# INTEGRATED ASSESSMENT OF HEALTH STATUS, LIFESTYLE AND HEALTH CARE OF CHILDREN IN THE FIRST YEAR OF LIFE

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## ✓ Resume,

The purpose of this publication, which is to develop recommendations for improving medical and preventive care for children of the first year of life on the basis of a comprehensive study of health and lifestyle, presents the results of socio-hygienic research to identify risk factors for morbidity and mortality of children of the first year of life. Identified the combination of risk factors, the most adverse from the point of view of development of incidence and the emergence of "a death" children of the first year of life. And also presents the factors that favorably affect the child's body, able to counteract the risk factor.

Keywords: integrated assessment, lifestyle, health status of children of the first year, primary link

# БИР ЁШАР БОЛАЛАР ХАЁТ ТАРЗИ, ТИББИЙ ТАЪМИНЛАНГАНЛИК ВА СОГЛИГИНИНГ КОМПЛЕКС ИНТЕГРАТИВ БАХОЛАНИШИ

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#### ✓ Резюме,

Ушбу комплекс интегратив тахлилий такшириш усули асосида бир яшар болаларнинг хаёт тарзи, тиббий таъминланганлиги ва соғлигини интегратив бахоланиш натижалари ёритилган. Ушбу тахлилий мақола мақсади, болалар ҳаётининг биринчи йилидан уларга кўрсатиладиган тиббий, социал ёрдам асоси, улар ҳаёт тарзи, соғлигини интегратив баҳолаш натижалари илмий таҳлилий кўрсатилган. Ушбу ёшдаги болалар ўртасида учрайдиган ўлим сабаблари таҳлил қилиниб, уларнинг аоссий омиллари кўрсатилган.

Калит сўзлар: Болаларнинг биринчи йилида хаёт тарзи ва соғлиги, уларга таъсир қилувчи салбий ва ижобий интегратив омиллар.

# КОМПЛЕКСНАЯ ИНТЕГРИРОВАННАЯ ОЦЕНКА СОСТОЯНИЯ ЗДОРОВЬЯ, ОБРАЗА ЖИЗНИ И МЕДИЦИНСКОГО ОБСЛУЖИВАНИЯ ДЕТЕЙ ПЕРВОГО ГОДА ЖИЗНИ

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### ✓ Резюме,

В данной публикации целью, которой является разработка рекомендаций по улучшению лечебнопрофилактической помощи детям первого года жизни на основе комплексного изучения состояния здоровья и образа их жизни, представлены результаты социально-гигиенического исследования по выявлению факторов риска заболеваемости и смертности детей первого года жизни. Было выявлено сочетание факторов риска, наиболее неблагоприятные с точки зрения развития заболеваемостей и возникновения "случай смерти" детей первого года жизни. А также представлены факторы, благоприятно-воздействующие на организм ребенка, способные противодействовать фактором риска.

Ключевые слова: интегрированная оценка, образ жизни, состояние здоровья детей первого года, первичное звено.

### Introduction

**E** nsuring the health of the child is an essential part of the task of ensuring the health of the nation, reduced to the creation of a set of necessary conditions and the overall improvement of the quality of life, politically and legally constituting one of the foundations of national security [8].

In the narrow sense, we are talking about a set of special measures to protect the health of the child, its full development, starting from birth. Children are the main value of society, contributing to its development and prosperity, but at the same time it is the most vulnerable part of it, in need of protection from diseases, physical and mental injuries.

Recent decades have determined the need to move to more modern, cost-effective and effective preventive technologies to preserve and optimize the health of children, especially children from birth to 1 year.

Among all age groups, special attention should be paid to young children, since it is during this period that risk factors can be implemented, the formation of various chronic pathologies [7].

The health of the child of the first year of life is influenced by a variety of factors, the knowledge of which helps to reduce the risk of pathological conditions.

In recent years, the literature published many works reflecting this set of issues. Perinatal lesion of the Central nervous system (CNS) is the most frequently detected pathology in children of the first year of life [4].

There are data on the relationship of CNS PP and somatic pathology, as well as the negative impact of CNS PP on neuropsychiatric development and mental health of children [2].

Rickets are the most common background disease in young children [6], however, for a number of reasons, the diagnosis of rickets is not always established by district

I. O. Erenkov et al. offers the use of ultrasonic densitometry with the aim of increasing the efficiency of diagnosis of rickets in children of early age [5].

Another frequent background disease is iron deficiency anemia (IDA) [2].

N. In. Ivanova et al. the connection of iron deficiency anemia in children of the first year of life with a slowdown in psychomotor development was revealed. It is proved that anemia with its untimely and inadequate treatment can irreversibly affect cognitive functions [3].

Electrocardiographic study is widely implemented in diagnostic algorithms for assessing the health of young children.

In the study of the state of the cardiovascular system in children of the first year of life N. In. Kharlamova et al. it was found that posthypoxiccardiopathy was detected in 76.4% of children, but half of them stopped its appearance by the month of life. [1].

Often already in the period of newborn diagnosed congenital heart disease [3].

