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Maternal mental health and child health and development in resource-constrained settings

Report of a UNFPA/WHO international expert meeting: the interface between reproductive health and mental health

Hanoi, June 21–23, 2007

World Health Organization
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RTCCD

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Contents

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Introduction

The UNFPA–WHO International Meeting on the Interface Between Reproductive Health and Mental Health, Maternal Mental Health and Child Health and Development in Resource-Constrained Settings took place in Hanoi, Viet Nam, between 21 June and 23 June 2007. The United Nations Population Fund (UNFPA) supported the meeting. UNFPA support reflects its commitment to ensuring that reproductive mental health is included in strategies to address maternal mortality and morbidity; child survival and development, and sexual and reproductive health. The meeting was a joint initiative of UNFPA; the World Health Organization (WHO); the Key Centre for Women's Health in Society in the School of Population Health at the University of Melbourne, Australia, which is a WHO Collaborating Centre; and the Research and Training Centre for Community Development in Hanoi, Viet Nam (see Annex 1: Meeting Conveners). Mr Ian Howie, UNFPA Chief of Mission Hanoi, opened the meeting. Mr Andrew Bruce, Chief of Mission Hanoi of the International Organization for Migration (IOM), gave an opening address in support of the meeting. Speakers at the opening session also included Dr Meena Cabral de Mello, representing the WHO Department of Child and Adolescent Health in Geneva; Dr José Bertolote, representing the WHO Department of Mental Health and Substance Abuse; and Dr Takashi Isutzu, representing UNFPA New York. They emphasized the importance of mental health to endeavours to improve reproductive health, maternal health, and child health and development in resource-constrained settings, and they underscored the value of multiagency, cross-sectoral initiatives.

Background

There is increasing evidence that common mental health problems, including depression and anxiety, are two to three times more prevalent among pregnant women and mothers of infants in resource-constrained settings than in high-income countries. Depression is associated with substantially reduced quality of life and functional capacity for these women. For their infants, poor maternal mental health is especially problematic: It reduces caregivers' sensitivity and responsiveness at a time when children are entirely dependent on their caregivers.

Most research into the determinants of women's perinatal mental health, and into its consequences for child survival, health and development, has taken place in high-income countries. Only a small proportion has taken place in developing countries. A series of three papers on early childhood development, published in *The Lancet* in January 2007, concluded that maternal depression affects substantial numbers of mothers in poor countries. The papers cited consistent epidemiological evidence that in the context of chronic social adversity maternal depression is especially detrimental to child development. It is essential that every country obtain local evidence concerning the problem and develop low-cost, nonstigmatizing, accessible interventions to address it. Mental health is closely linked to achieving the Millennium Development Goals of improving maternal health, reducing child mortality, promoting gender equality and empowering women, and reducing poverty

Meeting objectives

The meeting brought together the world's leading researchers in this field. They sought to assess the status of knowledge concerning the perinatal mental health problems of women in resource-constrained settings, their effects on infants, and the effectiveness of low-cost interventions.

The 17 experts came from 11 countries—Australia, Brazil, France, India, Japan, Pakistan, South Africa, Turkey, the United Kingdom, the United States, and Viet Nam (see Annex 2: International and Vietnamese experts). Local participants included 41 policy-makers, researchers, educators, community health

development officers and social activists from Vietnamese institutes, governmental agencies, private companies, local nongovernmental organizations and international nongovernmental organizations as well as representatives of United Nations organizations in Viet Nam (see Annex 3: Vietnamese participants and representatives).

Meeting outcomes

The first two days of the meeting consisted of four sessions. The international and local experts presented findings from their research in the following areas: (1) prevalence and determinants of maternal mental health problems, (2) consequences of maternal depression for child health and development in resource-constrained settings, (3) interventions to promote maternal mental health in resource-constrained settings and (4) interventions to promote child health and development (see Annex 4: Papers presented at the meeting and programme agenda). Summaries of these sessions begin on the next page.

On the final day, in a closed meeting, the core group of 17 international experts and representatives from Viet Nam, UNFPA, WHO and other international agencies drafted a document entitled Maternal mental health and child survival, health and development in resource-constrained settings: essential for achieving the Millennium Development Goals (see Annex 5). This statement seeks to inform countries and international agencies about perinatal mental health problems, their consequences for mothers and infants, and strategies to address these vital but under-recognized public health problems.

