy and reforms.

Around the world, public health and social security systems are deteriorating and disappearing as public sector reforms and privatization eliminate facilities, services, and spaces. Consistent and reliable data do not exist on either the beneficial or the detrimental effects of health sector reforms on women. In Canada, the National Coordinating Group on Health Care Reform and Women (NCGHCRW)⁶⁶ carries out studies designed to identify and increase awareness of the fact that health reforms and privatization of the health system are not gender neutral, and can be detrimental to overall population health.

Health sector reforms can have a direct impact on women's health by reducing, eliminating health services, or by privatizing or attaching user fees to certain services. By emphasizing out-patient care and eliminating care facilities for long-term and chronic patients, health sector reforms can also have an indirect and negative impact on women's quality of life by increasing their burden of caring for sick and disabled family and community members; throughout the world women are still the primary care-givers in families and households.⁶⁷ Public health sector reforms are rarely carried out in consultation with women, but are implemented from the national level down, through local and municipal governments to which women often have little or no access; so although women are given the responsibility for ensuring family health, they are not included in decision-making about the placement of health facilities, the type of services being offered, the fees being charged (if any).

Decentralization of health service delivery, if properly funded and supported through investments in infrastructure, and if carried out in consultation with women at the

⁶⁶ <http://www.cewh-cesf.ca/healthreform/index.html>

⁶⁷ *Is There a Method to This Madness: Studying Health Care Reform as If Women Mattered*. Winnipeg: National Coordinating Group on Health Care Reform and Women, 2000. http://www.cewh-cesf.ca/healthreform/publications/summary/method_madness.html

local and community levels has the potential to significantly improve women's access to health care and information. Ideally, decentralization would give local women more say in the administration, location and delivery of health services, making them more responsive to the health needs of women and their families. Similar experiences have been documented where women have been included in decisions about the placement of public water facilities with great success.⁶⁸ The Gender Unit of the International Development Research Centre is currently funding a study on the *Impact of Decentralization on Health, Education and Use of Natural Resources*⁶⁹ in Sudan, as part of their 2004 research competition on Decentralization and Women's Rights in Sub Saharan Africa.

Areas for Future Action:

- Identify ways to increase women's capacity to participate in decision-making processes related to health sector reforms, privatization and decentralization;
- Conduct research that examines the differential impact of health sector reforms, including decentralization and privatization using both quantitative and qualitative indicators of overall health and quality of life;
- Explore new models of decentralization that include women in decisions about the placement and management of health facilities.

Additional Areas of Concern

The health consequences of women's traditional roles as wives, mothers and care-givers are not yet well-understood and merit further study, particularly in light of the growing care responsibilities⁷⁰ placed on women by overall longer-life expectancy, cuts to the health sector, growing insurance premiums and the HIV/AIDS pandemic.

A number of studies show that women are more susceptible to certain mental health complications such as depression or eating disorders, but are often unlikely to visit a mental health professional.⁷¹ Insufficient weight was given to mental health issues in the Beijing PfA, an omission that was partially rectified through the Beijing +5 Outcome Document, which urged governments to "...integrate mental health services into primary health-care systems..." (Par.69, Art.(i)). To-date however, little research exists on the physical and social determinants of women's mental health, and mental health is generally not part or routine or primary health care services.

The global increase and feminization of population migration demand an international and national focus on the health of migrant women.⁷² Migrant women, as a result of their move from one health context to another face a distinct set of health risks; often without access to any health services in their destination country. In Thailand for example, Burmese migrant workers are twice as likely to become infected with

⁶⁸ *Rural Women Securing Household Water through Installation of Water Cisterns*. Netherlands: Gender and Water Alliance, 2004.

