FISEVIER

Contents lists available at ScienceDirect

International Journal of Obstetric Anesthesia

journal homepage: www.elsevier.com/locate/ijoa



Where is obstetric anesthesiology heading in the next decade? An Eastern European perspective



I. Golubovska ^{a,*}, C. Palmer ^b, A. Ronenson ^c, E. Shifman ^d, M. Sarkele ^e, N. Pejcic ^f, I. Velickovic ^g, B. Pujic ^h, P. Krawczyk ⁱ

- ^a Medical Faculty, University of Latvia, Riga, Latvia
- b University of Arizona College of Medicine, Tucson, USA
- ^c Department of Anesthesiology and Intensive Care, Tver State Medical University, Russian Federation
- d Pirogov Russian National Research Medical University, Moscow, Russian Federation
- ^eDepartment of Anestesiology and Intensive Care, Riga's Stradins University, Riga, Latvia
- ^fDepartment of Anesthesiology and Reanimatology, Leskovac General Hospital, Serbia
- g Department of Obstetric Anesthesiology, SUNY Downstate Health Science University, USA
- ^h Clinic of Anesthesia, Intensive Care and Pain Therapy, University Clinical Center Vojvodina, Serbia
- ¹Department of Anesthesiology and Intensive Care, Jagiellonian University Medical College, Cracow, Poland

ARTICLE INFO

Neonatal and maternal morbidity

Mortality, maternal

Keywords: European after the Healthcare disparities disparities Inequalities in care

ABSTRACT

European countries of "Eastern Block" origin took different healthcare and economic development trajectories after the Berlin Wall fell. Despite decreased maternal and neonatal mortality in the last two decades, healthcare disparities exist between the various countries. Minimum standards for obstetric anesthesia are not available for every maternity patient. Lack of equity in access to healthcare for maternity patients is multifactorial and includes differences in systems of care and health economics, and shortages of medical personnel.

The war in Ukraine generates additional challenges for healthcare systems in the region, resulting from a significant increase in the number of refugees, some of whom are pregnant and require maternity services, including obstetric anesthesia and analgesia and maternal critical care. The next decade's challenges comprise the implementation of evidence-based medicine advances in the field of obstetric anesthesia and analgesia, and of maternal critical care at national levels, including access to neuraxial opioids, the broad implementation of enhanced recovery after cesarean section protocols, and more frequent use of labor epidural analgesia. Further, there needs to be improvement in medical education provided in the national language, so that healthcare providers, patients, and their families can build and provide a safe environment for maternity patients. In addition, better provision of services and access to healthcare providers who have been well trained and are dedicated to dealing with obstetric patients.

These measures will hopefully enhance the quality of care for maternity patients, focusing on further reduction of maternal and neonatal morbidity and mortality, which is a priority and a highly desirable long-term outcome.

Introduction

European countries of "Eastern Block" origin had different economic and healthcare development trajectories after the Berlin Wall fell. In this paper we present the obstetric anesthesia perspective of four different countries, namely Latvia, Poland, the Russian Federation (RF) and Serbia. The differences result from political and economic conditions. Latvia and Poland are European Union (EU) members and are classified as high-income economies. The RF is a non-EU country classified as an upper-middle income economy, but the recent invasion of Ukraine has resulted in the country's isolation and has had an

economic impact. Serbia is an EU member candidate and is also classified as an upper-middle income economy; after over a decade of conflict (in the 1990s and into the 2000s) Serbia emerged as an independent nation. The tremendous unrest of that period had an impact on healthcare in the country, from which it is still recovering.

Healthcare expenditures vary widely between these four countries. The 2020 average for EU countries is US\$4,762 per capita. Latvia has the lowest per capita healthcare spending among the Baltic countries at US\$2,331. Polish expenditure per capita is lower at US\$2,234. Of the non-EU countries, the RF spends US\$2,278,23 per capita, while Serbia spends US\$1,660. 1,2 While Serbian expenditures are signifi-

^{*} Corresponding author: Iveta Golubovska, Faculty of Medicine, University of Latvia, Duntes 22, Riga LV1005, Latvia. *E-mail address:* iveta.golubovska@tos.lv (I. Golubovska).