International experts at the statement discussion

Photo credit: Dang Thi Hai Tho and Kelsi Kriitma

1. Prevalence and determinants of maternal depression

Meeting participants considered the results of a systematic review of the evidence on perinatal mental health in resource-constrained settings. The review was limited to evidence from World Bank-defined low and lower middle income countries, nonpsychotic disorders and English-language literature. Almost all the high-income countries of the world have data about the prevalence and determinants of perinatal depression. Such data can serve these countries as the basis for policy and practice. In striking contrast, the review found, only 11 of 112 countries classified as low or lower middle income countries have prevalence data.

Systematic reviews of the evidence from industrialized countries have concluded that 10–15% of women experience major depression in pregnancy. The few studies conducted in resource-constrained settings have found rates two to three times higher. Researchers from India, Turkey and Viet Nam presented the meeting with up-to-date evidence. In all three countries at least 25% of mothers of young infants experienced depression or showed clinically significant depressive symptoms.

There are some limitations to the evidence from resource-constrained countries. Many of the studies were undertaken at tertiary-level or university teaching hospitals. Therefore, it might be that only relatively socioeconomically advantaged women were assessed. In some of these countries skilled birth professionals attend relatively few births. No studies, however, involved women who had given birth at home with traditional birth attendants. It is possible that rates of common mental health problems in the general population of mothers of newborns are underestimated.

Methodological differences and limitations make comparisons among studies difficult. Some studies have conducted clinical interviews. Other studies have collected data with screening questionnaires. Only some of these questionnaires had been locally validated. Investigations did not all assess the same risk factors. Also, most of the prospective studies assessed mental health in pregnancy only as it constituted a risk for depression after childbirth.

Still, a consistent pattern of high prevalence of common perinatal mental disorders is emerging. Common risk factors include being adolescent, being unmarried, having previous reproductive losses, having an unwelcome pregnancy including pregnancy as a result of forced intercourse, being unable to confide in husbands, lacking emotional and practical support from family members, poverty and lack of personal income generating opportunities, inadequate housing, overcrowding and lack of privacy.

A presentation on the local validation of psychometric instruments in Viet Nam illustrated the need for culturally and psychologically sensitive measures to generate local evidence. Assessment needs to take into account differences in literacy, including emotional literacy, familiarity with the use of self-report instruments, and the establishment of locally appropriate clinical cut-off scores.

The discussion at the end of this session concluded that poor maternal mental health is an especially serious public health concern in resource-constrained settings. This conclusion reverses the once established view that mothers in resource-constrained settings do not experience mental health problems. Participants noted that the common mental health problems of depression and anxiety are predominantly socially determined and that cross-sectoral interventions are therefore needed to address them.

2. Consequences of maternal depression for child health and development and the mother–infant relationship in resource-constrained settings

Evidence presented from India, South Africa and the United Kingdom spoke to the impact of maternal postpartum depression on child health and socioemotional and cognitive development and on the mother–infant relationship. There is consistent evidence from resource-constrained settings that infants of mothers who are depressed are more likely to be of low birth weight, and malnourished and stunted

by the age of six months. Studies also report higher rates of diarrhoeal disease, infectious illness and hospital admission, and reduced rates of completion of recommended immunization schedules. In combination, these factors are likely to contribute to an increase in child mortality.

There is evidence from developed countries that the mother–infant relationship is compromised when the mother cannot demonstrate positive affect, attend to her baby's cues, and respond actively and contingently. In turn, a compromised mother–infant relationship adversely affects the child's cognitive, social, behavioural and emotional development. As yet there is little evidence regarding this linkage from resource-constrained settings, however.

3. Interventions to promote maternal mental health in resource-constrained settings

The psychosocial and physiological demands of pregnancy and caring for an infant make a woman more vulnerable to perinatal mental health problems, especially in adverse circumstances. At the same time, however, routine antenatal and postpartum health services provide an opportunity for heightened and psychologically informed mental health care. Even in the poorest countries there is some provision for antenatal, perinatal, postpartum and infant health care and other primary health care services. Interventions to improve maternal mental health and related child survival, health and development can be integrated into these existing services.

