



CLINICAL AND LABORATORY INDICATORS IN ASSESSING THE SEVERITY OF ANEMIA IN CHILDREN WITH ARALIA

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Abstract:

The aim of this study was to assess the severity of anemia among children under 5 years of age and to find out the relationship between the severity of anemia in children with socio-demographic variables such as: sex of the child, age, supplementary diet, parental education, occupation of the father and mother, with severity anemia in children of the Aral region.

Keywords: Assessment, severity of anemia, children , method

INTRODUCTION

Anemia is defined as a hemoglobin level below the 5th percentile for age (1). Red blood cells are responsible for carrying oxygen (O₂) to all organs of the body system using a protein called hemoglobin (Hb), and when RBC and Hb are deficient , the body's cells are deprived and do not receive enough O₂ (2) (3). Anemia may be classified according to morphology or etiology, or classified as microcytic , normocytic , or macrocytic depending on the mean red blood cell volume. Anemia is classified into mild , moderate and severe depending on the hemoglobin level or clinical signs, skin pallor table [1]

MATERIALS AND METHODS

30 children have been chosen for learning anemia. We have learnt children are from 6 months to 5 years who have chosen are having medical treatment in many branches children hospital of republic by dividing into two groups. Children in first group who are living in good condition, having vitamin, food which is full of vitamin and in second group children are not living good financial position. According to learning anemia in two groups, they have both anemia which is high level and low level

Anemia is a pressing problem in the world and is thus one of the most serious global public health problems. It affects more than half of preschool children and pregnant women in developing countries and at least 33% in industrialized countries [2].

Evidence indicates that anemia is associated with serious negative health consequences, such as impairment of a range of mental and physical factors in children, including physical coordination and abilities, mental development, cognitive abilities, and social, emotional and language development. Severe anemia (Hb less than 5 g/ dL) is associated with an increased risk of mortality [3] . especially in children (3-5 years old). Infants, children under 5 years of age, and

pregnant women are more susceptible to anemia due to increased iron requirements due to rapid body growth and expansion of red blood cells. Anemia is associated with socioeconomic, biological, environmental and nutritional factors.

The reliability of the questionnaire was determined through a pilot study and its validity was determined by a panel of experts. Data were analyzed using descriptive statistics of frequency, percentage, and inferential statistical procedures that included multiple logistic regressions. After an extensive review of available literature and relevant research, a questionnaire format was developed. The questionnaire format consists of two parts, which include:

Part One: Demographic Characteristics

This part includes demographic characteristics relevant to children and their families, such as the child's gender, parental education level, worm infection, and social background.

Part Two: Lab Test

This part includes hemoglobin concentration for diagnosing anemia.

RESULTS AND DISCUSSION

Peripheral blood hemoglobin levels were measured by finger prick and readings were taken using a portable hemoglobinometer , which was calibrated daily according to the manufacturer's specifications. Data are analyzed using descriptive statistics (frequency, percentage and application of inferential statistical procedures).

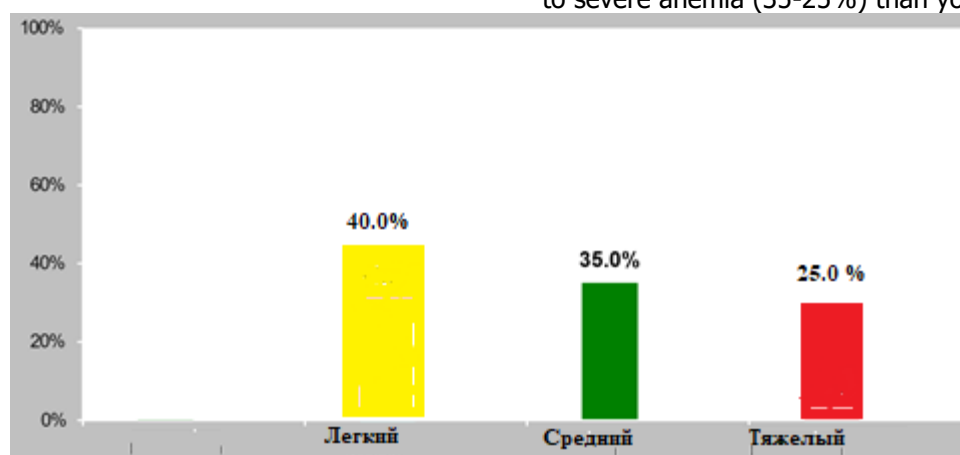
Table 2.
 Distribution of children and members of their families by demographic characteristics

