



The Main Directions Of Reducing Maternal Mortality

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ABSTRACT

Maternal mortality is an integrating indicator of the health of women of reproductive age and reflects the population outcome of economic, socio-hygienic and medico-organizational factors, is an indicator characterizing the activities of the women's and children's health service. The article presents the risk factors of maternal mortality, analyzes the primary medical documentation of 70 deceased women in the Samarkand region of the Republic of Uzbekistan, evaluates the quality and error analysis, and provides ways to reduce it.

Keywords:

Maternal mortality, maternal morbidity, pregnancy complications, childbirth complications, risk of maternal mortality, prevention of maternal mortality.

The relevance of research: Strengthening women's health, prevention of maternal mortality (MM), reduction of mortality and the search for new ways to solve organizational, therapeutic, preventive, tactical tasks is one of the urgent health problems of the Republic of Uzbekistan. In strategic documents, the President of the Republic of Uzbekistan Sh.M. Mirziyoyev identified the health of mother and child as the main priority for the present and future development of our country, pointed out the need to reduce maternal and perinatal morbidity and mortality. [1,5,7,9]

Maternal mortality (MM) is one of the main indicators of the country's civilization, which is difficult to overestimate in the modern world community. According to WHO, every day 830 women in the world die from acquired causes related to pregnancy and childbirth, 99% of all maternal deaths occur in developing

countries.[1,8,9] In 2020, almost 287,000 women died during pregnancy, childbirth and the postpartum period, 1 case of MM occurred every 2 minutes. In developing countries, the MM rate is 100-300 per 100,000 live births, while in developed countries it is 7-15 per 100,000 live births. More than half of MM cases occur in Asia, where almost a third of a million women die every year. High rates of MM are promoted by interrelated factors, both economic, social, and medical.[2,6,10,11]

Despite the fact that over the period from 2000 to 2020, the MM indicator in the world decreased by almost 34%, today it is difficult to determine how many and from what causes women die from abortions, during pregnancy and childbirth. The problem of prevention and reduction of maternal morbidity and mortality is relevant due to the fact that most of these deaths can be prevented, this problem is being

actively solved in our country and abroad, numerous WHO studies have been devoted to it. [13,14] In the period from 2016-2030, in accordance with the Millennium Sustainable Development Agenda, the goal is to reduce the global MM indicator to less than 70 per 100,000 live births. [3,4,8,12,15]. All this determines the relevance of this problem and requires a scientific analysis of MM risk factors.

The purpose of the study: In-depth study of MM risk factors, development and implementation of a set of measures for the prevention of MM, justification of reserves for its further reduction.

Research objectives:

1. To establish social and clinical-anamnestic risk factors of MM characteristic of the Samarkand region of the Republic of Uzbekistan
2. Substantiate and implement a system of measures to reduce MM.

Research material: The primary medical documentation of 70 deceased women in the Samarkand region of the Republic of Uzbekistan was analyzed, quality assessment and error analysis were carried out, risk factors for MM at the stages of medical care that led to death were identified.

The results of the study : The problem of reducing MM and the search for new ways to solve organizational, therapeutic, diagnostic, tactical tasks dictates the need to analyze the risk factors of MM.

Interrelated factors contribute to high rates of MM, including high-risk pregnancy and unwanted pregnancy, lack of access to family planning services, high-quality ante-, intra-, and postnatal care, complications such as bleeding, infections, hypertensive conditions, obstructive labor, abortions in which medical and emergency care was inadequate .

Determining the structure of MM and its causes is extremely important. In some cases, the cause of MM remains unclear due to, for example, the transfer of a woman to another medical institution where she dies, and the

death certificate may not even mention the presence of pregnancy. This, of course, affects not only the structure of MM, but also its indicator.

To a certain extent, the level of the MM indicator is influenced by economic factors such as the low economic status of women, their decision and the ability to receive antenatal care. Antenatal care is extremely important for early detection of high - risk women .Although many complications of pregnancy and childbirth can be predicted with the help of preventive measures, such as, for example, screening in the antenatal period, these measures are not enough to prevent maternal deaths.

