

## 51. PROBLEMS AND PROSPECTS IN THE CARE OF CHILDREN WITH EXTREMELY LOW BIRTH WEIGHT (500-1000 G)

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**Introduction:** Today everyone widely is discussing the problem of prematurity, births and children born between 22-37 weeks gestation terms, which in turn form the high rate of perinatal and infant mortality and morbidity.

News this problem is caused primarily by the increased number of premature birth, which over the past three decades, including in developed countries, despite the progress achieved in the field of maternal-fetal medicine remained unchanged, keep it between 10-15% industrially developed countries to 30% in developing countries. One of the negative factors that maintain increased growth rate of premature birth is worsening reproductive system as a consequence of many factors both medical as well as social. From year to year the number of men and women with different reproductive system disorders, in most cases acquired since the period of adolescence. They increased growth and cause reproductive losses particularly perinatal mortality and morbidity. An important role in the increased incidence of premature births and implementing it has broadly of new technologies in the reproductive system, such as an assisted reproduction.

Regarding Moldova in terms of "modern life" today have accumulated a lot of factors that maintain a high level of reproductive losses. Precarious economic situation, low education and living, drain the migration, the new model of sexual behavior and reproductive early beginning of sexual life, frequent change of sexual partners, increase in sexually transmitted diseases and sterile couples, maintaining a high level of number of abortions, form causes a negative influence on the function of procreation.

This problem generates dilemmas, which in a stable correlation with perception change lives and human existence.

As said above confirmation, in Moldova in recent years a number 38 500 1200 ectopic pregnancy birth registers, whose number increases from year to year, 3082 miscarriages and pregnancy stopped evolving, 10312 abortions on demand 542 after a medical abortion, 142 social reasons, 450 newborn deaths in the pre, intra and neonatal. In the first year of life die 350 children, reproductive loss reaches 16 078 cases, one third of all the products of conception.

In 2012 the Republic of Moldova were recorded 1,500 teenage abortions, which constitute 12% of all abortions, but the actual number is much higher if we take into account that many abortions remain unregistered. A rather high percentage of losses reproductive and perinatal mortality infantile handle.

Annually in the world 131 million children are born, 13 million premature tooth 1 million die in the care of premature infants perinatal. Treatment and shows a rather complicated problem if we consider these children are born with a disorder poly-systemic and most pathology cases with preexisting maternal pregnancy. These children consume huge material resources for the care and rehabilitation of late deficiencies often encountered. It can not remain without attention and the ethical and moral dilemma.

The mechanisms that cause premature birth until now not yet fully elucidated current treatment methods, particularly the prevention cannot be considered highly effective, and those aimed at improving fetal prognostic not solve all the problems premature babies.

However the progress of medical science in recent decades, including in the field of obstetrics and perinatal mortality showed that both morbidity as well as premature babies can be reduced including and between children with extremely low birth weight ( ELBW) ( 500-1000 g).

These results were obtained using extensively in the last decades corticosteroids, surfactant enhancement of the care children during neonatal resuscitation and intensive care wards.

There are 70-80 years since twentieth century many European countries began to include in statistical agencies national all stillbirths and live weight of 500 g and gestational age 22 weeks.

**Objectives:** Based on the above, we conducted a retrospective study aimed at elucidating the following objectives: to establish in incidence of preterm birth (including 22-28 weeks) in co-report

to the terms of gestation, risk assessment of the main factors that cause preterm birth between the terms ' gestation 22-28 week, setting the level of perinatal loss and survival rate of children with extremely low birth weight (ELBW) premature complication assessment during the first year of life.

**Materials and methods:** The Republic of Moldova to the requirements of WHO, Ministry of Health according to order children born with extremely low birth weight began to be subjected to official registrars 01.01.2008. This reform, both in the medical, statistical information and in the correct state was oriented to standards and criteria for implementing European registration for births and deaths and ensuring comparability of national indicators worldwide.

Today, in the Republic of Moldova are well known results of numerous studies regarding the terms of preterm birth between 28 weeks gestation, but lacks domestic science results preterm birth and preterm babies born between 22-28 weeks gestation terms.

In our study included 830 patients, 860 children who were born extremely low birth weight. According to a questionnaire there were examined obstetrical-gynecological case history data highlighting general somatic status and current complicated tasks.

Among the most common causes of premature births were caused miscarriages and artificial infection, adverse conditions of work tasks obtained through assisted reproduction, stress.

To study the mortality and morbidity of children in remote medical documentation there were analyzed both sectors resuscitation and intensive care as well as the sector and one of rehabilitation outpatient clinics.

**Results:** The results have demonstrated that during 2008-2012 in Moldova were registered 197 384 births, including 9459 premature, of which 830 between 22-28 weeks gestation terms . Therefore, the incidence of premature births was 4.8%, this indicator is much lower than in many European countries. The incidence of children born between 22-28 weeks gestation terms was 0.4 % to the total number of births and 9.1 % of all premature births.

Most children ( $70.70 \pm 1.55\%$  ) were born between 22-26 weeks gestation terms, which caused high rate of perinatal deaths.

Analyzing the results we found that of 863 perinatal infants born, 283 ( $32.8 \pm 1.59\%$  ) died antenatal, intranatale 51 ( $5.9 \pm 0.08\%$  ) living or born 529, of which 305 (  $57, 7 \pm 1.68\%$  ) died in the early neonatal period.

An interest in the results table development of children with extremely low birth weight (ELBW) who survived and were discharged home. To elucidate this issue, we analyzed 75 children born at 26-28 weeks gestation periods. Out of 75 children discharged home nine ( $12.0 \pm 3.75\%$  ) died during the first year of life, only 10 children matched normal physiological development, the other 56 children were found various neurological impairments.

**Conclusions:** Thus, among the most common causes that caused the premature birth were: infection, gynecologic disease, and artificial miscarriage, premature births, multiple pregnancies, stress.

Level perinatal loss among children born with extremely low birth is 3-4 times higher than the same indicator certified in perinatal centers of developed countries.

Taking into consideration that up to 25 weeks of gestation did not survive any child resuscitation of these infants must be exercised only at the insistence of parents, but the stillborn should not be included in official statistics.

To increase the weight and survival of children with extremely low mass of Moldova perinatal centers require more efficient procurement of new technologies as well as providing necessary medication to treat these children. The costs of caring for a child with extremely low birth that has survived and was discharged home 19 400 lei.

Scientific research of premature births, including 22 to 28 weeks gestation periods in the future should be directed to conduct optimization imminent withdrawal pregnancy, birth and behavior improve child care in the neonatal period and during the first years of life.

**Keywords:** premature births, children with extremely low birth weight (ELBW), perinatal mortality, reproductive losses