

COMPARATIVE STUDY OF INFANT AND MATERNAL MORTALITY – ROMANIA IN A EUROPEAN CONTEXT

Daina Lucia, Carp Gheorghe

University of Oradea, Faculty of Medicine and Pharmacy, Oradea, 1 December Street, nr.10,
Romania, e-mail: lucidaina@gmail.com

Abstract

Infant and maternal mortality is a very important and still unsolved problem for public healthcare in Romania. Despite the numerous programs and efforts undertaken to solve this problem, the numbers continue to hold at a very high level compared to other countries in the European Union. The number of deaths has decreased from year to year in both infant and maternal mortality, but measures still need to be intensified in this domain so that a proper attention is given to prevention programs and an increase in the availability of medical consults for pregnant women in the first months of pregnancy and after birth.

Key words: infant mortality, maternal mortality, comparative study

INTRODUCTION

Infant and maternal mortality affects the entire population of the world, being an actual public healthcare problem. From the statistical data presented in a 2013 Save the Children International report, we can extrapolate that one pregnant woman dies every minute around the world, and annually 3 million children die in their first 28 days of life. We can also point out a series of factors which influence infant and maternal mortality: social factors, economic factors, political factors, environmental factors or the quality of health services. An improvement in the healthcare system or, more specifically, in the quality of medical care, may lead to a 10% decrease in infant and maternal mortality (Enachescu D., Vladescu C., 2012). The purpose of this study is to undertake an analysis of infant and maternal mortality indicators in Romania compared to the European Union, while also identifying the main causes of death in order to apply the correct measures to improve the negative indicators.

MATERIAL AND METHOD

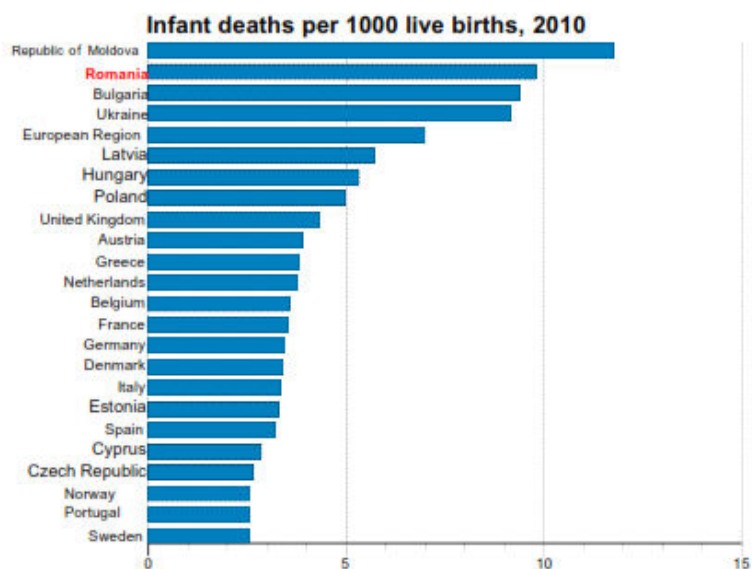
The characteristic method used in social-economic studies was also used for this paper, through analysis, comparisons and statistics, all based on specialty literature. Data and information from the World Health Organization and the National Public Healthcare Institute was also collected

and used in this paper (European Health for All Database 2014, Healthcare statistics, Eurostat, 2012).

RESULTS AND DISCUSSIONS

Infant and maternal mortality indicators, which have a powerful correlation with the performance of the healthcare system, place Romania close to last place in the European Union.

Infant mortality is still high in countries which were associated to the communist block in Eastern Europe: Moldova – 11.76%, Romania – 9.79%, Bulgaria 9.38% or Ukraine 9.17%. Sitting at the opposite pole, the countries with the lowest indexes were Norway – 2.56%, Portugal – 2.55% and Sweden – 2.54% (Figure 1).



Source: WHO/Europe, European HFA Database, April 2014

Fig. 1. Gross infant mortality index in 1000 born in the year 2010 in Europe

In Romania, infant mortality, although decreasing, continues to be the highest of all European countries in the period between 1990 and 2007 (11.99% in 2007). In 2011, the value of the standardized rate of infant mortality was 9.43% (Figure 2).

Between 1990 and 2012, the number of deaths under a year was reduced by approximately 5 times, with indexes decreasing from 16.9% (1990) to 9.0% (2012). In a rural setting, infant mortality is 1.5 times bigger than in a rural setting, the main causes being the low level of education in

mothers and a majority of low-income families. As to causes of death in the analyzed period we can see a predominance of respiratory diseases, perinatal causes and congenital anomalies (Figure 3).