Access to emergency care is also important for many women. Obstetric bleeding is one of the first causes of MM, they lead to an unfavorable outcome in cases of hemostasis disorders (2,20). The most common cause of fatal outcome of pregnancy and childbirth from bleeding is premature detachment of the normally located placenta (11-45%), as well as bleeding in the subsequent and early postpartum periods (24.2%). DIC was observed in 7 cases (10.0%), massive bleeding could be predicted, they occurred on a certain clinical background. It should be noted that in most cases there were risk factors and the possibility of preventing bleeding and hemorrhagic shock, such as the correct organization of monitoring of pregnant women with known high-risk groups threatened by the development of bleeding, compliance with the stages of hospitalization, timeliness and completeness of the volume of medical measures, timely provision of emergency surgical care, etc..

The analysis of MM from bleeding showed that the algorithm for stopping bleeding given in national guidelines is relevant, the system of measures to combat bleeding, the introduction of a single protocol for the treatment of obstetric bleeding, safe and effective means in the prevention of complications reduce the frequency of multiple organ, cardiovascular, cerebral dysfunction, coagulopathy, reduce the proportion of massive blood loss. Preventive or earlier initiation of the use of factors affecting hemostasis, in cases where massive bleeding is

predicted, allows in some cases to avoid hysterectomy. The main defects in the provision of medical care were: underestimation of the severity of the pregnant woman's condition; incorrect choice of the delivery method; violation of the protocol for conducting childbirth; unqualified management of the postoperative period, underestimation of the magnitude of true blood loss.

District and rural hospitals should be staffed and fully equipped to provide emergency medical care. Due to the shortage of doctors in certain obstetric institutions, midwives and other medical workers should be trained in methods of prevention and emergency care for obstetric complications. For example, the risk of bleeding can be effectively reduced with obstetric bleeding when assessing the condition of the maternity hospital, skin color, A / D, pulse, respiratory rate, it is important to determine the tone of the uterus. Timely massage of the uterus, the use of uterotonic means, determination of the volume of blood loss, determination of the Algover shock index, catheterization of the peripheral vein, infusion of crystalloids to the diagnosed volume of blood loss in a ratio of 2:1, etc. contribute to the prevention of massive postpartum bleeding.

Hypertensive conditions during pregnancy remain one of the main causes of MM (4,5,6,17,18). Due to the delayed diagnosis of complications, the development of multiple organ failure, inadequate therapy and irrationally chosen term and method of delivery, 17 women (24.3%) died. Hypertensive disorders, preeclampsia, eclampsia should be detected and properly treated to avoid seizures and other life-threatening complications. Recognition of early, signaling symptoms of preeclampsia is especially important. Delayed diagnosis of preeclampsia, lack of proper attention to generalized edema, including liver, persistent arterial hypertension, which is not stopped by medication, the growth of liver enzymes and urea levels in the postpartum period, the development of multiple organ failure and early extubation of patients contributed to the

fatal outcome. Especially severe were the forms caused by autoimmune pathology – HELLP syndrome, antiphospholipid syndrome, hepatitis. The antiphospholipid syndrome, disseminated intravascular coagulation syndrome was based on a systemic inflammatory response syndrome that caused multiple organ failure.

Peritonitis after cesarean section was observed in 1 (1.4%) cases, the fatal outcome was associated with the development of sepsis, with an increase in leukocytes and leukocyte infection index, progression of disorders of the hemostasis system with a decrease in the prothrombin index against the background of intensive therapy, including rehabilitation of the focus of infection, antibacterial therapy. Postpartum infections can be eliminated by observing proper hygiene and timely detection and treatment of early signs of infection, inflammatory and extragenital diseases (proper use of antibiotics, prescription of antianemic drugs). Obstetric practice should be based on modern concepts of systemic inflammatory response syndrome, autoimmune pathology, genetically determined and acquired thrombophlebia (3,6,19) For the prevention of infections, it is important to observe cleanliness during childbirth, recognition of early signs of purulent-septic complications.

Recently, among the causes of MM, the number of extragenital diseases has increased. MM largely depends on the state of health of pregnant women, and first of all, their somatic status. 72.8% of the deceased were accompanied by extragenital diseases pregnancy was contraindicated (4) for women, death occurred in 7 cases (10.0%), viral hepatitis and cardiovascular diseases were the dominant causes of maternal death.

Improving the living conditions and health of pregnant women is our task and the task of the state, with its implementation, MM indicators will decrease. It should be noted that autopsy was performed in 30 (42.9%) women. One of the main tasks of the pathology service is to ensure the reliability of data on the causes of MM. We noted some discrepancies in the formulations of the final clinical and

pathoanatomic diagnoses, finding out the true cause of death was difficult in some cases, which, accordingly, reduces the informative value of the MM structure.

