



THE INFLUENCE OF THE CONDITIONS AND LIFESTYLE OF THE FAMILY ON THE HEALTH OF ONE-YEAR-OLD CHILDREN

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Abstract

Aim. To determine the risk factors for the health of one-year-old children, depending on the conditions and lifestyle of the family.

Materials and methods. To identify the risk factors that determine the health of children, the morbidity, conditions and lifestyle of 1,240 one-year-old children were studied. The work was carried out at the bases of family hospitals in four districts of the Tashkent city.

Results The analysis of the "History of child development" showed that the risk of various pathologies was more often registered in children whose families were created on the basis of inter-family marriages, the presence of pathology of children at the time of birth, poor quality of care, and in children with a dysfunctional psychological climate of the family, etc. In children of this age, a relatively high incidence of respiratory diseases, congenital anomalies and individual conditions arising in the perinatal period has been established.

Conclusions. To study the risk factors for the health of one year old kids, it is necessary to use a cohort method. The identified risk factors for children's health should be the basis for the development of prognostic tables and individual preventive measures.

Keywords: Risk factors, children of the first year of life, conditions and lifestyle.



Introduction

When considering human health as the harmonious development of both physical and spiritual capabilities of an individual, it is important to recognize that health is formed in inseparable connection with the surrounding environment in the broadest sense, and in particular, with one's living conditions and lifestyle. Since the lives of most children — especially during their first year — take place primarily within the family, a child's health is largely determined by the lifestyle of the parents, especially that of the mother. Therefore, the study of socio-hygienic factors influencing children's health must begin with an assessment of the living conditions and lifestyle of the family.

Our in-depth, comprehensive socio-hygienic research and the evaluation of both favorable and unfavorable lifestyle factors within families made it possible to identify key determinants affecting the health of infants in their first year of life. These findings also reflect region-specific characteristics related to local traditions, customs, and population lifestyle patterns.

Objective of the Study. To identify the risk factors affecting the health of infants in their first year of life, based on their living conditions and lifestyle.

Materials and Methods. To determine the risk factors influencing the health of infants in their first year of life, the medical histories and lifestyle characteristics of 1,240 children were studied. The research was conducted in family polyclinics located in four districts of Tashkent city: Sergeli, Yunusabad, Shaykhantokhur, and Yakkasaray (2020–2021). Assessment of lifestyle and living conditions was carried out using a survey-based approach, including parent interviews and direct observation.

Results and Discussion

As is well known, morbidity is one of the leading indicators of population health, particularly in infants during their first year of life.

In the first year of life, the overall morbidity rate among children was 1,895.9 cases per 1,000 children of the corresponding age. Boys were found to be slightly



more frequently ill than girls. With increasing age, the morbidity rate among children gradually decreased (Table 1). One of the main areas of focus for family doctors and visiting nurses is preventive work with children during their first year of life. For this purpose, regular monitoring of the child is carried out, with analysis of all information obtained by family doctors at local family polyclinics. In order to prevent the development of both acute and chronic diseases, it is necessary to take into account not only hereditary factors, but also biological, social, and medical factors, as well as the living conditions and lifestyle of the family.

The identification of risk factors affecting a child's health is carried out by the family doctor from the moment the newborn comes under observation and continues throughout the child's life. In our study, to determine the risk factors, the observed children were divided into three groups based on the frequency of illness:

1. Group with high morbidity (frequently ill children).
2. Group with episodic illnesses.
3. Group of children with no recorded illnesses.

Table 1. Classes of diseases prevalent among one-year-old children

Nosology of diseases	Age of children, months				
	0-2	3-5	6-8	9-11	0-1
3. Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	16,1	3,2	19,4	64,5	103,2
4. Endocrine, nutritional and metabolic diseases	32,3	82,3	94,4	34,7	243,6
10. Diseases of the respiratory system	126,6	237,9	226,6	194,4	785,5
16. Certain conditions originating in the perinatal period	251,6	28,2	4,0	11,3	295,2
17. Congenital malformations, deformations and chromosomal abnormalities	116,1	96,8	38,7	23,4	275,0
Total diseases	607,3	496,8	406,5	385,5	1896,0

The leading risk factors were identified based on data from the "Child Development History" as well as from an assessment of the living conditions and lifestyle of infants during their first year of life, using a specially designed questionnaire. This instrument included a passport section, information on



maternal extragenital pathology, obstetric history, the course of the current pregnancy and delivery, early antenatal factors, and a comprehensive set of family lifestyle and environmental conditions

After determining the risk group, the family doctor is required to develop a personalized dynamic observation plan for the infant, which includes laboratory tests, specialist consultations, and the implementation of necessary preventive measures.