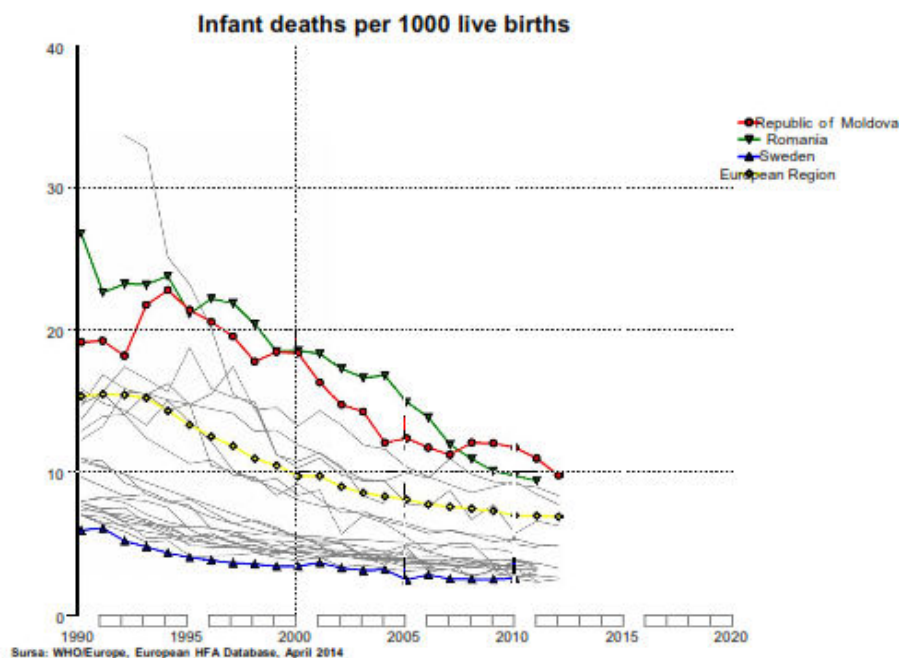


Fig. 2. The evolution of the gross infant mortality index in 1000 born between 1990 and 2012 in Romania compared to European countries.

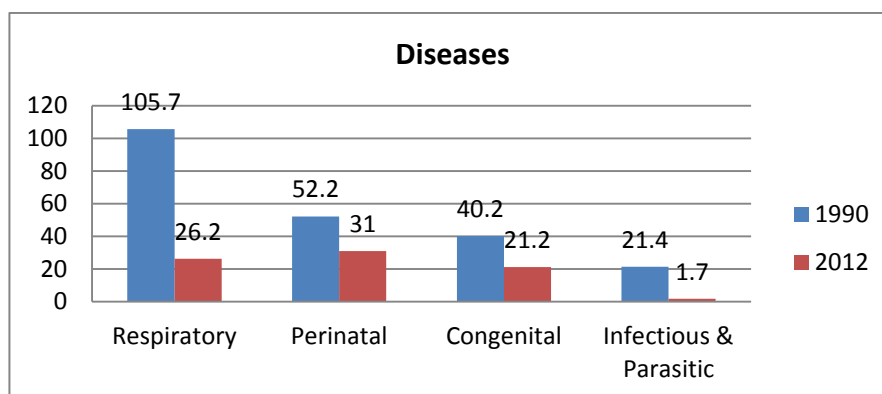
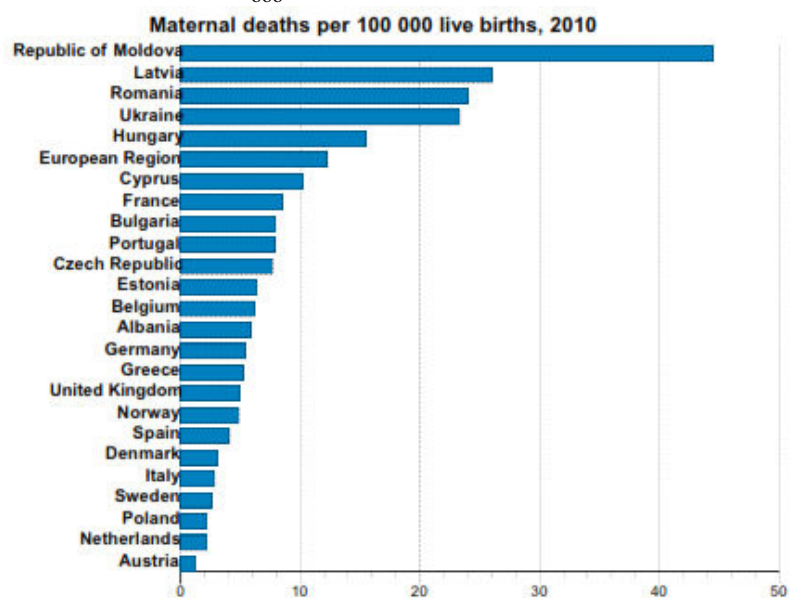