<http://www.genderandwateralliance.org/english/casestudies.asp>

⁶⁹ Impact of Decentralization on Health, Education and Use of Natural Resources http://web.idrc.ca/en/ev-29737-201-1-DO_TOPIC.html

⁷⁰ Gender-Sensitive Home and Community Care and Care-giving Research: A Synthesis Paper. Winnipeg: National Coordinating Group on Health Care Reform and Women, 2001. <http://www.cewh-cesf.ca/healthreform/publications/summary/synthesis.html>

⁷¹ "Women and Mental Health." Bethesda: National Institute of Health, 2005. <http://www.nlm.nih.gov/HealthInformation/depwomen.cfm>

⁷² In this context, "migrant" women refers to both documented and undocumented women who have migrated voluntarily for economic or other reasons, as well as women who have sought asylum in other regions or countries as refugees, or who have been forcibly displaced by conflict or natural disasters.

HIV (4.9%) as the general Thai (2.2%) and Burmese (1.9%) populations.⁷³ In Australia, the tuberculosis infection rate among migrants in immigration detention centres is comparable with the rates in source countries.⁷⁴ In Pakistan, reproductive health complications are a leading cause of death among Afghan refugee women.⁷⁵ Among Burundian refugees in Tanzania, twenty-five percent of women surveyed in the Kanembwa refugee camp had been exposed to sexual violence.⁷⁶ Mental health should be a particularly important component of efforts to address migration, which can be a stressful process particularly in the case of populations displaced by conflict, persecution or natural disasters. In June 2004 the International Organization for Migration (IOM) brought together health and migration experts for the first time to explore the major health threats to migrant population and identify priority areas for future collaborative work.⁷⁷

Throughout the world, populations are moving from rural to urban areas at an increasing rate, often ending up in urban slums or shanty-towns where the coverage and quality of health services may be limited or non-existent. Little is known about either the distinct health risks faced by urban and rural women, or their differential access to health care, but it is clear that urbanization and health must become a research priority. The Institute on Urban Health Research at Northeastern University looks at many of the issues that affect urban women including obesity, HIV infections, substance abuse and violence.⁷⁸

Conclusion

Though women's health is one of the critical areas of the Beijing PfA in which the most progress has been made, health itself is such a broad field that it is also one of the areas in which the most work still needs to be done. Health is fundamental to people's ability to exercise their human rights - and it is an essential pre-condition for sustainable individual, social and community development.

Gender inequality continues to represent an enormous threat to women's health as it deprives them of access to health services and information and exposes them to health threats such as physical and sexual abuse, HIV-infection, and unwanted pregnancy. Lack of information and sex-specific research, as well as the exclusion of women from health decision-making processes will only exacerbate this situation.

Taken together, the Cairo PoA and the Beijing PoA present a holistic view of gender equality and women's health and list most of the key actions necessary to ensuring that women are able to achieve and enjoy the highest attainable standard of physical and mental health, but neither agreement has been fully implemented. The utility of periodic reviews of international agreements such as the Cairo PoA and the Beijing PfA is that we can re-evaluate these agreements in the light of new and emerging issues, and give States the opportunity to re-affirm their commitment to promoting and protecting women's health and human rights.

⁷³ Srithanaviboonchai et al. "HIV-1 in ethnic Shan migrant workers in northern Thailand." *AIDS* 16 (6) 2002.

⁷⁴ King & Vodicka. "Screening for conditions of public health importance in people arriving in Australia by boat without authority." *Medical Journal of Australia* 175 (11), 2001.

⁷⁵ Bartlett L. et al. "Maternal mortality among Afghan refugees in Pakistan, 1999-2000." *The Lancet* 359, 2002.

⁷⁶ *International Migration, Health and Human Rights*. Geneva: World Health Organization, 2003.

<http://whqlibdoc.who.int/publications/2003/9241562536.pdf>

⁷⁷ Seminar on Health and Migration, June 9th - 11th 2004 <http://www.iom.int/en/know/idm/smh%5F200406.shtml>

⁷⁸ Institute on Urban Health Research <http://www.iuhr.neu.edu/>