Variables		Frequency	Percent
Floor baby	Male	17	56
	Female	13	44
	General	30	100
Age baby	Child under 2 years old	7	23
	Child from 3 to 5 years old	8	27
	Child before school _ age	15	50
	General	30	100
Additional diet	Additive	17	57
	Without additions	13	43
	General	30	100
Education mothers	Secondary education	7	25
	Higher education _ _	23	75
	General	30	100
Education fathers	Secondary education	18	60
	Higher education	12	40
	General	30	100
Genus keep busy and swear at her	Unemployed _	20	66
	Jobs _	10	34
	General	30	100
Professions and father ov	Unemployed _	5	16
	Jobs _	25	84
	General	30	100

This table shows that more than half of the sample (56.0%) were boys, (43.0%) did not receive additional nutrition after 6 months, (40.0%) did not have their mother and father respectively had secondary education . (66.0%) and (16.0%) their mother and father, respectively, were unemployed.

Distribution of anemia in children by hemoglobin level according to the WHO classification. This figure indicates that 48% of children are anemic.

Figure II: Distribution of anemia in children by severity. This indicator indicates that (40.0%) children suffer from mild to moderate anemia . According to this figure, children have a higher percentage of moderate to severe anemia (35-25%) than younger children.



A diet supplemented with milk and dairy products or fruits, fruit juices , grain products such as buckwheat, oatmeal.

Children not receiving supplements were 2.6 times more likely to develop anemia than children receiving supplements.Children whose mothers have



secondary education are 1.2 times more likely to suffer from anemia than children whose mothers have higher education.x

This study attempts to provide new information on anemia and the severity of anemia in the Aral Sea region in children under 5 years of age, and to establish the relationship between the severity of anemia and sociodemographic factors that may confound or modify this relationship.

In this study, 30 children aged from 6 months to 5 years in the Aral Sea region were examined. Anemia was defined as Hb <11.0 g/ dL (5). In total, about (48%) children were found to be anemic. According to the WHO classification, this study showed that anemia should be considered a serious or serious health problem in the Aral Sea. This result contrasts with the WHO classification of anemia in countries that consider the Aral Sea to be an area of severe anemia.

CONCLUSION

In the present study, the severity of anemia was moderate to severe. Anemia was observed in 35% of children from the children's drawing (II). These results are similar to the results of a study conducted in at Aralya . They examined 30 children in the age group from 6 months to 5 years, about 25% of the samples were anemic; 40.0% had mild anemia, 35.0% had moderate anemia, and 25.0% had severe anemia. It has been proven that among children of low-income families, social The origin of the disease is anemia is higher. Therefore, those with anemia should add milk and dairy products, as well as fruits, fruit juices , and grain products such as buckwheat and oatmeal to the baby food diet . Also, children according to age groups need to take medications that contain iron and vitamins , which in turn makes it possible to prevent the disease from anemia.

LITERATURES

1. Patent of the Republic of Uzbekistan No. 2197 dated April 21, 1994 for "Method for determining the biological value of breast milk" Buglanov.A.A , Almaganbetova.U.K , Ataniyazova.O.A
2. "Clinic hematology methods " Nadzhimitdinov S.T. Abu Ali Ibn Sino 1998.
3. "Clinic laboratory analysis and checking ways " Toshkent 2016 A gzamkhozhaeva . T.S _
4. " Clinical laboratory diagnostics " Andijon 2020 M. A. Zhuraeva
5. " Clinical laboratory diagnostics " A. A. Kishkun GEOTAR-Media, 2019