A woman's emotional well-being and social circumstances can be assessed within routine perinatal health care, using either structured questions or appropriately validated and culturally sensitive self-report questionnaires. Stepped intervention protocols, clearly described pathways to care, professional education and health service development are needed. Participants emphasized the importance of an approach that provides care to both mother and baby.

Interventions need to be simple and practical and to address both individual needs and family functioning. In an ongoing study in a rural area of Pakistan, village-based community health workers integrated a psychological intervention to treat maternal depression into their routine clinical practice. Evidence from Japan illustrated the importance to maternal and child health of assessing and addressing gender-based violence. Participants also heard how a psychosocial intervention for people who had tried suicide might be applied to women with perinatal mental health problems. The intervention has been studied in several resource-constrained countries.

Proposed strategies to integrate mental health care into the primary health care system in Viet Nam served as examples. These strategies address research, education and training, policy development and health service development.

4. Interventions to promote child health and development

To prevent the adverse effects of compromised caretaking on child health and development, interventions must attend to the child's needs and to strengthening the mother–infant relationship as well as to maternal health. Participants considered two such interventions that have been tested in controlled trials in resource-constrained settings. In Khayelitsha, a periurban township in South Africa, trained lay women provided mothers with structured support and education about infant capacities. Mother–infant relationships and child health and development improved. In Porto Alegre, Brazil, a single psycho-educational session about infant behaviour and capacities was conducted individually with mothers of newborns while the mothers were still in hospital. This session improved the mothers' sensitivity and responsiveness to their infants at age six months, compared with mothers who were randomly assigned to a comparison group that received only usual information about infant care.

Overall, the international expert meeting concluded that there is widespread lack of awareness about women's mental health in the perinatal period and its impact on child health and development in resource-constrained settings. All resource-constrained countries need cross-sectoral approaches—not only the integration of mental health care into primary perinatal health care, but also strategies to reduce poverty and domestic violence and to promote equality of participation in education and income-generating occupations, The approach must be multistranded, including research, education, community-based interventions, health service development, health system strengthening and social policy formation.

Annex 1. Meeting conveners

Meena Cabral de Mello	Department of Child and Adolescent Health and Development, World Health Organization, Geneva
Jane Fisher	Key Centre for Women's Health in Society, School of Population Health, University of Melbourne, Melbourne
Takashi Istuzu	United Nations Population Fund, New York
Tran Tuan	Research and Training Center for Community Development, Hanoi

Annex 2. International and Vietnamese experts

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Bryanne Barnett	University of New South Wales, Sydney, Australia
José Bertolote	Department of Mental Health and Substance Abuse, World Health Organization, Geneva, Switzerland
Andrew Bruce	International Organization for Migration, Hanoi, Viet Nam
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Christine Comblain	International Organization for Migration, Hanoi, Viet Nam
Peter Cooper	Winnicott Research Unit, University of Reading, Reading, United Kingdom
Jane Fisher	Key Centre for Women's Health in Society, School of Population Health, University of Melbourne, Melbourne, Australia
Zaeem ul Haq	Johns Hopkins Bloomberg School of Public Health/ Center for Communication Programs, Islamabad, Pakistan (also representing Atif Rahman)
Ian Howie	UNFPA, Hanoi, Viet Nam
Takashi Izutsu	UNFPA, New York, USA
Yoshiharu Kim	National Center of Neurology and Psychiatry, Tokyo, Japan
Nguyen Thi Nhu Ngoc	Ho Chi Minh City, Viet Nam
Doreen Rosenthal	Key Centre for Women's Health in Society, School of Population Health, University of Melbourne, Melbourne, Australia
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Mark Tomlinson	Medical Research Council, Cape Town, South Africa

Tran Tuan	Research and Training Centre for Community Development, Hanoi, Viet Nam
Atsuro Tsutsumi	International Research Institute of Health and Welfare, Kobe, Japan
Jacqueline Wendland	University of Paris V, Paris, France

Annex 3. Vietnamese participants and representatives

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Vu Van Chinh	Health Policy Unit, Ministry of Health, Hanoi

