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TRANSFORMATION OF PRIMARY DISABILITY INDICATORS DUE TO EPILEPSY UNDER MARTIAL LAW

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The problem of disability remains painful for all countries of the world, both from a medical and socio-economic point of view. Diseases of the nervous system, especially epilepsy in people of working age, are a significant problem in Ukraine. The ongoing war is expected to exacerbate this problem. The study aimed to analyze trends in disability due to epilepsy in wartime settings to identify causal patterns of disability. In this article, disability due to epilepsy is considered one of the essential medical and social characteristics of public health in wartime. The relevance of this problem in our country is due to its significant scale and negative dynamics, especially at the expense of working-age people.

Key words: epilepsy, primary disability, working and adult population, military status.

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ТРАНСФОРМАЦІЯ ПОКАЗНИКІВ ПЕРВИННОЇ ІНВАЛІДНОСТІ ВНАСЛІДОК ЕПІЛЕПСІЇ В УМОВАХ ВІЙСЬКОВОГО СТАНУ

Проблема інвалідності залишається болючою темою для всіх країн світу як з медичної, так і з соціально-економічної точок зору. Захворювання нервової системи, особливо епілепсія у людей працездатного віку, є значною проблемою в Україні. Очікується, що війна, яка триває, загострить цю проблему. Метою дослідження було проаналізувати тенденції інвалідності внаслідок епілепсії в умовах воєнного часу, для виявлення причинно-наслідкових зв'язків інвалідності. У цій статті інвалідність внаслідок епілепсії розглядається як одна з найважливіших медико-соціальних характеристик громадського здоров'я у воєнний час. Актуальність цієї проблеми в нашій країні зумовлена її значними масштабами та негативною динамікою, особливо за рахунок осіб працездатного віку.

Ключові слова: епілепсія, первина інвалідність, працездатне та доросле населення, військовий стан.

The work is a fragment of the research projects "Development and implementation of a system for providing rehabilitation assistance to military personnel and victims of hostilities with severe nervous system injuries" and "Possibilities of treatment optimization", state registration No. 0124U002223.

Neurological disorders are the leading cause of disability-adjusted life years (DALYs) lost and the second leading cause of death worldwide, with 9 million people dying from neurological disorders each year [8–11]. In 2016, the top five neurological causes of DALYs were stroke (42.2 %), migraine (16.3 %), dementia (10.4 %), meningitis (7.9 %), and epilepsy (4.9 %) [19–21]. Neurological disorders are now the second leading cause of death and the leading cause of disability worldwide. A new, groundbreaking study, Global Burden of Disease (GBD), shows that the number of people living with brain diseases will double by 2050 [12, 21–23, 26–29].

The Global Burden of Disease (GBD) study identified the 10 most disabling neurological diseases worldwide, including data on the 36 most common neurological disorders and conditions, and provides estimates of prevalence, years lived with disability (YLD), years of life lost (YLL), and disability-adjusted life years (DALY) for each condition. Currently, about 90 % of the total neurological DALYs are accounted for by 10 primary conditions: stroke, neonatal encephalopathy, migraine, dementia, meningitis, epilepsy, neurological complications associated with preterm birth, nervous system cancer, autism spectrum disorders, and Parkinson's disease [5, 7, 19–20, 28].

Deep social inequalities compound the significant burden of neurological disorders. For example, almost 80 % of the 50 million people with epilepsy live in low- and middle-income countries, with the treatment gap exceeding 75 % in most low-income countries and exceeding 50 % in most middle-income countries. Women, older people, the poor, people living in rural and remote areas, and other vulnerable groups are disproportionately affected by neurological disorders [1–6, 23–25, 30].

By 2022, only 7 % of Ukrainian citizens had direct experience of "touching" war, now at least 50 %. There is a significant increase in the number of citizens with potentially traumatic experiences and the risk of mental disorders, especially with severe traumatic brain injuries (TBIs), which is one of the most acute problems of the Ukrainian healthcare system. As a result of a full-scale war on the territory of our country, both military personnel and civilians are at risk of receiving TBI. According to official statistics, in Ukraine, before the start of the full-scale invasion, the number of TBIs was 120 thousand cases/year, and due to active military operations, such indicators doubled. Unlike TBIs in peacetime, their structure has qualitatively changed [2–4]. Combat injuries of the skull and brain have appeared, which have acquired a multiple and combined nature, significantly complicating the condition of the victims and posing a threat to their lives. First, this concerns gunshot wounds, in which 40 % of victims with moderate and severe injuries belong to the high-risk group, with adverse consequences such as symptomatic epilepsy.

