Maternal mental health and child health and development in low and middle income countries

Report of the meeting held in
Geneva, Switzerland
30 January – 1 February 2008

World Health Organization

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INTRODUCTION

Perinatal[i] mental health problems have been studied in more than 90% of high income countries (HICs), whereas information is available only for 10% of low and middle income countries (LMICs) (*1*).

The impact of maternal mental health problems on infants in high income countries has been identified mostly in terms of psychosocial and emotional development, thanks to the groundbreaking early work of Spitz (*2*) and of Bowlby (*3*), who studied the emotional needs of infants and mother-child attachment. Subsequently, a large body of literature, also from HICs, documented the effects of maternal mental health on the child's psychological development (*4*), intellectual competence(*5*), psychosocial functioning (*6*) and rate of psychiatric morbidity (*7, 8*).

Recently, a series of studies have demonstrated that the impact of mental health problems in pregnant women, and up to one year after childbirth, in LMICs differed from what was known from HICs in two important aspects:

1. The prevalence of maternal mental disorders is significantly higher in LMICs (as will be described below); and

2. The impact on infants goes beyond delayed psycho-social development and also includes low birth weight, reduced breast-feeding, hampered growth, severe malnutrition, increased episodes of diarrhoea and lower compliance with immunization schedules.

Regrettably mental health is not specifically mentioned in the Millennium Development Goals, but the full realization of at least three of its goals are directly or indirectly related to women's mental health (or to the reduction of the impact of perinatal mental health problems)[ii], namely:

MDG 4: Reducing child mortality,

MDG 5: Improving maternal health,

MDG 3: Promoting gender equality and empowering women.

The contribution to the Global Burden of Disease (GBD) of only three classes of mental disorders (i.e., mood disorders, schizophrenia and specific anxiety disorders, generalized anxiety disorders *excluded*) among women age 15-44 years – the years most relevant for reproductive health[iii] – is 7% of the total GBD for women of all ages, and 3.3% of the total GBD for both sexes (*9*). Depression alone now ranks 5th among all causes of the GBD for both sexes combined and 4th for women only; it is expected to rank 2nd by the year 2020 (*10*). The perinatal period is a time of increased physical and emotional demands on the woman, and the disability associated with depression is likely to interfere with many essential functions related both to the mother and the infant. Therefore, it is not difficult to see that a large proportion of this burden of disease will affect women of reproductive age and their infants.

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[i] Most of the information reviewed, discussed and presented here refers to the period of pregnancy and up to one year after childbirth; for the sake of brevity it is referred to as the "perinatal period". It is acknowledged that for different purposes and constituencies "perinatal" may refer to different periods of time.

[ii] See also: WHO (in press). *Report of UNFPA-WHO International Expert Meeting: The Interface between Reproductive Health and Mental Health - Maternal mental health and child health and development in LMICs*. Geneva, WHO.

[iii] Reproductive health has been defined by the International Conference on Population and Development (ICPD, 1994), along the lines of WHO's definition of health, as "a state of complete physical, mental and social well-being in all matters relating to the reproductive system and to its functions and processes".

In view of the potential health, development, and human rights implications of recent findings, the World Health Organization's (WHO) Department of Mental Health and Substance Abuse in collaboration with the United Nations Population Fund (UNFPA), launched an initiative to understand this problem better and to identify and propose solutions to it. One of the first activities of this initiative was to convene a meeting of experts bringing together the expertise from other relevant WHO Departments and that of experts from both developed and developing countries who have been active in this area (see list of participants and agenda of the meeting in Annex 1). What follows is a summary of the presentations and discussions that took place during that meeting, as well as its main conclusions and recommendations.

PREVALENCE, RISK FACTORS, AND CONSEQUENCES TO WOMEN OF MATERNAL MENTAL HEALTH PROBLEMS IN LOW AND MIDDLE INCOME COUNTRIES

Prevalence

Studies conducted in HICs indicate a prevalence of 10-15% of perinatal mental disorders (*11, 12*). It has been suggested that rates of first onset and severe depression are three times higher in the postnatal period than in other periods of women's lives (*13*). More recently, Gavin et al. (*14*) confirmed those findings, suggesting that the rates are particularly high during the first trimester following childbirth.

Recent studies have found that in LMICs these problems are in the range of 10-41%, depending on the place and time of the perinatal period studied and the instruments employed. Table 1 presents a summary of these studies conducted with pregnant women (with prevalence rates varying from 10% to 41.2%), and Table 2 presents the equivalent information for puerperal women (with prevalence rates ranging from 14% to 50%)[i].

Admittedly, not all percentages refer to the same level of problem, i.e., in some studies a broader concept of psychological distress was used (as measured by screening instruments, such as the General Health Questionnaire (GHQ) or Self Reporting Questionnaire (SRQ), validated for local use), whereas in others a nosological diagnosis was used (obtained by instruments such as the Schedules for Clinical Assessment in Neuropsychiatry (SCAN) and the Mini-International Neuropsychiatric Interview (MINI)). Similar variability has been found in studies from HICs and it is postulated that this may be due to cross-cultural variables, reporting style, differences in the perception of mental disorders and the stigma attached to them, as well as differences in socio-