Annex 4. Papers presented at the meeting and programme agenda

Day1

Welcome and overview of the interaction between reproductive health and mental health

8:30 – 8:40	Ian Howie (UNFPA Chief of Mission, Viet Nam)
8:40 – 8:45	Andrew Bruce (IOM Chief of Mission Viet Nam)
8:45 – 9:00	Meena Cabral de Mello/José Bertolote (WHO)
9:00 – 9:10	Doreen Rosenthal (KCWHS)
9:10 – 9:20	Professor Pham Song, Chairman of Viet Nam Medical Association and Chairman of RTCCD Board of Advisors
9:20 - 9:45	Takashi Izutsu (UNFPA)

Prevalence and determinants of maternal depression

Morning Chair: Jane Fisher

9:45 – 10:15	Jane Fisher: Maternal mental health in resource constrained settings: a review of the evidence
10:15 – 10:30	Questions and answers/Clarification
10:45 – 11:15	Nhu Ngoc: Postpartum depression in Ho Chi Minh City
11:15 – 11:30	Questions and answers
11:30 – 12:00	Tran Tuan: Evidence from Viet Nam of the need for local validation of psychometric instruments
12:00 – 12:15	Questions and answers

Afternoon Chair: Doreen Rosenthal

1:30 – 2:00	Nazan Aydin: Prevalence and risk factors for maternal depression in Erzurum, Turkey
2:00 – 2:30	Questions and answers
2:45 – 3:15	Sudipto Chatterjee: Maternal depression and childhood nutrition: Review of the evidence from developing countries and the possible public health interventions feasible in these settings
3:15 – 3:45	Questions and answers
3:45 – 4:45	Discussion/Conclusion on Prevalence and determinants of maternal depression

Day 2

Consequences of maternal depression for child health and development in low-income settings

Morning Chair: Meena Cabral de Mello

8:50 – 9:20	Peter Cooper: The impact of postpartum depression on child socioemotional and cognitive development
9:20 – 9:35	Questions and answers

9:35 – 10:05	Bryanne Barnett: Maternal mental health and its effects on child health
10:05 – 10:20	Questions and answers
10:20 – 10:35	Discussion/Conclusion on session: Consequences of maternal depression

Interventions to promote maternal mental health in resource-constrained settings

10:50 – 11:20	José Bertolote: An efficient brief intervention for suicide attempters: potential applications for maternal depression management in PHC
11:20 – 11:35	Questions and answers
11:35 – 12:05	Tran Tuan: Integrating mental health care into the primary health care system of Viet Nam
12:05 – 12:20	Questions and answers
12:20 – 12:50	Yoshiharu Kim: Gender-based violence as a determinant of Maternal and Child Health
12:50 – 1:05	Questions and answers

Afternoon Chair: Jane Fisher

1:45 – 2:15	Zaeem Haq: Integrating a psychological component for perinatal depression into routine practice of village based community health workers in rural Pakistan: challenges and opportunities
2:15 – 2:30	Questions and answers
2:30 – 3:00	Discussion/Conclusion on session: Interventions to promote maternal mental health

Interventions to promote child health and development

3:15 – 3:45	Mark Tomlinson: Improving the mother-infant relationship and child health and development: implications for the integration and scale up of services
3:45 – 4:00	Questions and answers
4:00 – 4:30	Jaqueline Wendland: Effects of an early intervention on the quality of mother-infant interaction in Brazilian low income families
4:30 – 4:45	Questions and answers
4:45 – 5:15	Meena Cabral de Mello: Integrated Interventions to promote child health and development
5:15 – 5:30	Questions and answers
5:30 –6:00	Discussion/Conclusion on session: Interventions to promote child health and development

Day 3 (Attended by local and international experts)

Drafting of a statement on evidence-based action for improving maternal mental health and child health and development in resource-constrained settings to address the Millennium Development Goals (see Annex 5).

Maternal mental health and child survival, health and development in resource-constrained settings: essential for achieving the Millennium Development Goals

Mental health[1] is fundamental to attaining the Millennium Development Goals of improving maternal health, reducing child mortality, promoting gender equality and empowering women, achieving universal primary education and eradicating extreme poverty and hunger.

