

Conclusions. Significant expression of metalloproteinases (MMP-1 and MMP-9) results in more active degradation of extracellular matrix components, increases a risk of rupture of atherosclerotic plaques fibrous cover and makes them less stable [1].

LITERATURE

1. Falk, E. Pathogenesis of atherosclerosis / E. Falk // Journal of the American College of Cardiology. – 2006. – Vol. 47, № 8, Suppl. – P. C7–C12. – Mode of access: <https://doi.org/10.1016/j.jacc.2005.09.068>.

THE IMPACT OF CENTRALIZED HEALTHCARE FUNDING ON MATERNAL MORTALITY: BELARUS VS NIGERIA

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Relevance. Maternal mortality remains a critical global health challenge, with vast gap between nations. The structure and financing of a healthcare system are fundamental determinants of maternal health outcomes. Understanding how different funding models influence these outcomes is essential for developing effective health policies. This study compares Belarus, which employs a centralized, state-funded system, with Nigeria, which has a fragmented and resource-constrained model, to highlight the impact of these differences.

Target. To conduct a comparative analysis of maternal healthcare delivery and outcomes in Belarus and Nigeria. The primary objective is to examine how centralized funding affects the maternal mortality rate (MMR) by analyzing the organization of services across primary, secondary, and tertiary care levels in relation to each country's health expenditure as a percentage of Gross Domestic Product (GDP).

Research methods. This research is a comparative analysis based on a synthesis of epidemiological and economic data. Data on maternal mortality ratios (MMR) and current health expenditure (% of GDP) for Belarus and Nigeria from 2017 to 2023 were sourced from World Bank and WHO databases [1]. The study compares these statistical trends against the structural organization of each nation's maternal health system.

Results and their discussion. The analysis reveals Belarus's centralized system, funded by approximately 5.8-7.1% of GDP, features a mandatory, universal care pathway. All pregnancies are tracked from state-funded Women's Consultation Clinics (primary level) through clear referral to secondary and tertiary hospitals, ensuring continuous monitoring and skilled attendance at birth. This integrated structure corresponds with a consistently low MMR of 1-2 per 100,000 live births. In contrast, Nigeria's fragmented system allocates a lower percentage of its GDP (3.1-4.2%) to health. Its primary care tier is weak, with most facilities lacking 24/7 emergency

obstetric care, leading to a reliance on informal providers. This systemic fragmentation and under-resourcing is reflected in a persistently high MMR, which, despite a modest decline from 1142 to 993 per 100,000 live births between 2017 and 2023, remains orders of magnitude higher than Belarus. The data confirms an inverse relationship: the higher, more stable state investment in Belarus's centralized system is associated with a dramatically lower and more stable MMR.

Conclusions. The comparative analysis demonstrates that Belarus's model ensures universal access and coordinated care, directly contributing to its low MMR. Conversely, Nigeria's high MMR is a direct consequence of its fragmented system, weak primary care, and reliance on out-of-pocket expenditure, which creates barriers to timely and skilled care. Strengthening maternal health outcomes in resource-constrained settings like Nigeria requires a multi-faceted approach focused on revitalizing primary healthcare with sustainable funding, ensuring secondary hospitals can provide reliable emergency care, and establishing a functional referral chain, adapted to the local context.

LITERATURE

1. Maternal mortality ratio (modeled estimate, per 100,000 live births) – Nigeria // World Bank Group. – URL: <https://data.worldbank.org/indicator/SH.STA.MMRT?locations=NG> (date of access: 20.02.2026).

THE ROLE OF AMNIOTIC MEMBRANES IN OBSTETRICS AND GYNECOLOGY

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Relevance. Is known stem cells are cells with the potential to develop into many different types of cells in the body. What is the main source of stem cells? There are four main sources of stem cells, i.e. embryonic tissues, fetal tissues, adult tissues and differentiated somatic cells after they have been genetically reprogrammed, which are referred to as induced pluripotent stem cells [1]. The amniotic membrane is the innermost of the three layers forming the fetal membranes. It is a translucent membrane composed of an inner layer of epithelial cells, planted on a basement membrane that in turn is connected to a thin connective tissue membrane by filamentous strands. Amniotic cells express many stem cell markers, such as OCT-4, SSEA-4, GATA-4, hepatocyte nuclear factor-3 β ¹⁶⁻¹⁹. These factors indicate that amniotic stem cells are also multipotent stem cells [1]. The intent of this unique edition is to compile original research and review papers that show and promote increasing activity to grasp the