Epilepsy can be caused not only by genetic or unknown causes, but also by other neurological conditions. For example, epilepsy can be secondary to stroke, brain infection, tumor, or traumatic brain injury. Epilepsy can be accompanied by other neurological conditions, such as migraine, which occurs in approximately 19 % of people with epilepsy and mental retardation (approximately 26 % of adults and 30–40 % of children). Seizures can also be a manifestation of other conditions, such as infections, metabolic imbalances, brain tumors, and neurodegenerative diseases [21–23, 30]. They can also signal an underlying neurological condition's worsening or changing state. In the United States, 3.4 million people will have epilepsy by 2025 [7–11, 28].

Epilepsy is now well treatable, and more than 70 % of people with epilepsy can live seizure-free when they have access to modern anticonvulsant treatments, the most cost-effective of which are included in the WHO Model List of Essential Medicines [10, 24–27]. Epilepsy prevalence rates of 75 % are found in low-income countries and are significantly higher in rural areas than in urban areas. Significant gaps in treatment may result from a combination of reduced capacity of health systems, inequitable resource allocation, and low priority for epilepsy treatment [15–18]. Factors that contribute to this gap include staff shortages, limited access to anticonvulsant drugs, lack of knowledge and confidence of health professionals in the management of epilepsy, misconceptions, and stigma [28–30].

Epilepsy can therefore serve as an entry point to accelerate the strengthening of services and support both epilepsy and other neurological disorders. Other neurological disorders, as identified based on national priorities, should be considered alongside epilepsy treatment and care to achieve the best outcomes for all [7–9, 15–18].

In response to the global burden of neurological disorders and conditions, the World Health Assembly adopted the Intersectoral Global Action Plan on Epilepsy and Other Neurological Disorders 2022–2031 (IGAP) in May 2022 [26–29]. The action plan aims to "reduce the impact and burden of neurological disorders, including associated mortality, morbidity and disability, and to improve the quality of life of people with neurological disorders, their caregivers and families" [19–21]. The problem of disability remains painful for all countries of the world, both from a medical and socio-economic point of view [7, 10].

The relevance of this problem worldwide is due to its significant scale and negative dynamics, especially at the expense of working-age people. The economic consequences of disability in the population are enormous. This article examines disability due to epilepsy as one of the essential medical and social criteria of public health in wartime.

The purpose of the study was to assess the indicators and analysis the reasons for the increase in disability among the adult and working-age population of Ukraine due to epilepsy under martial law.

The research methods used in the work are the methods of a systematic approach and systematic analysis, a systematic review, and medical-statistical methods:

– A systematic approach and systematic analysis were used to analyze and generalize the study results comprehensively.

– The method of a systematic review – to study the global state of disability due to epilepsy in the military.

– The medical-statistical method was used to analyze the research results and determine their statistical reliability.

This retrospective study included data from the official document "Report on the causes of disability and indications for medical, professional and social rehabilitation", commissioned by the Ministry of Health of Ukraine. Data on disability due to epilepsy was obtained for 2022–2023.

An analysis of domestic and foreign literature, information from printed and online publications, materials, and various sources was conducted to determine the cause-and-effect characteristics of disability. A study of statistical data on primary disability of adults and the able-bodied population due to epilepsy, provided by 24 regional centers and the city of Kyiv, was conducted. A total of 1.375 cases of men aged 25 to 50 years who received the status of a person with a life impairment due to epilepsy (primary disability) were considered.

In 2023, 121.632 more people were examined in Ukraine than in the previous year, 2022. One hundred seven thousand nine hundred sixty-eight more people were initially examined, and 13.296 more were re-examined. Four hundred eighty-seven more people were examined for control and appeal than the previous year. In 2023, the percentage of those initially examined was 47.5 %, and those re-examined were 52.5 %.

Of the initially examined, 88.3 % of people submitted documents to the MSEC to determine their disability group, of which 64.4 % lived in urban areas and 35.6 % in rural areas. To determine the percentage of disability 6.75.

The average number of people examined per 10 thousand adults in Ukraine in 2023 was 195.9 (in 2022 – 156.0). The highest number of people examined per 10 thousand adults was in the Zhytomyr region – 392.2, the Vinnytsia region – 297.3, the Lviv region – 288.8, and the Chernivtsi region – 269.3. In the last three regions, this is most likely due to the presence of internally displaced people. The population indicators of the regions provided for calculation by the State Statistics Service of Ukraine did not consider people who left the country and internally displaced persons in the regions. The lowest number of people examined per 10 thousand adult population in Luhansk – 10.4, Kherson – 23.1, and Donetsk – 68.3 regions, due to the same demographic reasons and temporarily occupied territories in these regions. However, in the Zaporizhzhia region, under similar circumstances, the number of examined per 10 thousand population was 174.9, almost no different from the average indicator for Ukraine [1].