Mental health problems are one of the most prevalent and severe, but neglected, complications of pregnancy and childbirth. ***(1)*** They make a substantial but currently unrecognised contribution to maternal mortality and morbidity. Suicide is a leading cause of pregnancy-related death in developed countries and of death in young women of reproductive age in some resource-constrained countries. ***(2–4)*** One in three to one in five pregnant women and mothers of newborns in developing countries, and about one in ten in developed countries, have significant mental health problems of which depression[2] and anxiety[3] are the most common. ***(5–8)*** Moreover, if maternal caretaking capacity is compromised, child survival, health and development are jeopardized. ***(9)*** The presumption that culturally-prescribed postpartum care is available and provides mothers of newborns with an honoured status, mandated rest and increased practical assistance, thus protecting mental health ***(10)***, does not reflect reality for many women. ***(7)***

Risk factors for maternal mental health problems

Mental health problems in pregnant women and mothers are predominantly socially determined. The risk factors in developing and developed countries are similar but the prevalence of such factors is higher in the former. Risk factors include:

- poverty and chronic social adversity, including limited education and opportunities for income generation, and crowded living conditions; *(5–7, 11–15)*
- gender-based violence, including emotional, physical and sexual abuse during childhood, family violence, including by intimate partners, and rape; *(5, 16, 17, 18, 19)*
- lack of autonomy to make sexual and reproductive decisions; *(20)*
- unintended pregnancy, especially among adolescent women; *(7, 14, 21)*
- lack of empathy from partners and gendered stereotypes about the division of household work and infant care; *(7, 12, 14, 20, 22, 23)*

- excessive workloads and severe occupational fatigue; *(24)*
- lack of emotional and practical support or criticism from her own mother or mother in law, or peer group; *(6, 7, 12, 19, 24)*
- gender discrimination and devaluing of women; *(20, 25, 26)* and
- stillbirth, miscarriage and complications of unsafe abortion, pregnancy and childbirth, and persistent poor physical health. *(27)*

Some risk factors appear to be more common in contexts in which there are strong gendered role restrictions on women, including lack of reproductive rights, and giving birth to a daughter in cultures with a preference for sons. *(5, 12, 24, 28)*

Maternal mental health is significantly worse in humanitarian situations or emergencies, especially among refugees and internally displaced people. Sexual and reproductive health is at risk or compromised as a result of deterioration in security and in the functioning of social and health care systems as well as due to a lack of access to appropriate services. Unintended pregnancies increase where access to sexual and reproductive health services is limited. Gender-based violence, including rape, is a common consequence of social unrest and is used as a weapon of war. In addition, people who are trafficked and undocumented migrants are at increased risk of mental health problems and often lack access to health and social services. *(29)*

Impact on mothers and children

Mental health problems constitute a severe burden for both mothers and children. In 2004, perinatal conditions were ranked first, depression fourth and maternal conditions fifth as contributors to the global burden of disease (GBD) experienced by women globally. *(30)* When these co-occur, the human suffering can be extreme. A mother whose mental health is compromised has substantially reduced capacity to care for herself and her infant.

Pregnant women or mothers who have mental health problems often have poor physical health and may have persistent high-risk behaviours including substance abuse. Mothers who are depressed and anxious are less likely to attend for antenatal care or adhere to prescribed health regimens. Although vital registration systems and other systematic data are not available for most developing countries, suicide has been found to make a significant, but under-recognised contribution to pregnancy-related deaths in some of these settings. *(4, 31–34)*

The impact of poor maternal mental health on the developing infant can be severe. Infants are entirely dependent on their caregivers for provision of nutrition, physical care, comfort, social interaction and protection. Infants' neurological, cognitive, emotional and social development are adversely affected if they lack day-to-day interactions with a caregiver who can observe infant cues, interpret these accurately and respond contingently and effectively. *(35–37)* Lifelong capacity to build and maintain satisfactory relationships is established through bonding and attachment in the early years. Without intervention, problematic patterns in relationships can be transmitted and continue across generations. *(38)* Maternal depression in resource-constrained settings is linked directly to lower infant birth weight, higher rates of malnutrition and stunting in six-month-old infants, higher rates of diarrhoeal disease, infectious illness and hospital admission, reduced completion of recommended schedules of immunisation and worse physical, cognitive, social, behavioural and emotional development in children. *(39–45*). In combination these factors contribute to an increase in child mortality.