However, it should be noted that in the routine practice of family physicians, family lifestyle and consanguineous marriage patterns are not always considered significant risk factors.

Among the children included in our study, a significant proportion were born from first pregnancies and first deliveries. In particular, the number of children born from a first pregnancy was 2.3 times higher than those born from third or later pregnancies.

According to our findings, only $17.6 \pm 1.3\%$ of pregnancies occurred without complications; in all other cases, various deviations were observed. In $41.3 \pm 1.12\%$ of complicated pregnancies, the condition was accompanied by anemia and other extragenital diseases.

In our study, $71.7 \pm 1.69\%$ of all births occurred in mothers aged 20–34 years.

Parental care culture and quality have a profound impact on the formation, maintenance, and strengthening of children's health. A survey of parents showed that, on average, urban-residing mothers spent only 2.0 ± 0.15 hours per day on childcare.

Children's health status and the development of their personality traits are influenced by a variety of family factors that characterize the lifestyle and living conditions within the household. A comparative analysis of infants from different family types revealed that obstetric history was more often complicated in children born to mothers in consanguineous marriages ($p < 0.001$). Pathological pregnancy courses were more frequently reported in mothers from single-parent households ($p < 0.01$). Complications during childbirth related to the fetus were associated with unfavorable obstetric history and maternal extragenital pathologies ($p < 0.01$). Genealogical history showed a low burden coefficient



overall; moderate burden was more commonly observed in families with an adverse psychological climate ($p < 0.05$). Social history was more frequently unfavorable in single-parent families ($p < 0.001$ – 0.01). The neonatal adaptation period in maternity wards for newborns from complete and well-functioning families generally proceeded without pathology ($p < 0.01$ – 0.05).

At the time of discharge from the maternity hospital, and again at one year of age, all infants were classified according to potential health risk groups.

In the group of frequently and chronically ill children (high morbidity risk group), the impact of all the factors presented in Figure 1 was found to be most pronounced. As the morbidity rate among infants decreased (in the episodically ill and non-ill groups), the prevalence of the following risk factors also declined: families with consanguineous marriages, children with pathological health conditions at birth, children receiving inadequate maternal care, and those from families with an unfavorable psychological climate.

However, in the second and third groups of children, there was a relatively higher proportion of mothers with higher education levels, unemployed mothers, children born from second or third pregnancies and deliveries, and families living in good or optimal housing conditions.

Thus, this study established that among infants in their first year of life, specific risk factors for various diseases are associated with differences in family living conditions and lifestyle. These findings inform the diagnostic, therapeutic, and preventive strategies employed by family physicians and visiting nurses.

Conclusions

1. The overall morbidity rate among infants in their first year of life was 1,895.9‰ per 1,000 children. With increasing age, a decreasing trend in morbidity was observed. The leading categories of illnesses among infants were respiratory system diseases (785.5‰), certain conditions originating in the perinatal period (295.2‰), and congenital anomalies (275.0‰). These categories together accounted for 71.5% of all recorded diseases in children during their first year of life.



2. The primary risk factors determining the health status of infants during their first year of life are associated with family living conditions and lifestyle. These include: the condition of the newborn at birth, maternal age and birth order of the child, presence of health issues at birth, consanguineous family relationships, the psychological climate within the household, housing conditions, and the quality of maternal childcare.

3. In the course of monitoring and assessing the health status of infants – as well as in the development of targeted, differentiated preventive interventions – family doctors and visiting nurses must take into account both health group classifications and the specific risk factors that influence the health of children in their first year of life.

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