

Maternal mortality in Serbia

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Summary

Maternal mortality related to obstetric events is still high today. The main components of reproductive health are evaluated. Early diagnosis of the obstetric risks can significantly reduce maternal mortality.

Key words: Pregnancy; Mortality; Obstetric risk.

Introduction

Maternal mortality refers to deaths of women due to complications of pregnancy, childbirth, and puerperium (the first six weeks after delivery). The maternal mortality ratio is used, as a more stable indicator which monitors deaths per 100,000 live births. The most common complications that lead to maternal deaths are: infection, excessive bleeding after childbirth or abortion, and other complications of pregnancy, including eclampsia and postpartum sepsis [1].

Worldwide, more than 350,000 women die annually from complications during pregnancy and childbirth, 99% occur in developing countries [2].

Materials and Methods

Our state adopted the Millennium Declaration in 2000. The Millennium Development's fifth goal is: improving maternal health. As maternal health is an indicator of quality of healthcare of women of childbearing age (women aged 15 to 49 years), this is taken into account when adjusting the Millennium Development's fifth goal in the Republic of Serbia with the following tasks:

1. Reduce by 75% the maternal mortality ratio since 1990 by 2015. For the Republic of Serbia until 2015, reduce the maternal mortality ratio to 4.9.
2. By 2015, preserve and improve women's reproductive health by maintaining the fertility rate at the current level, while reducing the abortion rate by doubling the percentage of women using modern contraceptive methods.
3. To reduce mortality in the group of women of childbearing age by one-third between 2000 and 2015.

Discussion

There are many problems in the quality of registration of maternal deaths, as reported by sightings and by an expert in the Republic of Serbia. It occurs that these

deaths are registered under other causes, especially if the woman was diagnosed with some chronic health problems before pregnancy [3]. In some cases, registration under other causes of death can occur if death take place in another hospital in which the patient was admitted due to other medical complications. It is estimated that as much as ten percent of maternal deaths occur after the 42nd day of delivery, in which case the death is not registered under the same cause, therefore there is underregistration [4]. Since there 2007, triangulation methodology is used for collecting data: death certificate, registration of birth, and hospitalisation list. Sources of data for this analysis were: the Statistical Office of Serbia [5] and the Institute of Public Health of Serbia "Dr. Milan Jovanovic Batut" [6].

Based on comparisons of the five-year average at the beginning of the Millennium period for monitoring of maternal health (1990-1994), with the five-year average based on the analysis performed in 2005 (for period 2001-2005), it is evident that the maternal mortality ratio decreased significantly from 13.9 to 6.5, therefore it was considered realistic to reach the proposed national value of five deaths due to complications of pregnancy, childbirth, and puerperium per 100,000 live births [7] by 2015.

However, maternal mortality ratio in the last five years shows a different trend than expected: 2007: 7.3, 2008: 14.4, 2009: 19.9, 2010: 17.6, 2011: 9.

In our population causes of maternal mortality in the period from 2007 to 2011 were: hemorrhage (four), eclampsia (six), embolism (seven), sepsis (eight), influenza H₁N₁ (eight), adult respiratory distress syndrome (four), acute heart failure (seven), leukemia (one), and unknown cause (two). In 2009 and 2010, the highest maternal mortality ratio was recorded, and the incidence of influenza H₁N₁ as the cause of death was 28.5% and 33.3%, respectively.

Maternal mortality in Serbia for years has been low and has been reduced to sporadic cases, as in most Western countries. The incidence of births that take place in the presence of trained health workers in the Republic of Serbia is very high; since 2002, more than 99% (up to 99.5% in year 2005). Certain prerequisites for the reduc-

tion of maternal mortality are still unsatisfactory, such as coverage of antenatal women's healthcare.

Conclusion

To promote and preserve the health of women of childbearing age, it is necessary to ensure greater social and economic security of all women, especially in the period of maternity, pro-natal policy of the state, and the protection of the family. Analysis of main components of reproductive health: fertility, safe motherhood, family planning, prevention of unwanted pregnancies and abortions, as well as specific disease in women of childbearing period [8], is necessary. A significant reduction in maternal mortality can be achieved by early diagnosis, prompt treatment, and rehabilitation after certain illnesses.

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