

On labor and childbirth: the importance of quaternary prevention

Sobre o parto e o nascer: a importância da prevenção quaternária

Sobre el parto y el nacimiento: la importancia de la prevención cuaternaria

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For many women, the motherhood is one of the most intense and significant aspects of human existence. Generally associated with a moment of renewal, becoming a mother is sometimes associated with risk to the lives of woman and child. The risk to the woman can be greater or lesser depending on the extent to which women are supported or oppressed in the society and is a concrete expression of gender inequalities and structural violence against women ¹. In other words, maternal mortality indicates the degree to which the society is developed. Many of the risks associated with motherhood are socially determined, but, the environment, biological factors, access and quality of health technologies are also important ^{2,3}. When pregnancy, childbirth and postpartum take place with no modification or attenuation of the factors that determine maternal morbidity and mortality, the resulting situation is closer to the natural history of motherhood. The natural history of motherhood, as experienced by our remote ancestors, included an estimated 2,000 to 3,000 maternal deaths per 100,000 live births (Gapminder. Maternal mortality historical data for Afghanistan, Angola, Bhutan, Lao People's Democratic Republic and Sri Lanka, 2014. <http://www.gapminder.org/data>, accessed on 10/Mar/2014). Fortunately, humankind's development has produced a secular trend to distance it from the natural history of motherhood, and in

the present day few countries display mortality in excess of 1,000 maternal deaths per 100,000 live births. This trend, known as “obstetric transition”, is also associated with lower fertility rates, aging of the obstetric population, changes in the pattern of causes of morbidity and mortality (with chronic degenerative diseases gaining importance) and increasing institutionalization of care at childbirth. Use of health technologies favors reduction in maternal morbidity and mortality, but hyper-medicalization – or the excessive and unnecessary use of health technology in care during pregnancy and childbirth – also represent risks for women, fetuses and newborns. In the later stages of the obstetric transition, when maternal mortality falls below 50 maternal deaths per 100,000 live births, the risks associated with the hyper-medicalization of maternity become more evident ⁴.

One of the health technologies most often used unnecessarily is childbirth through by caesarian section. This surgical procedure undoubtedly benefits women and children in specific situations of risk; however, its unnecessary use can represent additional risks for the mother-child dyad, besides constituting a drain on health resources. It is the surgical procedure most often performed in the world, and in increasing proportions in practically all countries ⁵. In Brazil, which is close to the final stages of the obstetric

transition, the situation is no different. At many hospitals, abdominal delivery has become the norm: today Brazil is one of the countries with the highest caesarian rates in the world. More than just a rate of mode of delivery, the high rate of caesarian section points to where Brazil stands in terms of the degree of hyper-medicalization of motherhood. This is a complex, multi-factor problem, whose causes include the dominant role played by obstetricians during intrapartum care, the traps of the health system which make caesarian delivery more convenient to many health professionals, and the perception among a considerable portion of the population that this mode of childbirth may possibly be better.

In order to gain a better understanding of various aspects of the hyper-medicalization of motherhood in Brazil, the federal government sponsored an *Epidemiological Survey of the Consequences of Unnecessary Caesarian Delivery in Brazil*. That initiative gave rise to the *Birth in Brazil* study, with overall coordination by the National School of Public Health, Oswaldo Cruz Foundation (ENSP/Fiocruz) and conducted by researchers in the fields of epidemiology, obstetrics, perinatology, pediatrics and obstetric nursing from a number of Brazilian institutions, including the Fernandes Figueira Institute (IFF/Fiocruz), the Belo Horizonte Health Department, Brasília University, São Paulo University, Pará State University, Ceará Federal University, Maranhão Federal University, Rio de Janeiro Federal University, Santa Catarina Federal University and the Brazilian National Agency for Supplementary Health ⁶. This issue of *Cadernos de Saúde Pública* publishes a robust collection of analyses of the *Birth in Brazil* study, offering more detailed information on caesarian delivery in Brazil that is representative for public and private services in all regions of the country, as well as on other no less important aspects relating to antenatal care, and care during labor, delivery and childbirth. The study addressed as well, the occurrence of maternal and neonatal complications and produced new estimates of maternal and neonatal mortality and near miss morbidity. In addition, this Supplement includes evaluations of facilities' structures and quality of care offered in Brazil. In several analyses, the worst outcomes were encountered among the most vulnerable portions of Brazil's population, represented by poor, black women with little schooling residing in the North and Northeast sub-regions.

Overall, what the information published in this special Supplement to *Cadernos de Saúde Pública* highlights is the need to stress the im-

portance of quaternary prevention in obstetrics. Complementing primary, secondary and tertiary prevention, the concept of quaternary prevention was developed by a Belgium general practitioner, Marc Jamouille. Quaternary prevention is conceived as the set of activities employed to identify people who are at risk of hyper-medicalization and to reduce unnecessary or excessive interventions so as to minimize iatrogenicity ⁷. In other words, practicing quaternary prevention means practicing the principle of "first do no harm" (*primum non nocere*), which is one of the cornerstones of health care practices. In the context of maternal and perinatal health, the practice of quaternary prevention is inseparable from scientific evidence-based practice, humanization of childbirth and combating obstetric violence. Moreover, combating obstetric violence should be made a priority issue for the health sector, because it represents the de-humanization of care and the perpetuation of the cycle of women's oppression through the health system itself.

However, while quaternary prevention and humanization of childbirth are key components, it is still necessary to go further in order for all avoidable maternal and perinatal deaths to be eliminated in Brazil. Many complications of pregnancy are difficult to prevent and for this reason they must be promptly attended, when and where they occur. Accordingly, it is the health system's duty to offer a quality service. One starting point for improving quality is to introduce clinical audits into the day-to-day activities of professionals working in hospitals and maternity facilities. Of special note is the role of the clinical audit in association with in-service training and simulations in management of obstetric complications. This is a resource that has been shown able to reduce maternal and perinatal mortality in hospitals ⁸. Now, clinical auditing also entails returning the findings to the health services and professionals audited. Audits without feedback are ineffective in improving quality, besides representing a waste of scarce resources. Unfortunately, many committees on maternal and infant mortality in Brazil only investigate the deaths and do little to return their evaluations to the health services and professionals involved.

In order to advance in building a Brazil free of maternal and perinatal deaths, a pact among all those concerned is required. The results of the *Birth in Brazil* survey are one step towards women's regaining their leading role during delivery and childbirth. It is up to all of us to advance in strengthening the health system so that it is able to provide a humane, quality service to all women in Brazil.

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