Of the total contingent initially referred to the MSEC in 2023, 7.7 % of people were not recognized as disabled (in 2022, the share of those not recognized as disabled was 7.0 %). Including 3.1 % of people identified as temporarily incapacitated (the medical certificate of temporary incapacity for work was extended), the share of such people was 3.9 % in the previous year. Unreasonably referred to the MSEC from people not recognized as disabled in 2023 amounted to 4.6 % (in the last year, 3.1 %).

The number of persons initially recognized as disabled for all reasons (except children with disabilities) per 10 thousand of the total population in 2023 was 61.7, in the previous year, this figure was 38.9.

This average indicator for Ukraine is exceeded in the following regions: Chernivtsi – 95.3, Zhytomyr – 94.0, Lviv – 89.6, Vinnytsia – 85.2, and Ivano-Frankivsk – 72.5.

By causes of disability, the distribution of initially recognized as disabled in 2023 (Fig. 1) traditionally, as in previous years, had the following form: by specific weight, people with disabilities due to a general disease prevailed 83.8 % (in 2022, the particular weight of this category of people was 87.0); people with disabilities among military personnel 10.0 % (in 2022 – 4.0 %); people with disabilities since childhood 5.2 % (in 2022 – 7.3 %); people with disabilities due to the Chernobyl accident 1.2 % (in 2022 – 1.5 %); people with disabilities due to an accident at work or an occupational disease 1.0 % (in 2022 – 1.7 %).

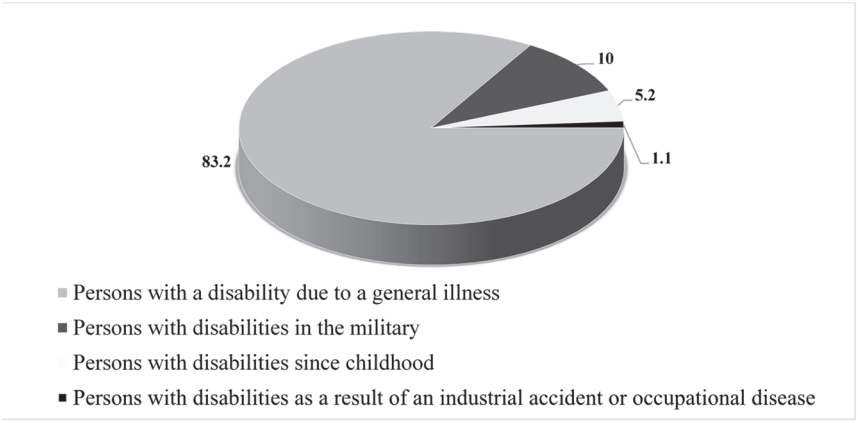

Fig. 1. Distribution of initially recognized as disabled by the causes of disability in Ukraine for 2023.

The most significant increase in primary disability among workers by region of Ukraine in 2022–2023 per 10 thousand employed population is observed in the Luhansk region, +333.3 %, Kharkiv, +88.1 %, Zhytomyr, +96.6 %, and Chernivtsi, +88.1 % regions. Growth in primary disability among workers in Ukraine is +53.7 % per 10 thousand employed population [1].

A review of 1,375 cases of men aged 25 to 50 with epilepsy, provided by health care facilities, identified that the quality and reliability of medical documentation remains a common problem. The analysis revealed unsatisfactory filling out of the forms in 27 % of cases. According to a preliminary review, the proportion of such cases was up to 55 %, mainly related to the formation of clinical diagnoses and descriptions of epileptic seizures according to the ICD-10 and the International Classification of Epilepsy (ILAE 2017) [11–13].

In 2023, primary disability among the adult population due to nervous diseases amounted to 5.3 % and among the working population – 6.1 %; of which epilepsy among adults amounted to 0.5 % and among the working population – 0.7 %.

Separately, according to the indicators of the adult population, due to diseases of the nervous system, an increase of 48.1 % is determined (2022 – 2.7 and 2023 – 4.0; of which epilepsy: 2022 – 0.2 and 2023 – 0.4, which is +100 %; of which epilepsy: 2022 – 0.3 and 2023 – 0.5, which is +66.7 %.

