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ABSTRACT

Maksym V. Khorosh

https://orcid.org/0000-0002-2083-1333

Department of Public Health with Medical and Labor Examination, Poltava State Medical University, Poltava, Ukraine

ANALYSIS OF THE PREVALENCE OF DISABILITY IN THE CHILDREN POPULATION IN POLTAVA OBLAST IN 2018-2022

The aim of the study is to analyze the situation with child disability in the Poltava region for 2018-2022, investigate its main trends, and analyze the structure of the causes that lead to children's disabilities.

Materials and Methods. The study design is descriptive. The conducted study involved methods of social medicine: medicalstatistical and structural-logical analysis. The statistical data of the State Statistics Service of Ukraine were taken as the study materials. To obtain results, calculations of generally accepted indicators (disability, primary disability, specific gravity) and analysis of statistical series was carried out.

Results. It was established that during the studied period, the level of disability in the child population in the Poltava region was higher than the national level and it remains relatively stable (from 228.28 per 10,000 children in 2018 to 228.96 per 10,000 children in 2022). At the same time, the level of primary disability of the child population during the study period was lower than the national level and showed a downward trend (from 23.98 per 10,000 children in 2018 to 20.57 per 10,000 children in 2022). The gender structure of both indicators showed that the specific weight of boys was higher than that of girls, and there was also an increase in the level of indicators among boys and a decrease among girls. The main causes of disability in the Poltava region were congenital anomalies (26.26%), mental and behavioral disorders (23.45%), diseases of the endocrine system (12.99%), which corresponded to the structure of the disability causes in Ukraine. Regarding primary disability, the main reasons were mental disorders (30.60%, a gradual increase in specific gravity is observed), endocrine problems (18.32%), and congenital anomalies (17.46%).

Conclusions. During the studied period, there was a trend towards an increase in primary disability. In the structure of disability and primary disability, an increase in the specific weight of boys was observed. In the structure of disability, the first place was occupied by mental disorders, and during the studied period, there was a tendency to increase. In the Poltava region, in contrast to Ukraine, endocrine problems take the second place. Based on such a picture, it can be concluded that in order to improve children's health, attention should be paid to the psychological health of children and the preventive component of risk factors should be strengthened.

Keywords: disability of the child population, primary disability, structure of disability, child population.

Corresponding author: Maksym V. Khorosh, Department of Public Health with Medical and Labor Examination, Poltava State Medical University, Poltava, Ukraine

e-mail: indarion0@gmail.com

РЕЗЮМЕ

Максим В. Хорош

https://orcid.org/0000-0002-2083-1333

Кафедра громадського здоров'я з лікарсько-трудовою експертизою Полтавського державного медичного університету, м. Полтава, Україна

АНАЛІЗ СИТУАЦІЇ ЩОДО ПОШИРЕНОСТІ ІНВАЛІДНОСТІ ДИТЯЧОГО НАСЕЛЕННЯ В ПОЛТАВСЬКІЙ ОБЛАСТІ ЗА 2018–2022 РОКИ

Мета дослідження – проаналізувати ситуацію з дитячою інвалідністю в Полтавській області за 2018-2022 роки, дослідити її основні тенденції, а також проаналізувати структуру причин, що призводять до інвалідності дітей.

Матеріали і методи. Дизайн дослідження — дескрептивний. Проведене дослідження передбачало використання методів соціальної медицини: медико-статистичного та структурно-логічного аналізу. Матеріалами дослідження виступили статистичні дані Державної служби статистики України. Для отримання результатів проводилися розрахунки загальноприйнятих показників (інвалідність, інвалідизація, питома вага) та проводився аналіз динамічних рядів.

Результати. Встановлено, що протягом досліджуваного періоду рівень інвалідності дитячого населення в Полтавській області вище за загальнонаціональний і лишається відносно сталим (від 228.28 на 10000 дітей в 2018 до 228.96 на 10000 дітей в 2022). В той же час рівень первинної інвалідизації дитячого населення за дослідний період став нижче за загальнонаціональний і показав тенденцію до зниження (з 23.98 на 10000 дітей в 2018 до 20.57 на 10000 дітей в 2022). Гендерна структура обох показників показала, що питома вага хлопчиків вища за дівчат, а також простежується збільшення рівня показників серед хлопців і зниження серед дівчат. Основними причинами інвалідності в Полтавській області виступають природжені аномалії (26,26%), розлади психіки та поведінки (23,45%), хвороби ендокринної системи (12,99%) що відповідає структурі причин інвалідності по Україні. Стосовно первинної інвалідизації основними причинам ϵ розлади психіки (30,60%, спостерігається поступове збільшення питомої ваги), ендокринні проблеми (18,32%) та природжені аномалії (17,46%).

