## Prediction of risk and multilevel program of prevention the children invalidity Kasimova D.<sup>1</sup>, Djuraeva N.<sup>2</sup>, Mirpayzieva M.<sup>3</sup> (Republic of Uzbekistan) Прогнозирование факторов риска и разработка многоуровневой программы профилактики детской инвалидности Касимова Д. А.<sup>1</sup>, Джураева Н. К.<sup>2</sup>, Мирпайзиева М. А.<sup>3</sup> (Республика Узбекистан)

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**Abstract:** children's disability is a major problem today. Hundreds of thousands of disabled children need attention and support of society, social, medical and other assistance. The relevance of this issue indicates the quantitative growth of disability in childhood and adverse trends in its structure.

**Аннотация:** детская инвалидность является важнейшей проблемой современности. Сотни тысяч детей-инвалидов нуждаются во внимании и поддержке общества, социальной, медицинской и другой помощи. Об актуальности этой проблемы свидетельствует количественный рост инвалидности с детства и неблагоприятные тенденции в её структуре.

**Keywords:** child disability, risk factors for childhood disability, health care for children with disabilities. **Ключевые слова:** детская инвалидность, факторы риска детской инвалидности, медицинское обслуживание детей-инвалидов.

The study of children invalidity reasons and factors, affecting on its level, was performed by complete method in 4 districts of Tashkent: Shaykhontakhur, Almazar, Chilanzar and Mirzo Ulugbek districts. The choice of districts with various levels of children invalidity has been dictated with necessity for detecting of factors, determining these differences, reserves of children invalidity decreasing with account of concrete peculiarities of each territory [1, c. 346].

Territorial (not by institutions) administrative-local principle of choice of children and their family for the study of conditions and life style, and also medical –biological factors, forming disabling chronicle pathology, allowed to receive representative, authentic data about general studying totality of object and subject of investigation. The main group consisted of invalid children, control –healthy children, living in the same districts, in the same territories, served by family polyclinics. Children of control group were selected in a random way correspondingly to the number of invalid children, involved to polyclinics [2, c. 225]. In the first place were diseases of nervous system (30,8 %), congenital anomaly (28,0 %), diseases of musculoskeletal system (8,4 %), diseases of ear and mastoid a (6,4 %), mental disorder (4,5 %) in the structure of disabling diseases by significance. With account of these data the first group consisted of invalid children with psycho-neurological diseases, congenital anomalies and musculoskeletal system diseases and others [1, c. 346].

## Results of the study and discussion

Selection of material by studying of condition, life style of mothers have been made; the copy of data from primary registration documents of invalid children and healthy children (control group) has been done. The form «Studying of medical-social aid, condition and life style of invalid children has been composed for unification of material selection». The reasons of disablement have been studied in indicated districts by complete method for three years (2008-2010 y.) Total number of studies composed 5790 (1930childrenX3years). Sociological investigation has been made in 300 invalid children (main group) and 300 healthy children (control group). Received results have been analyzed by modern statistical methods with using of principles and methods of evidence-based medicine (random sample, method «event-control»), promoting to eliminating of systematic and intermittent error. After statistical analyzing of received data the relationship of chance has been calculated.

Investigation of case –control method considers the rate of risk factors affecting. It may be done by calculating the relationship of chance. Relationship of chances– indices are similar to relative risk and it is interpreted by analogical way. R. Ch is equal to 1,0 supposes the absence of relationship between risk factors and the development of disease, R.Ch<1,0 –indicates that factor is associated with a less risk of disease development by the comparison of them, which is not affected by factors action (1, 2). Risk level for more significant factors of children disablement has been determined by four revealed group factors:

- 1) social-biological 8 factors;
- 2) Extra genital and chronicle diseases of mothers-5diseases;
- 3) obstetric-gynecological anamnesis 7 factors;

4) biologcal factors, characterizing – child –invalid infant – 4 factors.

Thus, the investigation consisted of 24 factors.

For easy calculation, comfort applying and with the aim of integrative assessment of children invalidity risk and compiling of the prognostic tables we selected more significant factors, which composed no less 2,0 for some relationship of chances. It was 16 factors. As the relationship of chances is more as the factors have more significance. Taking into account of these factors we compiled prognostic table (table 1) for early detecting of women groups, pregnancies women in child birth and their family, having risk of invalid child birthing. The main appointment of prognostic table is to give objective and cooperative indexes of development risk of children invalidity by more important factors, typical for this region.

Table 1.Assessment table for complex integrated risk efficacyof children invalidity

№	Factor	Factor gradation	Relationship of chances (RC)		
I.	Social-hygienic				
1.	Living conditions	Unfavorable Less favorable Favorable Good	2,45 1,51 1,36 1,0		
2.	Psychological condition in family	Unfavorable Favorable	2,0 1,0		
3.	Conflicts, quarrels between members of family	Often Sometimes Absent	4,65 2,50 1,0		
II.	Extra genital pathology (chronicle diseases of mothers)				
1.	Heart disease	Yes No	2,18 1,0		
2.	Hypertensive disease	Yes No	3,17 1,0		
3.	Infection in anamnesis	Yes No	2,35 1,0		
4.	Anemia	Yes No	2,07 1,0		
III.	Factors of obstetric- gynecologic anamnesis				
1.	Marriage age	till 17 18-19 20-24 24 <	2,25 1,68 1,0 1,32		
2.	Outcome of previous pregnancy	Spontaneous miscarriage Abortion Pathological labor Normal labor	3,34 2,81 2,40 1,71		
3.	Family type by relative marriage	Closely relative marriage Far relative Non-relative	3,53 2,23 1,0		
4.	Heredity	Compromised Non-compromised	3,63 1,0		

5.	Presence of child with congenital anomaly in family	Yes No	2,4 1,0	
IV.	Biological factors, characterizing of newborn			
1.	Interval between labors, age	Till 1 1-2,0 2,0-3,0 3 and more	2,90 1,65 1,40 1,0	
2.	Child state at the moment of delivery	Birth trauma Hemolytic disease Other complications Healthy	2,63 2,28 1,51 1,0	
	Minimal risk $(\sum)$ Maximal risk $(\sum)$		14,0 39,55	

## **Findings**

- 1. Development of child birth planning services, improvement of antenatal and intranatal aids, strengthen of newborn aids, development of medical genetic services, and involvement of screening program by different pathology.
- 2. Prophylactic works with reproductive age women, work with healthy children, creating of family school of health and list-register of family with high risk of children invalidity development, strengthen of medical aid for women and children, suffering from chronicle diseases and having health disorders and limited possibilities.

## References

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