Echocardiographic examination of 1012 children in the first half of life indicates a high incidence of small abnormalities of the heart, in particular, additional trabeculae in the left ventricular cavity.

The study of O. K. Kuleshova (2014) with co-authors showed a high frequency of functional disorders of the digestive tract, especially in children of the first half of

The health of children in the first year of life depends largely on the type of feeding. A. V. Kashin, et al. (2005) analyzing the physical development of children in the first year of life depending on the type of feeding, showed that children who were on early artificial feeding, by the end of the first year of life had higher weight-speed indicators. However, in the group of infants who received long-term breastfeeding, mesosomatic type of physique (85.3%) with harmonious development (84.1%) was more often noted.

Similar data are presented by other authors [Puzankova N. In. et al., 2015; Savchenko E. A. et al., 2015].

Atyasova T. G. (2005) showed that infants receiving artificial feeding, 1.8 times more often diagnosed with dystrophy, 2 times more often - deficiency anemia, 1.7 times more purulent-septic diseases in comparison with children who were breastfed.

T. I. Legonkova et al. (2011) a multicenter, open-label, comparative, prospective study was conducted to examine the health status of children on different types of feeding. As a result of long-term follow-up, it was shown that children who received breast milk had higher rates of physical and neuropsychiatric development, a lower incidence of acute respiratory diseases and atopic

N. Yu. Zarnitsina et al. (2007) a comparative assessment of the health status of children in the first year of life living in urban and rural areas was carried out. It is shown that urban children are longer on breastfeeding, and therefore they have less background diseases, they are less likely to suffer from acute respiratory diseases. However, urban children are more likely to be in group 3 as a result of congenital malformations, intrauterine infections and chronic diseases.

The emphasis on managed health organizational factors is extremely important. One of these factors is the systematic follow-up of children in the first year of life.

Clinical examination is a dynamic control over the level of development and health (children) for the purpose of early diagnosis of initial deviations, timely health and corrective measures, as well as providing the conditions necessary for optimal health and development [1].

The main methodological principles of dispensary supervision in the first year of life are as follows: 1) continuous coverage of children living in the area of service clinics, the unity of preventive and therapeutic work of the district doctor; 2) differentiated monitoring of children and preventive, health, therapeutic measures, depending on the individual characteristics of the child; 3) the leading role of the district children's clinic (or district CRH) in dispensary supervision with the broad involvement of Advisory centers; the continuity between the institutions of various disciplines in the examination and management of children; 4) predictive approach when assessing the potential short and long term health and development of the child; 5) the introduction of new non-traumatic methods for preclinical diagnosis and monitoring of the computer (complex auto-matirovanie system) medical examinations and dynamics of indicators of children's health.

Thus, the only way to improve the health of young children, reduce their morbidity and disability is the full strengthening of the state pediatric service and its Central link responsible for medical examination - children's district clinics - with the broadest participation in the medical examinations of the child population specialists of research institutes and departments of Pediatrics, pediatric centers.

Analysis of scientific and medical publications on the topic of research indicates that children of the first year of life, their health status, taking into account the importance of social and hygienic factors, are quite a frequent object of scientific research.

However, to date, a comprehensive study of the health status of children in the first year of life, taking into account the indicators of physical development of morbidity and mortality has not been carried out, the levels of health of children with complex factors have not been developed and the assessment tables of physical development have not been developed, the health of children with the leading factors of lifestyle and quality of health care have not been established. Not developed therapeutic and prophylactic and organizational0metodic measures to improve the health and differentiated medical care of children of the first year of life, taking into account a set of factors affecting their health.

As a result of the study, for the first time since independence the Republic of Uzbekistan will be given a comprehensive assessment of the state of health of the lifestyle and medical examination of children of the first year of life. Physical development will be studied, the estimated table of physical development of children of the first year of life taking into account their sexual and age features will be made.

Based on the study of morbidity and causes of death will be identified characteristic features of their structure and frequency, identified the leading causes of morbidity and mortality of children in the first year of life.

The first will be a comprehensive assessment of the state of health, studied the conditions, lifestyle and health



care of children, their impact on the health of children in the first year of life. An integrated risk assessment will be carried out, and groups of children with different levels of health and risk factors will be identified.

The purpose of this socio-hygienic study is to develop recommendations for improving medical and preventive care for children of the first year of life on the basis of a comprehensive study of health and lifestyle.

To achieve this goal, it is necessary to identify risk factors for morbidity and mortality of children in the first year of life. It is necessary to identify a combination of risk factors, the most unfavorable in terms of the development of morbidity and the occurrence of "death" of children in the first year of life. It is advisable, in addition, to study the factors that favorably affect the child's body, able to counteract the risk factor.