Висновки. Протягом дослідженого періоду спостерігається тенденція до зростання первинної інвалідності. В структурі

інвалідності та первинної інвалідності спостерігається збільшення питомої ваги хлопчиків. У структурі інвалідизації перше місце посідають психічні розлади, причому протягом досліджуваного періоду спостерігається тенденція до зростання, а на другому місці в Полтавській області, на відміну від України, ендокринні проблеми.

Виходячи з такої картини можна зробити висновок, що для покращення здоров'я дітей необхідно приділяти увагу психологічному здоров'ю дітей та посилювати профілактичну складову факторів ризику.

Ключові слова: інвалідність дитячого населення, інвалідизація, структура інвалідності, дитяче населення.

Автор, відповідальний за листування: Максим В. Хорош, кафедра громадського здоров'я з лікарськотрудовою експертизою Полтавського державного медичного університету, м. Полтава, Україна e-mail: indarion0@gmail.com

INTRODUCTION / BCTYII

According to the modern views of the organization of health care and the principles of public health, the well-being of society is based on the statement that the health of a child is the highest value, since it is a direct factor of influence on the economic, scientific, cultural, defense potential of the country [1]. Assessment of the level of children's health makes it possible to get an idea of the level of general socioeconomic development, the level of the health care system, the level of preventive work, etc. [2].

Throughout the recent history of Ukraine, the country's health care system has experienced many challenges caused by the socio-economic crisis in the context of reforming the industry, the problem of financing the medical industry and staffing problems, the conditions of martial law, first in the East of the country, and from 2022 - a full-fledged war, the conditions of the COVID-19 pandemic, etc., which, in turn, had a risky effect on the health of children [3, 4].

In recent years, there has been, on the one hand, a gradual increase in the morbidity rate of the child population, and on the other, a deterioration in the general state of health caused by the influence of many risk factors, socio-economic, environmental and psycho-emotional factors [2, 5, 6]. Also, it is important to remember that heredity plays a major role in the occurrence of childhood disability [7].

Studying the prevalence of childhood disability is an extremely important issue, as it is an important medico-social and socio-economic problem [8, 9, 10]. Knowledge of the problem of disability is extremely important from the perspective of public health development, on the one hand for improving the

socio-economic adaptation of such people, and on the other - for medical and analytical work aimed at improving the health of the population of Ukraine [11, 12].

Aim. The purpose of this work is to analyze the situation with children's disability in the Poltava region for 2018-2022, to investigate its main trends, as well as to analyze the structure of the reasons that lead to the disability of children.

Materials and methods. The conducted research involved the use of methods of social medicine: medical-statistical, for working with statistical information, and structural-logical analysis, for forming the conclusions of the obtained calculations. The research materials were statistical data of the State Statistics Service of Ukraine, data of the Institute of Demography and Social Research of the National Academy of Sciences of Ukraine and the Poltava Regional Center of Medical Statistics. Calculations of generally accepted indicators (disability, primary disability, specific gravity) and analysis of dynamic series was carried out to obtain results. The research design is descriptive.

Results. Analyzing the level of disability of the child population in Ukraine, it was established that, as a whole, the level of disability of the child population throughout Ukraine during the studied period, the level of disability of the child population remains constant: from 212.78 in 2018 to 212.30 in 2022. (Table 1).

