

## Maternal death due to domestic violence

Both domestic violence and the disproportionately high maternal mortality ratios<sup>±</sup> in developing countries are recognized as global public health problems. Governments of the world have committed themselves to providing the necessary care for all pregnant women and to work towards the elimination of all forms of violence against women (1).

It is not yet known what proportion of maternal mortality is due to domestic violence, whether there are between-country differences, and what factors could explain those differences. However, evidence shows that domestic violence and maternal mortality are linked because it has been reported that some women die from domestic violence while pregnant or during the period following the end of pregnancy. It should be pointed out that demography and health surveys have indicated that a significant proportion of women suffer from intimate partner violence during pregnancy (2). Lethal direct traumas, abdominal traumas that produce obstetric complications which can later lead to death, and psychological stress or dominance of women are the principal mechanisms of how domestic violence can cause maternal deaths.

### Causal mechanisms of death

#### *a. Lethal direct traumas*

Murders of pregnant women perpetrated by intimate partners (femicide) and suicide of women while pregnant or during the period following the end of pregnancy have been documented worldwide. Often unwanted pregnancy seems to play an important role in this type of violent death.

- In several states of the United States (1990-1991), a study found that the risk of being physically attacked or murdered was 3 times greater among women with unwanted pregnancies (3).
- In Matlab, Bangladesh, for the period 1976-1993, a study found that pregnant adolescents had a greater risk of suicide death than non-pregnant adolescents (4).
- In Morelos, Mexico, a study of deaths due to unsafe-abortion found that that during the year 2001 up to 15% of violent death of pregnant women could have been attributed to unwanted pregnancies. The study reports cases of adolescents who committed suicide after realizing they were pregnant (5).

#### *b. Abdominal trauma that causes obstetric complications*

Women, while pregnant or during the period following the end of pregnancy, can die due to the obstetric complications generated by abdominal trauma. For example, abdominal trauma can cause hemorrhages and/ or abruptio placentae (detachment of the placenta) any of these obstetrical complications can become the cause of death for the fetus and/ or for the woman.

- In British Columbia, Canada (1999-2000), a study found that women abused during pregnancy were up to 3.5 times more likely to experience hemorrhage before delivery than women who were not abused (6).
- The same study found that women abused during the pregnancy had more than 7 times the risk of having a perinatal death than non-abused women (6).

#### *c. Psychological stress and dominance of women*

An environment of stress and fear can also lead to obstetrical adverse outcomes through physiological responses triggered by stress (*e.g.* hormonal response), through the adoption of certain risky behaviors by women or controlling behavior by the violence perpetrator (7). Through dominance of women decision-making capacity and movement (*e.g.* locking up doors, expressing prohibition to leave, restricting economic support, and so on), women can find themselves limited to seek help when complications arise.

### **"Maternal death due to domestic violence" has not been fully addressed in maternal mortality studies**

Unfortunately, neither the definition of maternal death nor the formula to estimate the maternal mortality ratio includes domestic violence deaths. This fact makes impossible to collect information and determine accurately the contribution of domestic violence to maternal mortality. Nonetheless, there are studies that have highlighted the existence of maternal deaths due to domestic violence

<sup>±</sup> The Maternal Mortality Ratio is a measure of the risk of death of women when pregnant. It is usually measured in terms of maternal deaths per 100 000 live births. Traditionally, in maternal mortality surveillance the terms "ratio" and "rate" have been used indistinctively, throughout this text, however, we will refer to "maternal mortality ratio."

without greater discussion of the definition used and the implications for measurement (8). Therefore, there is a need for a more inclusive definition of maternal mortality and broader epidemiological surveillance that considers domestic violence as a cause of maternal death.

## Women from developing country may have a greater risk of maternal death due to domestic violence

Maternal deaths due to domestic violence take place both in developed countries and developing nations. Nonetheless, with a greater degree of subordination to men, less legal and police protection, fewer options to prevent and deal with unwanted pregnancies, it is likely that women from developing countries have a greater risk of maternal death due to domestic violence than women living in developed nations.

## The role of the Pan American Health Organization (PAHO/WHO)

Over the past years, PAHO/WHO has conducted extensive research and actions on the subject of domestic violence in Latin America and the Caribbean. Through research (1995-1997), PAHO/WHO has contributed to the following actions: the setting of intervention priorities; the identification of numerous factors (at the individual and the society levels) linked to domestic violence; and to the identification of the "critical path" of women who try to break the vicious cycle of domestic violence (9). Nowadays, PAHO/WHO is concentrating its efforts to exploring the association and magnitude of the relationship between domestic violence and the maternal and perinatal health in Latin America and the Caribbean.

Generating data on this relationship is important because it would facilitate the development of a joint strategic framework between Safe Motherhood and Gender Equity for a comprehensive approach of both domestic violence and maternal mortality. Acting now to prevent violence during pregnancy could facilitate attaining the millennium goal of reduction of maternal mortality by 75% by the year 2015 and achieving, in the run, important progress toward gender equity.

## References

1. United Nations, Division for the Advancement of Women (DAW). Convention on the Elimination of All Forms of Discrimination against Women (<http://www.un.org/womenwatch/daw/cedaw/text/econvention.htm>). Retrieved on August 1, 2004.
2. Ellsberg M., Heise L., Pena R., Agurto S., Winkvist A., "Researching domestic violence against women: methodological and ethical considerations." *Stud Fam Plann* 200; 32(1):1-16.
3. Gazmararian JA., Adams MM., Saltzman LE., Johnson CH., Bruce FC., Marks JS., Zahniser SC., "The relationship between pregnancy intendedness and physical violence in mothers of newborns." The PRAMS Working Group. *Obstet Gynecol.* 1995; 85(6):1031-8.
4. Ronsmans C., Khlat M., "Adolescence and risk of violent death during pregnancy in Matlab, Bangladesh." *Lancet.* 1999; 354 (9188):1448.
5. Walker D., Campero L., Espinoza H., Hernández B., Anaya L., Reynoso S., Langer A., "Abortion deaths in Mexico: a case of misclassified second trimester deaths." *Reproductive Health Matters.* Forthcoming 2005.
6. Janssen PA., Holt VL., Sugg NK., Emanuel I., Critchlow CM., Henderson AD., "Intimate partner violence and adverse pregnancy outcomes: a population-based study." *American Journal of Obstetrics and Gynecology* 2003; 188(5):1341-7.
7. Langer A., Hernández B., García C., Saldaña G., "Identifying interventions to prevent maternal mortality in México: a verbal autopsy study." In Berer M., Sundari T., editors: *Reproductive Health Matters. Safe motherhood initiatives: critical issues.* London: Blackwell Science; 1999, pp.127-136.
8. Espinoza H., Camacho V., "Maternal death due to domestic violence: Unrecognized critical component of maternal mortality." *Rev Panam Salud Publica / Pan Am Health Journal.* February 2005, Vol. 17, No. 2. 123-129.
9. Sagot M., Shrader E., *La ruta crítica de las mujeres afectadas por la violencia intrafamiliar en América Latina. Estudios de caso en diez países [The critical path of women affected by domestic violence in Latin America. Case studies in ten countries]*. Washington, DC: Pan American Health Organization, 2000.

July 2005