POSTPARTUM CARE: LEVELS AND DETERMINANTS IN DEVELOPING COUNTRIES

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Background: Maternal mortality continues to be high in many parts of the world. Best estimates still put the figure at just over 500,000 maternal deaths every year, 99 percent in the developing world[i] . Though antenatal care continues to be important for mothers in their preparation for childbirth, it cannot predict whether an individual woman will present a critical complication at delivery[ii]. One-fourth of maternal and one-half of neonatal deaths occur during labor, delivery and within the first 24 hours postpartum, increasing to 60 percent and two-thirds respectively by the end of the first week postpartum. The Demographic and Health Surveys (DHS) project has been measuring several components of maternal health in developing countries for over 20 years. The DHS reports present information on the magnitude of maternal mortality and the occurrence, frequency of, and attendance at antenatal and delivery care for a number of characteristics of women. Previous research based on DHS has shown substantial increase worldwide in the use of antenatal care services. A recent review of data from 49 countries with two or more household surveys found an 11-point increase in use of antenatal care between 1990 and 2000, from an average of 53 to 64 percent[iii] . However, the other components of maternal care have not followed such a promising path. There are wide gaps between antenatal and delivery care and even more between delivery and postpartum care (PPC).

Methods and Data Sources: The study utilizes data from 30 surveys conducted between 1999 and 2004 under the DHS project representing major regions of the world. All the surveys include women aged 15 to 49 years and the sample is nationally representative. The study concentrates on the occurrence or not of PPC as its main dependent variable. However, other related dependent variables explored are periods of attendance (0-1 day, 1-2 days, 3-4 days, and so on); PPC provided at institutional or at the community level; and whether provided by a professional or non-professional attendant. The relationship between hypothesized determinants of PPC and characteristics of women and their households is examined using bi-variate and multivariate analyses.

Results: Extent and timing of PPC: In the 30 countries covered in this study **4 in 10** women with a live birth in the five years preceding the survey did not receive PPC. If timing of first care is considered, on average the first PPC for all births --in the 29 countries with this information-- is provided **two days** after delivery. If the picture is restricted to non-institutional births, the picture is bleaker. Only 13 percent of these women receive their first PPC within 24 hours, and on average **three days** postpartum. These women are clearly in life-threatening danger should they suffer a complication such as postpartum hemorrhage, the number one maternal killer.

Place and providers of PPC for non-institutional births: The majority of women in Cambodia, Indonesia and Nepal received their first PPC at home, an indication of the community strategy or accessibility to this service in South/Southeast Asia. This is complemented by the fact that in Nepal and Cambodia seven of ten providers of this care among non-institutional births are TBAs. Interestingly, this is not the case with Indonesia, where the majority of PPC, even in the community, is provided by trained health personnel.

Characteristics associated with receiving PPC: For further analysis, post partum care was divided into three categories. All women who delivered at a health institution were assumed to have received PPC by a health professional. Women who delivered outside a health institution were subdivided in whether they received PPC by a health professional or a TBA and other persons. Each of these three categories was used to analyze its correlation with several background characteristics of women. Most characteristics were well correlated with having received PPC, in particular Area of Residence, Birth Order, Education, Household Wealth, Number of ANC visits, Reading Newspaper, Watching TV, and Health Care Decision Making.

Conclusion/Recommendations: Women who receive PPC are more likely to live in wealthier households, have received antenatal care, are educated beyond primary level, live in urban areas, and are more exposed to the media. Some relationships are less clear or reversed for postpartum care performed by TBAs or other non-skilled attendants.
The first check-up six hours after delivery –as promoted at present by WHO-- might be too late for women who develop postpartum hemorrhage immediately after delivery. This poses a particular challenge for countries with a high percentage of non- institutional births, or home deliveries.

[i] WHO. 2005. Postpartum Care of the Mother and Newborn: a practical guide. Report of a Technical Working Group 89p. Available at http://www.who.int/reproductive-health/publications/msm_98_3/postpartum_care_mother_newborn.pdf, accessed on March 2, 2005.

[ii] McCormick, M.L, H.C.G Sanghvi, B. Kinzie, N. McIntosh. 2002. Preventing postpartum hemorrhage in low-resource settings. *International Journal of Gynecology & Obstetrics* 77:267-275.

[iii] WHO, and UNICEF. 2003. Antenatal Care in Developing Countries, Promises, achievements and missed opportunities. Geneva p8.