The highest level with a tendency to increase of the disability of the child population is observed in the Chernihiv region: 267.41 in 2018 to 287.07 in 2022. Further, certain territorial differences in the level of disability are determined: in 2018, the highest

Table 1 – Indicators of disability of the child population by regions of Ukraine in 2018 and 2022

		Disability of Children							
	20	22	2018						
	Children with disability (abs.)	1		Level per 10000 children					
Ukraine	156010	212,30	161594	212,78					
AR of Crimea*		No data							
Vinnytsia region	6134	223,81	6996	243,56					
Volyn region	5498	234,59	5525	231,29					
Dnipropetrovsk region	13163	235,14	13296	229,50					
Donetsk region**	4674	88,30	6909	115,76					
Zhytomyr region	6031	263,94	6080	253,90					
Zakarpattia region	7754	268,74	6826	233,90					
Zaporizhzhia region***	4126	147,15	6929	235,74					
Ivano-Frankivsk region	6944	257,53	5972	215,36					
Kyiv region	8196	221,31	8581	252,16					
Kirovohrad region	3885	245,99	3838	228,22					
Luhansk region**	2092	86,48	2230	78,42					
Lviv region	11494	241,68	11134	229,50					
Mykolaiv region	4618	234,09	4990	240,95					
Odesa region	9053	194,17	8389	180,06					
Poltava region	5164	228,96	5331	228,28					
Rivne region	6058	222,32	6734	242,31					
Sumy region	3728	233,64	3805	223,52					
Ternopil region	5073	267,76	4716	239,56					
Kharkiv region	8544	202,85	9235	213,79					
Kherson region ***	1435	75,90	3973	201,77					
Khmelnitsky region	5682	249,59	5754	243,61					
Cherkasy region	4787	253,94	4554	227,62					
Chernivtsi region	4767	262,80	4398	238,94					
Chernihiv region	4341	287,07	4321	267,41					

^{*} Temporarily occupied territory (since 2014);

^{**} Data from the controlled territory (part of the territories under occupation since 2014);

^{***} Data from the controlled territory (part of the territories under occupation from 2022)

levels were observed in Chernihiv, Zhytomyr, Kyiv, and Khmelnytskyi regions, while in 2022 Chernihiv, Zakarpattia, Ternopil, and Zhytomyr regions took the leading positions. The objective assessment of the lowest levels has certain difficulties, which is caused by the occupation of some territories of Ukraine both since 2014 and as a result of the armed aggression of the russian federation in 2022. Speaking about the situation in

the Poltava region, it can be seen that both in 2018 and in 2022 the situation remained relatively satisfactory and stable: the general indicator of disability of the child population was 228.28 in 2018 and 228.96 in 2022, the indicator was moderately higher than the national level, and in the general rating, Poltava region took 15th position (Fig. 1).

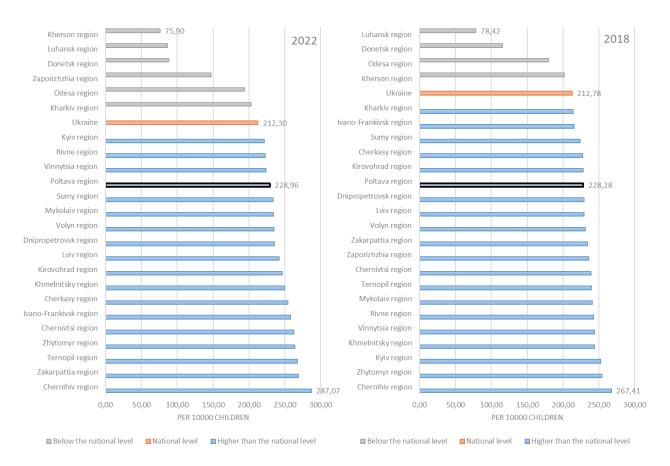


Figure 1 – Levels of disability of the child population in 2018 and 2022

Speaking about the initially established disability (primary disability), it can be seen that in Ukraine this indicator remains constant during the studied period, with a slight increase in 2022: from 21.34 in 2018 to 21.93 in 2022 (Table 2).

Analyzing the picture by region, the situation with primary disability of the child population is somewhat different from the general indicator of disability. If in 2018 the regions in which this indicator was the highest were Chernihiv (25.81), Vinnytsia (25.34), Zakarpattia (25.22), Kyiv (24.98) and Ternopil (24.48) regions, then in 2022, Zakarpattia (41.28), Ivano-Frankivsk (37.94),

Chernivtsi (34.07), Ternopil (29.9), and Odesa (29.75) regions will occupy the leading positions in terms of disability of the child population. At the same time, in the Poltava region, a decrease in the rate of disability of the child population can be traced from 23.98 in 2018 (seventh position) to 20.57 in 2022 (sixteenth position). At the same time, it should be noted that if in 2018 the indicator was higher than the national level (23.98 in Poltava region, 21.34 in Ukraine), then in 2022 it becomes lower than the national level – 20.57 and 21.93, respectively (Fig. 2).