Mental health and economic development are reciprocally related. Women's mental health is worse if they are not permitted to generate an income, and women with mental health problems can find it difficult to participate economically and socially. This leads to the huge loss of their contributions to society and the economy. There are also clear economic costs to the reduced participation of children who have not been able to reach their full potential. *(46)*

What can be done

Detection, early intervention and treatment strategies are available, but to date have rarely been applied in resource-constrained settings. Even in the least-resourced countries, there is some provision for antenatal, perinatal, postpartum and infant health care and other primary health care services. It is within these existing services that interventions to improve maternal mental health and child survival, health and development can be integrated.

Interventions to improve maternal mental health and promote child health and development include:

- early detection of maternal mental health problems through the use of direct questions about emotional well-being and social circumstances and the use of locally validated screening instruments; *(47)*
- psycho-educational interventions at antenatal and postnatal health care services that combine information provision with psychological support; *(48–50)*

- improvement of the mother-child relationship through enhancement of a mother's sensitivity to infant developmental needs for stimulation, interaction and comfort; *(9, 38, 51, 52)*
- promotion of child health and development through improvements in maternal responsiveness; *(52, 53)*
- improving partner relationships through programmes promoting gender equality and challenging gender-based stereotypes about fathering and household work;
- reducing intimate partner and family violence; *(18)*
- culturally sensitive, solution-focused brief psychological therapies; *(54, 55)*
- improving social support for women through building social networks;
- improving access to education and vocational training for girls and women;
- appropriate treatment of detected depression and anxiety through clearly-defined, stepped protocols that can be managed by primary health care providers; *(56, 57)*
- identification and early referral to specialist services of women at risk of perinatal mental health problems because of a personal or family history of severe mental illness; *(57)* and
- provision of low-cost psychotropic medication to mothers who are extremely depressed and unresponsive to psychosocial interventions, taking into account the risks of these medications to the foetus and to the breastfed infant. *(57)*

Implementation strategies:

- all resource-constrained countries require, as a matter of urgency, local evidence, generated through systematic research and utilizing appropriate methods about the nature, prevalence, social determinants and consequences of maternal mental health problems;
- development and evaluation of improved intervention models which specify the roles and responsibilities of health and non-health sectors;
- health service strengthening, starting with demonstration projects based on the existing evidence;
- capacity development and networking of stakeholders including in the non-health sectors;
- development of a legal and policy framework for the protection of women's mental health;
- stigma reduction and awareness raising among the general population;
- estimation of the financial and human resources to provide these enhanced services on the necessary scale;
- development of indicators to track the progress that countries make in achieving goals to improve maternal mental health;
- support for organizations wanting to implement these recommendations; and
- establishment of adequate funding to support research, implementation and evaluation of community based interventions, mental health education and training for health professionals.

Way forward

Mental health problems are a key determinant of maternal and child mortality and morbidity, but are not currently recognised in existing initiatives to promote maternal health and improve sexual and reproductive health and child health. We believe that the achievement of the Millennium Development Goals to improve maternal health, reduce child mortality, promote gender equality and empower women, achieve universal primary education and eradicate extreme poverty and hunger cannot be achieved unless there is a specific focus on maternal mental health. In doing this it is essential to pay attention to the social determinants of mental health and its key role in maternal health and child survival, health and development, and in increasing the coverage of evidence-based low-cost interventions for maternal mental health problems. Thus, enhancement of maternal mental health requires the involvement of multiple sectors including those dealing with development, poverty reduction, human rights, social protection, education, gender, and security, in addition to health. The *Lancet* has published a recent series of papers about the major global burden of mental health problems in resource-constrained settings. It constitutes an international call to action that there is "No Health without Mental Health". *(26)* Further, mental health is integral to implementing international treaties such as the International Covenant on Economic, Social and Cultural Rights (ICESCR), the Convention on the Rights of Children, the Convention on the Elimination of All Forms of Discrimination Against Women and the Convention on the Rights of Persons with Disabilities, as well as documents such as the Programme of Action of the International Conference on Population and Development (ICPD) and the Beijing Platform for Action of the Fourth World Conference on Women. *(58)*

We call on governments, international organizations and civil societies, informed by WHO's definition of health[4], ICPD's definition of reproductive health[5] and ICESCR's definition of the right to health to take immediate action to address mental health in their endeavours to improve maternal and child health[6], survival and development. Political will, concerted action by global stakeholders and resources are needed now to integrate maternal mental health in strategies to achieve the Millennium Development Goals.