Analysis of the birth histories of deceased women shows that most of them had a number of complications during pregnancy and childbirth. A particularly serious problem is that for every woman who is in a serious condition and has survived, there are many more complications caused by childbirth, such as, for example, complications of infection can lead to diseases of the pelvic organs, and subsequently, to infertility, obstructive labor - to urinary incontinence, prolapse and prolapse of the uterus and so on, which exacerbates chronic suffering and worsens the quality of life of women. One of the forms of maternal morbidity is the development of genitourinary and rectovaginal fistulas, prolapses of the genitals. They are usually the result of trauma during prolonged obstructive labor or can sometimes be caused by instrumental delivery. These women subsequently need expensive plastic surgeries, and sometimes due to the lack of conditions for their performance, these complications remain hidden until the end of a woman's life. Thus, severe obstetric complications can leave an indelible painful mark.

Analyzing the factors leading to MM, it can be noted that the following are important:

-Socio-economic factors (poor health of women, lack or low education, hard work of women, difficulties in caring for children and doing housework, insufficient culture (prohibition of food during pregnancy, etc.), which leads to chronic fatigue and diseases), unsatisfactory intra-family relationships, living away from large medical institutions, remote location of medical institutions, lack of transport)

-Clinical and anamnestic factors (late registration for pregnancy, severity of the condition, a history of chronic anemia, anemia of pregnant women, concomitant extragenital diseases, infections of the vagina and genitals, etc.).

-Obstetric complications, such as bleeding (abortions, ectopic pregnancy, premature

detachment of a normally located placenta, placenta previa, uterine atony, etc.), hypertensive conditions during pregnancy (severe preeclampsia, eclampsia, HELLP syndrome, acute fatty liver hepatitis, etc.), difficult (obstructive) childbirth, in which the recognition of early signs of danger are invaluable, and therefore midwives and doctors should be trained to recognize early signs of unsatisfactory progress in childbirth.

-Reproductive factors (the age of the pregnant woman, the parity of pregnancy and childbirth)

-Unwanted pregnancy

- Tactical factors (qualification of a doctor and an average med.inadequate treatment (erroneous actions of medical personnel, medical mistakes, insufficient treatment of severe obstetric complications).

-Organizational factors of medical care: lack of access to maternity services, poor medical care, insufficient number of trained personnel, insufficient amount of material, for example, blood, drugs, equipment, medicines, as well as lack of personnel.

Thus, the leading risk factors are realized with incomplete and insufficient quality of medical care, with less significance of diagnostic errors.

From the above data, the following MM prevention measures can be recommended :

- Priority should be given to the development of primary health care, to ensure effective antenatal care.

- Pre-pregnancy training of girls, adolescent girls and women with the allocation to a special group of patients at high risk of an unfavorable outcome of pregnancy and childbirth, compliance with the intergenetic interval between childbirth through the use of effective contraception, improving the living conditions and health of pregnant women is of invaluable importance.

- Public education, early detection of high-risk pregnant groups, detection of diseases complicating pregnancy and childbirth, informing women and their families of dangerous pregnancy symptoms are important

- Improvement of emergency medical care, training of medical personnel to recognize

risk factors related to age, parity, burdened obstetric and gynecological history

-Increasing the role of nurses, social workers, psychologists, financial incentives for district doctors and secondary medical workers for the results achieved.

All this will contribute to the prevention and timely detection of diseases in girls, adolescents and women, medical examination coverage, and the birth of desirable healthy children.

The prospect of further reduction of MM is the use of new scientific achievements. Thus, providing effective access to the main elements of obstetric care to women from the high-risk group at the level of primary health care using simple existing technologies, timely diagnosis, differentiated and pathogenetic treatment of major emergency conditions in obstetric practice (bleeding, preclampsia, decompensation of extragenital diseases, etc.), ensuring planned and emergency monitoring as a means of effectively identifying risk groups and monitoring the effectiveness and subsequent medical care in level III institutions, timely referral of high-risk pregnant women to specialized obstetric institutions for treatment, according to the regionalization of perinatal care, improvement of existing healthcare infrastructures will reduce maternal morbidity and mortality.

Modern achievements of medical science, the introduction of advanced practices and technologies, compliance with national standards and algorithms of emergency care, intensive care of critical conditions and continuous professional development of medical personnel are quite sufficient to prevent deaths of women from causes of the class "Complications of pregnancy, childbirth and the postpartum period".