The literature mentions a significant number of risk factors for children's health, the identification of which is carried out mainly by comparing the frequency of the studied signs in the group of patients and healthy children [1,4]. This raises the question of the specificity of individual factors, which to date cannot be considered solved [2,3]. As for the interaction of risk factors with each other, as well as with factors favorably affecting the child's body, these issues have been studied very poorly. The increase in morbidity, the increase in the proportion of children often ill in the structure of morbidity in many countries, the majority of authors associated with changes in the conditions and lifestyles of families. The study of the interaction of health and lifestyle using multivariate analysis can make a significant contribution to the development and improvement of the system of primary and secondary prevention of children. Approaches to the choice of the object of study to study the lifestyle of children in the first year of life can be different, and each approach in our opinion, has a number of advantages and disadvantages. These shortcomings may contribute to the combination of the individual approaches, each of which involves the solution of separate tasks. An integrated approach to the choice of the object of study in our opinion, makes it possible to obtain more informative data. In this article we will consider some approaches to the choice of the object of social and hygienic research, the impact of lifestyle development of diseases and the occurrence of "death" of children in the first year of life. First of all, it is necessary to decide which group of children should be examined to identify risk factors for children's health. Risk factors for disease, death affect the body until the moment when an accurate diagnosis is already made or the causes of death are determined.

### Material and methods

From our point of view, their detection can be approached in two ways: by conducting a retrospective study using the analytical method and by a prospective study of risk groups selected taking into account known factors. The first of these approaches is used more often and is technically simple. In this case, the examined group of children (patients - often ill) is formed with a confirmed, clarified and final diagnosis or cause of death. The control group can be-health of children (never sick during the year) of the same age and sex.

Thus, three groups of children are formed:

1 group-sick children (often ill children); 2 group - children who died (with a specified cause) and 3 group - almost healthy (never sick during the year).

Surveyed a group of sick children (sickly) and deaths (children who die from a certain canard the cause of death) to conduct a retrospective study of risk factors for the development of health can be selected with the use of the epidemiological method, as well as according medical institutions put the appropriate diagnosis and establish the cause of death of children. The choice of the research base should provide sufficient reliability of the research results and representativeness of the sample. From our point of view, it is essential to characterize the choice of the research base. Determination of volume (n) and sampling method (cluster, stratified, random-mechanical, rondomized). The second approach to the choice of the object of study is based on known risk factors for morbidity and causes of death in children of the first year of life. Since the number of these factors is very significant, it is necessary to consider which of them it is advisable to rely on in the selection of the study group of children to study the impact of lifestyle diagnosis on the incidence or causes of death of children. For example: rest and nutrition of pregnant women, birth weight, the nature of feeding, themselves may be a consequence of a lifestyle and, therefore, are not suitable for the selection of the study group.

## Result and discussion

In our opinion, for selection of the surveyed group for the purpose of perspective studying of influence of a way of life on health of children, it is possible to use such factors as age of mother (till 20 years), weight of a body of the child at birth (till 1500 gr.), sex of the child, the order of birth.

The control groups are selected according to which factor is taken as the basis for the selection of the target group. Thus, the control group may include healthy children born to mothers whose age was 21-24 years old, born from 2-3 pregnancies, with a birth weight of 3000-3499 Gy. At the same time, the control group should correspond to the surveyed - by age, sex, place of residence, examination of children in family clinics.

In the study, the risk group selected for factors such as age of matter, sex, order of birth, weight of the child at birth should be compared to the lifestyle of children who are often sick and who have never been sick during the study period, and monitoring should be carried out from their birth and during the first year of life.

The study should take into account that often ill male children born from mothers to 20 years, from the first birth, with low birth weight, who were on artificial feeding. However, in this case, it is impossible to exclude the influence of lifestyle, so it is advisable to conduct a comparative study of the influence of several complex lifestyle factors in often ill and not ill children, to eliminate the influence of previously known risk factors for morbidity and mortality of children. Comparison of risk factors of morbidity and mortality of children and their interaction as a cause and consequence with different approaches to the choice of the object the study will allow to determine with sufficient certainty the most significant factors and their adverse combinations, and to develop on this basis recommendations for primary prevention of morbidity in children, and secondary prevention of causes of death in children. Prevention is carried out by the family in which the child lives and primary health care institutions (JV, SVP, CRH, CGB, etc.), each of which contributes to

this great cause in accordance with its capabilities. In order to develop specific recommendations for the family and medical institutions for the formation and upbringing of a healthy child, it is necessary not only to identify the risk factors for the health of children, but also to carefully study the contingent of sick children and the peculiarities of the work of outpatient and inpatient institutions, the relationship and continuity in their primary and secondary prevention of morbidity of children.

Summary. 1. To select the object of study of the impact of lifestyle on the incidence and cause of death of children in the first year of life, it is advisable to use a prospective and random observation method (cluster, stratified).

- 2. As effective signs to identify risk factors for the development of the disease and causes of death of children, it is necessary to form an experienced (often ill and dead) and control (healthy - never ill children during the year) group of children.
- 3. Integrated approach and use of the principles of evidence-based medicine to the study of the health of children of the first year of life in conjunction with lifestyle factors will provide the most reliable data on the state of health and risk factors, to develop evidence-based recommendations for primary and secondary prevention of diseases, causes of death of children of the first year of life.

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