

Surveillance for the prevention of maternal mortality

Abstract

Maternal mortality is a public health problem in all countries of the world for its magnitude and social vulnerability. Active surveillance for case detection is one of the pillars proposed by WHO for prevention of maternal mortality for the purpose of advising improvement plans for health care processes. In Chile, the demographic transition, and also the current migrational dynamic have changed the maternal morbidity and mortality profile, posing new challenges for the health system. One of these is to consider a new conceptual model to characterize the cases, including a critical analysis of the integration of care networks and proper instruments to conduct clinical audits.

Keywords: health surveillance, prevention, maternal mortality

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Introduction

Maternal mortality is a prevalent health problem in developing countries; however, its social implications and correlation with the quality of health services constitutes a phenomenon that is evaluated and monitored transversely. Since the early 90s, the World Health Organization (WHO) has raised and formulated different goals and strategies to reduce maternal mortality rates, which have made progress, but not completely to date. Active surveillance to detect cases of maternal deaths is one of the pillars proposed by WHO for prevention of maternal mortality, which has among its purposes conduct a critical analysis of deaths and cases of severe obstetric morbidity (near miss) at local and national level. The last to draw conclusions and plans for improvements in the process of reproductive health care.^{1,2} In the sixties, Chile had a maternal mortality rate of 299/100,000 live births, one of the highest in the region. From that time Chile has experienced a steady decline, reaching a rate of 12 deaths per 100,000 live births in 2010.³ Continuous improvement in universal access to quality services in reproductive health, incorporating a national program for the control of fertility and the promotion of skilled birth attendance are part of the foundation responsible for the national demographic change in the last 50 years.⁴

However, in recent years the indicator has remained stable: 22 projected deaths per 100,000 live births by the year 2015 rate where comorbidities of chronic non-communicable diseases is and will be the main problem.^{5,6} This reflects a dramatic change in the profile of mortality of pregnant women, which has already been affected by the effects of the demographic transition. In a dynamic health system, these changes must be considered in order to have a health supply that effectively responds to a demand that does not have the same attributes as decades ago. Since 2007, Chile establishes and formalizes the "Standard Procedures for registration and audit of maternal, fetal and infant deaths"; a document re-edited in 2012 which adopts the main analytical approaches provided by WHO, which aspires that all health services can develop a clinical audit of maternal deaths in the country. Through this document, the immediate notification of cases was defined, also a time limit for audit was established and the institutions responsible for the audit were clarified.⁷ Its compliance

has been gradual and according to the Department of Health Statistics and Information (DEIS), the percentage of audited cases in 2009 was 40%, while in 2013 it was 62%.

In this context in 2016, the current legislation is supplemented by formalizing the "Technical Guidance for auditing and monitoring of maternal mortality" which aims to strengthen the system of information and monitoring of maternal mortality, where 3 mandates points out to meet the regulation:

- i. All cases must be notified at regional and national level within 24 working hours,
- ii. Health centers should perform clinical audit within the first 10 working days after the death and
- iii. The submission of all clinical data in the Ministry of Health within 7 working days after the death.

Although the regulation organizes the discussion,⁸ its adaptability to the new profile of pregnant women in Chile, which is strongly determined by factors associated with advanced demographic transition and migrant population, is still necessary. In order to offer a complete and comprehensive study of cases, it is necessary to incorporate these elements into a systematic and standardized study.

Conclusion

Despite the low rates of maternal mortality in Chile, this phenomenon remains a significant health problem. Among the reasons for this is the current obstetrical profile which constantly demands improvements in the quality of care of pregnant women, especially because of the increased prevalence of severe obstetric pathologies. Fortunately, with all implemented until today, there is a high probability that new cases are detected and analyzed in a timely and pertinent manner through all levels of the health system. However, there are further developments that we should consider and should be questioned globally:

- i. Characterization of pregnant women based on social determinants: the effects of demography and global migrational dynamic transition requires comprehensive studies beyond the limits of sexual

and reproductive health, to understand the factors that affect maternal mortality in a preventive approach based on their family and community.

- ii. Monitoring of maternal mortality applied to integrated networks of health services (RISS): WHO/PAHO since 2007 has promoted the initiative to implement integrated networks of health services, which seeks to strengthen health systems based on primary care through multidirectional integration of the health system.⁹ Analysis of maternal deaths could become a sentinel indicator of the degree of integration of health networks, as the relevance and continuity of care is an underlying cause in the large percentage of cases.
- iii. Standardization of instruments for analyzing cases: while international guidelines and local regulations deliver a broad conceptual framework, there is heterogeneity on how to perform the analysis of cases. This problem increases the perception of ambiguity, which lowers levels of confidentiality and potential ethical and legal externalities.

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Conflict of interest

The author declares no conflict of interest.

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