

Asan Abdrakhmanov:
Perinatal mortality in Kazakhstan and the potential for its reduction

The thesis deals with the issue of perinatal mortality and its determinants. The topic is particularly important to investigate in a Post-soviet Central Asia where survival of infants was shorter and the data were also influenced by changing definitions of live births, stillbirths and abortions. In addition, there are not too many in depth studies addressing detailed analysis of perinatal mortality in Kazakhstan.

The thesis consists of 105 pages including the annex. Besides the introduction and the theoretical framework, the master thesis is divided into three main parts providing us step by step with methods and data sources, descriptive and analytical results, and national policy background. The work terminates with conclusions and recommendations. In the first part, the author logically starts with the presentation of research goals and objectives and illustrates the topic within a broader international and historical framework. Next, the determinants of perinatal mortality are discussed and factors (sex of a child, child's birth order, mother's age, mother's place of residence and mother's marital status) used for subsequent analysis are defined.

The core part starts with defining entry data and methods. From the methodological perspective the author proceeds in using first the simple rates, followed by standardized indicators, and terminates by using binary logistic modeling. In this part the author proved his ability to use different statistical and demographic methods including SAS programming. The methods were properly applied for the purpose of perinatal mortality analysis.

The results presented show the trends in perinatal mortality from 1999 to 2008 in Kazakhstan, and also the impact of newly adopted definition in 2008 which was already discussed in the previous methodological part. Demographic differential in perinatal mortality are further specified by mother's age and other above mentioned variables. In addition, standardized rates for mother's age were used in order to assess more precisely the impact of above mentioned variables. The author also shows the relative frequency of perinatal deaths according to examined factors. Final binary logistic models confirmed most of the previous descriptive or standardized findings. Rather surprisingly the risk of perinatal death is higher in urban areas compared with rural and for the first birth order compared with 3+. The risk is very high for unmarried mothers and higher for older ages. The change in definition has no influence on the impact of investigated determinants.

To conclude, the author proved by this thesis the ability to outline the topic, to investigate it with appropriate methods, and more particularly to comment the results with an understanding of the essence. The thesis fulfills all requirements and does not contain errors. Also from a formal perspective the work is properly done. Because of its professional elaboration, I recommend the thesis to be submitted.

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Prof. RNDr. Jitka Rychtaříková, CSc.
Department of Demography and Geodemography
Faculty of Science, Charles University in Prague