Conclusions:

1. Women should not die during pregnancy, childbirth and the postpartum period

2. Efforts aimed at preventing MM will not only improve the medical care of all pregnant women, but also strengthen the health of all women of reproductive age

List of used literature:

1. Закирова Н, Туракулова Ш., Эшматов С., Хасанова Д., Курбаниязова В.// Акушерские и перинатальные исходы беременности при артериальной гипотензии//Журнал проблемы биологии и медицины. С195-197. 2017
2. Закирова Н.И. // Материнская смертность в регионе с высокой рождаемостью// Акушерство и гинекология. С. 21-24. 1998
3. Закирова Н.И., Закирова Ф.И., Абдуллаева Н.Э.// Макросомия плода: современное состояние проблемы/ Современные подходы к стандартизации оказания медицинской помощи в акушерско-гинекологической практике/23.02.2022/ С. 144-146
4. Закирова Н.И., Закирова Ф.И., Абдуллаева Н.Э.// Women's health and modern contraceptive technology after childbirth// Вестник фундаментальной и клинической медицины— 2022, — №3 (3) — Р 82-83.
5. Закирова Н.И., Закирова Ф.И., Абдуллаева Н.Э. // Достижения и перспективы развития акушерско-гинекологической службы в узбекистане// Эффективная фармакотерапия// ТОМ 19- № 7 - 2023 - С. 95-96
6. Закирова Ф. Закирова Н. Абдуллаева Н. Особенности ведения беременности, исход родов у женщин с ожирением и макросомией. *Современная медицина: традиции и инновации.* 2022; 1: 142-144.
7. Закирова Н. Закирова Ф. Репродуктивное здоровье женщин Самаркандской области. *Проблемы биологии и медицины.* 2021; 1.1(126): 101-103.
8. Закирова Н.И., Закирова Ф.И., Абдуллаева Н.Э.// Акушерские и перинатальные аспекты крупного плода// Достижения

- фундаментальной, прикладной медицины и фармации. 2023. С.232-233
9. Закирова Ф.И., Закирова Н.И., Абдуллаева Н.Э. ПОСЛЕДСТВИЯ МНОГОВОДИЯ ДЛЯ МАТЕРИ И ПЛОДА// Проблемы биологии и медицины. - 2023. №3.1. Том. 145. - С. 109-111.
 10. Юлдашева Ф. Закирова Н. Самиева Г. Особенности дисбиоза влагалищно микробиоты при гинекологических заболеваниях. *Проблемы биологии и медицины*. 2022; 3(136): 7-12.
 11. Abou-Zahr C, Wardlaw T, Stanton C, et al. Maternal mortality. *World Health Stat Q* 1996; 49: 77-87.
 12. Atrash HK, Alexander S, Berg CJ. Maternal mortality in developed countries: not just a concern of the past. *Obstet Gynecol* 1995; 86: 700-705.
 13. Allen VM, Campbell M, Carson G, et al. Maternal mortality and severe maternal morbidity surveillance in Canada. *J Obstet Gynaecol Can* 2010; 32: 1140-1146.
 14. Aoyama K, Pinto R, Ray JG, et al. Variability in intensive care unit admission among pregnant and postpartum women in Canada: a nationwide population-based observational study. *Crit Care* 2019; 23: 381.
 15. Zakirova F. Analysis of the treatment methods for endometriosis. *Research journal of trauma and disability studies*. 2022; 1(10): 39-45
 16. Zakirova N. Zakirova F. Abdullayeva N. Features of pregnancy management and birth outcomes in women with fetal macrosomiya with active and expectant tactics. *Journal of reproductive health and uro- nephrology research*. 2022; 3(4):77-79.
 17. Zakirova F. Abdullaeva N. Telmanova J. The consequences of polyhydramnios for mother and fetus. *International Journal of Medical Sciences And Clinical Research*. 2023;3(4):125-128.
 18. Zakirova Nodira Islamovna, Zakirova Fotima Islamovna, Abdullaeva Nigora Erkinovna, Risk factors for maternal mortality, *Journal of reproductive health and uro-nephrology research* 2023, vol 4, issue 3, pp 86-89
 19. Zakirova N. Abdullayeva N. Women's health-national health// *Tibbiyotda yangi kun*// 4(54). 2023. P.569-572
 20. Yuldasheva I. Farangiz, Samiyeva U. Gulnoza, Zakirova I. Nodira. Treatment of vaginal dysbiotic disorders in pregnant women before childbirth // *Journal of Biomedicine and Practice*. 2023, vol. 8, issue 1, pp. 17-22