Fig. 3. Infant mortality based on cause of death in 1990 and 2012 in 10000 born

Maternal mortality puts Romania in first place within Central and Eastern Europe, with the family planning programs making only a small impact in significantly reducing the frequency of induced abortions in the country. In the year 2010, the following numbers were reported: Moldova –

44.47‰, Romania – 24.03‰, Ukraine – 23.31‰, Hungary – 15.5‰ (Figure 4).

At a European level we find the following countries with the smallest numbers of maternal mortality: Poland – 2.18‰, Netherlands – 2.17‰ and Austria – 1.27‰.



Source: WHO/Europe, European HFA Database, April 2014

Fig. 4. Gross maternal mortality index in 100.000 born in 2010 in Europe

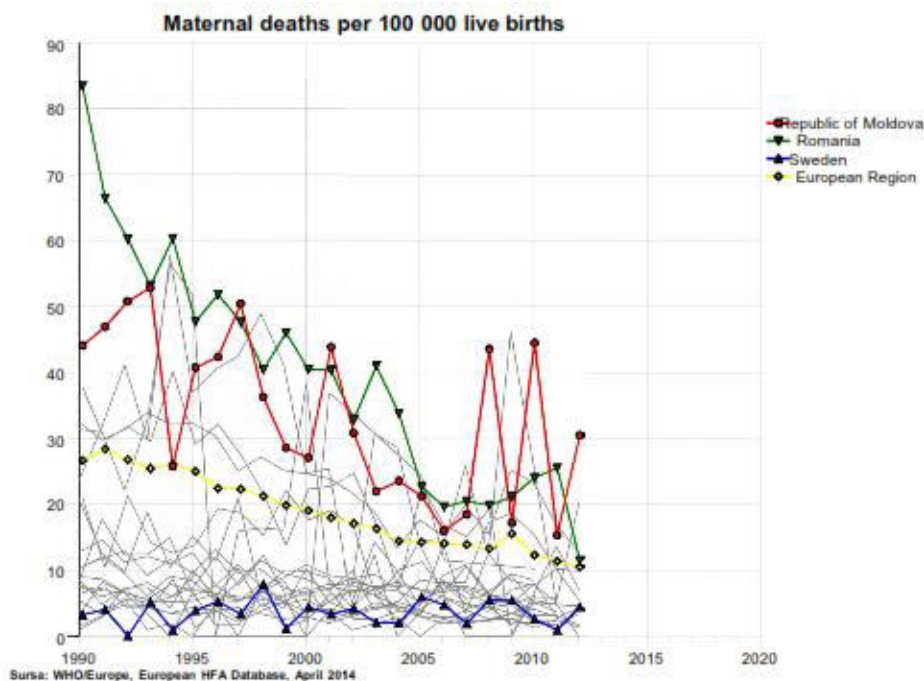


Figure 2.8. The evolution of the gross maternal mortality index in 100000 born between 1990 and 2012 in Romania compared to European countries

In Romania, maternal mortality has significantly shrunk from 83.56‰ in 1990 to 40.51‰ in 2000 and 11.44‰ in 2012 – the lowest value in the studied period. The large number of deaths between 1990 and 2005 was mainly due to deaths by induced abortion.

In the year 2012 maternal deaths were due to direct causes – complications of the pregnancy or birth (direct obstetrical risk and abortion) and indirect causes – indirect obstetrical risk and collateral causes. Comparisons to other countries in causes of death are not relevant due to the fact that not all countries include deaths through indirect risk in their calculation of maternal mortality, in accordance with WHO guidelines.

CONCLUSIONS

Infant and maternal mortality indicators in Romania continue to be the highest in Europe, despite the numerous measures undertaken to shrink them. In 2012 the value of standardized infant mortality rate was 9.0%, with 11.44‰(0000) in maternal mortality.

The healthcare system does not focus enough on prevention, where a major role is played by the early discovery of those afflictions which could

have a major impact on health or on the main factors which determine the disease.

A general intensifying of measures in this domain is imposed, with an accent placed on prevention programs and an increase in the availability of medical consults for pregnant women in the months prior and after birth.

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