 ${\it Table~2-Indicators~of~initially~established~disability~of~the~child~population~by~regions~of~Ukraine~in~2018~and~2022}$

	Initially established disability							
	20)22	20	18				
	Children with disability (abs.)	Level per 10000 children	Children with disability (abs.)	Level per 10000 children				
Ukraine	16115	21,93	16208	21,34				
AR of Crimea*	No data							
Vinnytsia region	495	18,06	728	25,34				
Volyn region	512	21,85	538	22,52				
Dnipropetrovsk region	1257	22,45	1228	21,20				
Donetsk region**	89	1,68	706	11,83				
Zhytomyr region	542	23,72	559	23,34				
Zakarpattia region	1191	41,28	736	25,22				
Zaporizhzhia region***	469	16,73	701	23,85				
Ivano-Frankivsk region	1023	37,94	635	22,90				
Kyiv region	859	23,20	850	24,98				
Kirovohrad region	331	20,96	373	22,18				
Luhansk region**	12	0,50	250	8,79				
Lviv region	1400	29,44	1130	23,29				
Mykolaiv region	279	14,14	498	24,05				
Odesa region	1387	29,75	919	19,73				
Poltava region	464	20,57	560	23,98				
Rivne region	586	21,51	666	23,96				
Sumy region	286	17,92	376	22,09				
Ternopil region	567	29,93	482	24,48				
Kharkiv region	539	12,80	815	18,87				
Kherson region ***	29	1,53	426	21,63				
Khmelnitsky region	616	27,06	518	21,93				
Cherkasy region	546	28,96	437	21,84				
Chernivtsi region	618	34,07	430	23,36				
Chernihiv region	367	24,27	417	25,81				

^{*} Temporarily occupied territory (since 2014);

^{**} Data from the controlled territory (part of the territories under occupation since 2014);

^{***} Data from the controlled territory (part of the territories under occupation from 2022)

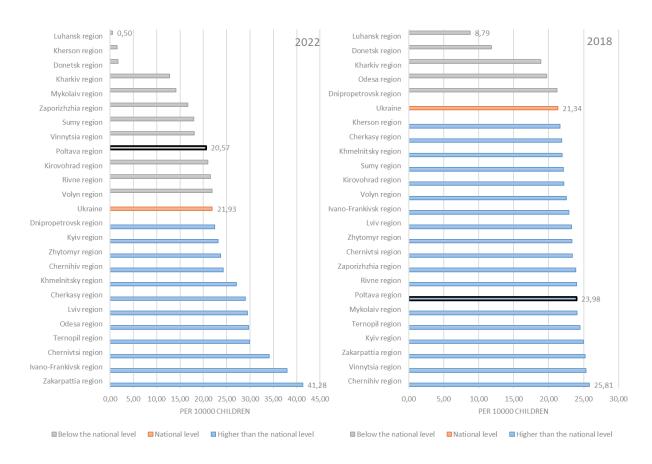


Figure 2 – Levels of initially established disability (primary disability) of the child population in 2018 and 2022

Analyzing the dynamics of indicators of disability and primary disability of the child population in the Poltava region, it can be seen that a wave-like increase in the indicator of disability of the child population in the Poltava region (from 227.6 in 2018 to 228.96 in 2022) is observed during the studied period. At the same time, looking at this indicator depending on

gender, a picture of an increase in the indicator can be observed among men (251.47 in 2018 to 262.54 in 2022), while a tendency to decrease this indicator can be observed among women (202, 24 in 2018 to 193.07 in 2022). A similar situation can be observed in Ukraine (Table 3).