This Statement was developed by the participants in the UNFPA-WHO International Expert Meeting on the Interface between Reproductive Health and Mental Health: Maternal Mental Health and Child Health and Development in Resource-Constrained Settings, held in Hanoi, Viet Nam, 21 to 23 June 2007. The International Expert Meeting was a joint initiative of UNFPA, WHO, the Key Centre for Women's Health in Society, which is a WHO Collaborating Centre for Women's Health in the School of Population Health at the University of Melbourne, Melbourne, Australia and the Research and Training Centre for Community Development in Hanoi, Viet Nam. The International Expert Meeting was convened and the Statement drafted by Jane Fisher, Key Centre for Women's Health in Society, University of Melbourne, Melbourne, Australia; Meena Cabral de Mello, WHO Department of Child and Adolescent Health and Development, Geneva, Switzerland; Takashi Izutsu, UNFPA, New York, NY, USA and Tran Tuan. Research and Training Centre for Community Development, Hanoi, Viet Nam. The international experts at the meeting and co-signatories to the Statement were: Abiodun Adewuya, Department of Mental Health, Wesley Guild Hospital, Ilesa, Nigeria; Nazan Aydin, Department of Psychiatry, Ataturk University, Erzurum, Turkey; Bryanne Barnett, Department of Psychiatry, University of New South Wales, Sydney, New South Wales, Australia; José Bertolote, WHO Department of Mental Health and Substance Abuse, Geneva, Switzerland; Peter Cooper, Winnicott Research Unit, University of Reading, Reading, UK; Sudipto Chaterjee, Sangath Centre, Goa, India; Zaeem ul Haq, Johns Hopkins University Center for Communication Programs, Islamabad, Pakistan; Yoshiharu Kim, National Center of Neurology and Psychiatry, Tokyo, Japan; Nguyen thi Nhu Ngoc, Center for Research and Consultancy in Reproductive Health, Ho Chi Minh City, Viet Nam; Doreen Rosenthal, Key Centre for Women's Health in Society, University of Melbourne, Melbourne, Victoria, Australia; Mark Tomlinson, Medical Research Council, Capetown, South Africa; Atsuro Tsutsumi, International Institute of Research and Health, Tokyo, Japan and Jaqueline Wendland, Department of Psychology, University of Paris V, Paris, France. The following international experts reviewed the Statement and are co-signatories: Lindsay Edouard, Patrice Engle, Vikram Patel, Arletty Pinel, Atif Rahman and Tomris Türmen.

Notes:

[1] Mental health is hereby understood as the capacity of individuals to interact with one another, the group and the environment and in ways that promote subjective well-being, the optimal development and use of mental abilities (cognitive, affective and relational) and the achievement of individual and collective goals consistent with justice and the attainment and preservation of conditions of fundamental equality.

[2] The WHO International Classification of Diseases (ICD-10) describes depression as the persistent presence for at least two weeks of a sad lowered mood, loss of interest in activities usually experienced as pleasurable, reduced energy, and at least two of the other common symptoms which include: reduced concentration; reduced self-confidence; ideas of guilt; a bleak and pessimistic view of the future; ideas or acts of self-harm or suicide; disturbed sleep and diminished appetite.

[3] In the WHO International Classification of Diseases (ICD-10) generalized anxiety disorder is characterized by the persistent presence for at least several weeks and usually for several months of apprehension (worries about future misfortune, feeling on edge and having difficulty concentrating); motor tension (restlessness, trembling and inability to relax) and autonomic over activity (lightheadedness, sweating, rapid heart beat, dizziness and a dry mouth).

[4] Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

[5] Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes.

[6] The right to health is the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.

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