Table 3 – Dynamics of indicators of disability and primary disability of the child population in Poltava region and Ukraine for 2018-2022

Disability (per 10000 children)					Primary disability (per 10000 children)							
Year	Poltava Region		Ukraine		Poltava Region			Ukraine				
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
2018	227,62	251,47	202,24	212,36	235,19	188,13	23,91	26,17	21,50	21,30	24,11	18,32
2019	233,29	258,10	206,88	216,22	239,80	190,22	22,20	24,74	19,51	21,51	24,76	18,06
2020	228,00	251,06	203,39	216,25	241,92	188,99	18,72	21,78	15,46	17,45	20,23	14,51
2021	233,39	261,00	203,90	217,45	244,36	188,88	22,01	24,94	18,87	20,53	24,09	16,74
2022	228,96	262,54	193,07	212,30	241,21	181,59	20,57	25,75	15,04	21,93	26,16	17,44

When analyzing the primary disability of the child population of the Poltava region, a gradual decrease of this indicator is noted both in general (23.91 in 2018 to 20.57 in 2022) and depending on gender. In Ukraine, a slightly different situation is observed: the decrease in the level of initially recognized as disabled is decreasing among the female population, while among the male population and in general, on the contrary, a non-significant increase of this indicator can be observed (Table 3).

Analyzing the causes of disability, it was established that the leading positions throughout the studied period are occupied by congenital anomalies (malformations of the circulatory system, Down syndrome, Turner syndrome, etc), mental and behavioral disorders (schizophrenia, mental retardation, etc), diseases of the endocrine system (metabolic disorders, hypothyroidism, diabetes, etc) and central nervous system disorders (cerebral palsy, epilepsy, etc). At the same time, data analysis shows that the share of congenital anomalies tends to decrease (from 28.42% in 2018 to 26.26% in 2022), and the share of mental disorders, diseases of the endocrine system, and disorders of the central nervous system on the contrary, they show an upward trend (Table 4).

Table 4 – The structure of the causes of disability of the child population for 2018–2022 (ranked to 2022)

	2018	2019	2020	2021	2022	2022 Ukraine
Congenital anomalies (malformations)	28,42	27,69	28,33	27,63	26,26	28,20
Mental and behavioral disorders	18,57	19,04	18,77	20,34	23,45	20,06
Diseases of the endocrine system and metabolic disorders	10,86	11,23	12,02	12,65	12,99	10,65
Diseases of the central nervous system	14,03	13,86	13,50	12,91	11,56	14,71
Diseases of the ear and mastoid process	7,33	7,49	6,32	6,27	5,93	5,56
Neoplasm	4,09	3,88	4,19	4,28	4,12	3,50
Diseases of the musculoskeletal system and connective tissues	3,77	4,18	4,06	4,27	3,85	4,46
Diseases of the eye and accessory apparatus	2,44	2,49	2,35	2,08	2,32	3,13
Diseases of the genitourinary system	2,06	1,99	1,97	1,98	1,96	1,73
Injuries, poisoning and others	2,19	1,90	1,95	1,65	1,51	1,47
Diseases of the circulatory system	1,50	1,44	1,44	1,33	1,41	0,89
Diseases of digestive organs	1,03	1,16	1,31	1,25	1,32	1,40
Infectious and parasitic diseases	1,35	1,38	1,42	1,22	1,18	1,47
Respiratory diseases	1,16	1,09	1,04	0,97	0,91	1,31
Diseases of the blood and hematopoietic organs	0,71	0,75	0,76	0,82	0,85	0,93
Diseases of the skin and subcutaneous tissue	0,47	0,44	0,55	0,36	0,37	0,53
Total	100,0	100,0	100,0	100,0	100,0	100,0

Speaking about the initial establishment of the disability group, the following picture can be traced. The first position in the structure of primary disability of the children's population is occupied by mental disorders, and during the studied period there is a tendency to increase their share in the structure of disability (from 22.68% in 2018 to

30.60% in 2022). It should be noted that the level of this problem in Poltava region is lower than in Ukraine. The second position among the causes of primary disability of the child population is endocrine problems, for which a sharp increase is observed during the studied period (from 10.54% in 2018 to 18.32% in 2022). In addition, in Poltava

region there is an excess of the national level, where these problems occupy only the fourth position. The third position belongs to congenital anomalies, which are characterized by wave-like dynamics with a downward trend. It is interesting that the fourth step is occupied by diseases of the central nervous system, which during the studied period show a downward trend, and at the level of Ukraine, this problem occupies the second position among the causes of disability of the children's population (Table 5).

Table 5 – The structure of the causes of primary disability of the child population for 2018-2022 (ranked to 2022)

	2018	2019	2020	2021	2022	2022 Ukraine
Mental and behavioral disorders	22,68	22,44	24,94	24,80	30,60	33,48
Diseases of the endocrine system and metabolic disorders	10,54	16,05	15,47	17,26	18,32	10,90
Congenital anomalies (malformations)	22,32	17,99	19,63	20,24	17,46	18,21
Diseases of the central nervous system	8,75	9,28	7,16	7,74	6,68	11,50
Diseases of the musculoskeletal system and connective tissues	6,61	8,51	7,16	8,53	5,39	6,36
Neoplasm	6,79	6,19	9,01	6,35	5,17	3,81
Diseases of the eye and accessory apparatus	2,50	3,48	2,54	1,79	4,53	3,17
Diseases of the circulatory system	3,04	1,74	1,62	1,39	3,23	1,09
Diseases of digestive organs	1,07	1,74	2,54	1,39	1,72	1,66
Diseases of the genitourinary system	4,11	2,32	3,00	1,79	1,51	1,81
Injuries, poisoning and others	3,21	2,51	1,15	1,39	1,29	1,56
Diseases of the ear and mastoid process	3,93	3,48	3,00	3,97	1,08	2,49
Respiratory diseases	1,07	1,16	0,23	1,19	0,86	1,56
Diseases of the skin and subcutaneous tissue	0,89	0,39	0,46	0,20	0,86	1,02
Infectious and parasitic diseases	1,79	1,55	1,15	0,79	0,65	0,55
Diseases of the blood and hematopoietic organs	0,71	1,16	0,92	1,19	0,65	0,81
Total	100,0	100,0	100,0	100,0	100,0	100,0

CONCLUSIONS / BUCHOBKU

According to the results of the conducted statistical research, it was established that during the studied period, the level of disability of the child population in the Poltava region remains approximately at the same level, moderately higher than the national level. At the same time, the rate of primary disability tends to increase. Speaking about the dynamics of primary disability, a decrease in the ranking position in the national ranking is noted, and the indicator becomes lower than the national one.

It was determined that both in the Poltava region and in Ukraine in the structure of disability and primary disability, the specific weight of the male population is greater than that of the female population. At the same time, there is an increase in the specific weight of boys and a decrease in girls.

The main causes of disability in the Poltava region are congenital anomalies, mental and behavioral disorders, and diseases of the endocrine system. In addition, there is a gradual increase in mental illnesses. In the structure of disability, the first position is occupied by mental disorders, and during the period under study, there is a tendency to increase, and in the second position, in the Poltava region, in contrast to Ukraine, there are endocrine problems.

Based on such a picture, it can be concluded that in order to improve children's health, attention should be paid to the psychological health of children and the preventive component of risk factors should be strengthened.

PROSPECTS FOR FUTURE RESEARCH / ПЕРСПЕКТИВИ ПОДАЛЬШИХ ДОСЛІДЖЕНЬ

Based on the obtained data, in further research, attention should be paid to the study of the problems of the formation of children's psychological health and the identification of risk factors for somatic, and first of all, endocrine diseases.

CONFLICT OF INTEREST / KOHФЛІКТ ІНТЕРЕСІВ

The authors declare no conflict of interest.

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None.

AUTHOR CONTRIBUTIONS / ВКЛАД АВТОРІВ

The author confirms sole responsibility for the following: study conception and design, data collection, analysis and interpretation of results, and manuscript preparation.

REFERENCES/СПИСОК ЛІТЕРАТУРИ

- 1. Koshlyak MA. Problema zberezhennia zmitsnennia zdorovia ditei: istorvkopedahohichnyi dyskurs. [The problem of preserving and strengthening children's health: a historical and pedagogical discourse]. Naukovi Pedahohichni zapysky. Seriia: 2022;206:146-150. https://doi.org/10.36550/2415-7988-2022-1-206-146-150.
- Rudkovska OV. Shliakhy zberezhennia psykholohichnoho zdorovia ditei v umovakh viiny. [Ways of preserving children's psychological health in wartime conditions.] Psykhichne zdorovia osobystosti u kryzovomu suspilstvi: zbirnyk materialiv VII Vseukrainskoi naukovopraktychnoi konferentsii (28 zhovtnia 2022 roku). Lviv, 2022. pp. 299-304.
 - https://dspace.lvduvs.edu.ua/bitstream/123456789 0/5051/1/28_10_2022.pdf#page=299.
- 3. Krivich IP, Chumak YuYu, Guseva GM. Suchasnyi stan zdorovia naselennia Ukrainy. [Current state of health of the population of Ukraine.]. *Dovkillia ta zdorovia*. 2021;3(100):4-12.
 - https://doi.org/10.32402/dovkil2021.03.004.
- Antypkin Yu H, Volosovets OP, Maidannyk VH et al. Stan zdorovia dytiachoho naselennia—maibutnie krainy (chastyna 2). [The state of health of the child population—the future of the country (part 2)]. Zdorovia dytyny. 2018;13(2):142-152. https://doi.org/10.22141/2224-0551.13.2.2018.129546.
- 5. Sokol KM, Podrihalo LV, Podrihalo OO. Alhorytm doslidzhennia kharchovoi povedinky dytiachoho naselennia. [Algorithm for the study of eating behavior of the children's population.] Hromadske zdorovia v Ukraini: problemy ta sposoby yikh vyrishennia: materialy IV naukovo-praktychnoi konferentsii z mizhnarodnoiu uchastiu z nahody 90-richchia vid dnia narodzhennia N.O. Halichevoi (1931–2017), vydatnoho sotsial-hihiienista, zaviduvacha kafedry sotsialnoi medytsyny,

- orhanizatsii ta ekonomiky okhorony zdorovia Kharkivskoho derzhavnoho medychnoho universytetu. Kharkiv, 2021. PP.59-61.
- 6. Pro skhvalennia Kontseptsii Derzhavnoi sotsialnoi prohramy ozdorovlennia ta vidpochynku ditei na period do 2025 roku: Rozporiadzhennia Kabinetu ministriv Ukrainy vid 26 travnia 2021 r. № 524-p. [On the approval of the Concept of the State Social Program for Children's Health and Recreation for the period until 2025: Decree of the Cabinet of Ministers of Ukraine of May 26, 2021 No. 524-p]. URL: https://zakon.rada.gov.ua/laws/show/524-2021-%D1%80#Text.
- Ilyas M, Mir A, Efthymiou S, Houlden H. The genetics of intellectual disability: advancing technology and gene editing. F1000Res. 2020 Jan 16;9:F1000 Faculty Rev-22. https://doi.org/10.12688/f1000research.16315.1.
- Simkiss DE, Blackburn CM, Mukoro FO, Read JM, Spencer NJ. Childhood disability and socioeconomic circumstances in low and middle income countries: systematic review. *BMC Pediatr*. 2011 Dec 21;11:119. https://doi.org/10.1186/1471-2431-11-119.
- Chatzitheochari S, Velthuis S, Connelly R. Childhood disability, social class and social mobility: A neglected relationship. *Br J Sociol*. 2022 Dec;73(5):959-966.
 - https://doi.org/10.1111/1468-4446.12974.
- 10. Kuznetsova LI, Brychuk MS, Zaiats LM. Orhanizatsiia fizkulturno-ozdorovchoi roboty ditei z invalidnistiu. [Organization of physical culture and health work for children with disabilities]. Scientific journal National Pedagogical Dragomanov University. 2019;4(112):70-75.
- 11. Bickenbach JE, Cieza A, Sabariego C. Disability and Public Health. *Int J Environ Res Public Health*. 2016 Jan;13(1):123.

 $\underline{https://doi.org/10.3390/ijerph13010123}.$

12. Slabkyi HO, Myroniuk IS, Koshelia II, Dudnyk SV. Medyko-demohrafichna sytuatsiia yak hlobalna problema hromadskoho zdorovia Ukrainy [Medico-demographic situation as a global public

health problem of Ukraine]. Visnyk sotsialnoi hihiieny ta orhanizatsii okhorony zdorovia Ukrainy. 2019;3(81):62-72.

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INFORMATION ABOUT THE AUTHORS / ВІДОМОСТІ ПРО АВТОРІВ

Khorosh Maksym Viktorovitch, Candidate of medical science, Associate Professor of the Department of Public Health with Medical and Labor Examination of PSMU, Poltava, Ukraine.

ORCID: 0000-0002-2083-1333 E-mail: <u>indarion0@gmail.com</u>, Phone: +38-096-538-70-40