Thus, the analysis of the indicators of the number of initially recognized persons with disabilities per 10 thousand adult population of Ukraine due to diseases of the nervous system by classes and nosological forms compared to 2022 showed a negative growth trend among the adult and working-age population, respectively, due to diseases of the nervous system (+48.1 % and +40.6 %); CVD (+61.1 % and +32.6 %).

Among the adult population due to diseases of the nervous system, high rates per 10 thousand population in Ukraine (2022 – 2.7 and 2023 – 4.0): by regional definition were observed in Poltava (8.3), Chernivtsi (7.4), Zhytomyr (6.0), Lviv (5.9), Odessa (5.7) and Vinnytsia (5.7) regions. Among them, the leading areas due to epilepsy are: Zakarpattia (1.4), Kharkiv (0.8), Odesa (0.8), Lviv (0.7), and Ivano-Frankivsk (0.7) [1].

Among the working population due to epilepsy: Zakarpattia (1.8), Kharkiv (1.1), and Odesa (1.0); due to peripheral nervous system disease: Chernivtsi (2.6), Poltava (2.2), and Vinnytsia (1.0) regions. A trend of high rates among both the adult and working-age population due to epilepsy was noted: Zakarpattia (1.4 and 1.8), Odessa (0.8 and 1.0), and Kharkiv (0.8 and 1.1) regions.

Interpreting the obtained data, we can conclude that the increase in disability rates among the adult and working-age population of Ukraine due to epilepsy was noted in Zakarpattia (1.4), Kharkiv (0.8), Odessa (0.8), Lviv (0.7), Ivano-Frankivsk (0.7) and Zakarpattia (1.8), Kharkiv (1.1) and Odessa (1.0), respectively.

By disability groups, among the adult population in 2023, the third group prevailed – 45.2 % compared to 2022 – 50.6 %; the second group, respectively, 38.3 % (2023) and 32.6 % (2022); the first group, 16.5 % (2023) and 16.8 % (2022). Thus, compared to the indicators according to group definitions in Ukraine for 2023, there was a negative trend of exceeding the levels of disability of group III in Luhansk (70.4 %), Zakarpattia (61.6 %), Ivano-Frankivsk (60.5 %) and Kherson (60 %); the second group of disability in Poltava (70.1 %), Kharkiv (57.6 %), Zaporizhzhia (55.4 %) and Odessa (47.3 %); the first group in Cherkasy (27.9 %), Sumy (27 %), Volyn (26.5 %) and Chernihiv (24.3 %) [1].

The distribution of primary disability by groups retained the trends inherent in previous years: an increase in the frequency and proportion of disabled people of group III among the adult and able-bodied population, but a negative difference of earlier years is determined by the gradual increase in disabled people of the first group, which is due to the consequences of war trauma. The analysis of disability criteria by groups showed that the III disability group was established if the patient had focal seizures with a frequency of 3–4 per day in combination with moderate personality changes, moderate pathopsychological symptoms; generalized seizures with a frequency of 1–2 per month and/or moderate personality changes, moderate pathopsychological symptoms, which was confirmed by medical documents and data from additional examinations.

Group II disability was established if the patient had focal seizures of 5 or more per day in the presence of pronounced pathopsychological symptoms and personality changes leading to maladaptation; in particular, generalized seizures – 1–3 times a week or more than four attacks per month, twilight disorders of consciousness or special states of consciousness – once per month, pronounced dysphoria – 2–3 times per month, epileptic status, serial seizures – once per 2 months and/or pronounced pathopsychological symptoms, pronounced personality changes, symptoms (IQ=35–49 points), impaired control of the function of the pelvic organs leading to pronounced maladaptation in the main areas of life (IQ=35–49).

Disability of the 1st group (A and B) was established if the patient had generalized seizures – 4 or more per week, two or more twilight disorders of consciousness or special states of consciousness, four or

more episodes of severe dysphoria, one or more epistatuses per month in combination with significantly pronounced pathopsychological, psychopathological symptoms (including psychotic register), significantly pronounced decrease; lack of control of the function of the pelvic organs, leading to complete maladaptation in the main areas of life with the need for constant care and supervision.

Table 1

Significant changes in epilepsy classification from 2017 to 2025 [6]

1.	The word “onset” has been removed from the names of the main classes of attacks.
2.	A distinction is made between classifiers and descriptors based on a taxonomic rule.
3.	Consciousness is used as a classifier instead of awareness, with consciousness operationally defined by awareness and responsiveness (Glor's recommendations to “accurately observe and interact with the patient during the seizure”).
4.	The dichotomy of observed and unobserved manifestations replaces the dichotomy of motor and non-motor.
5.	The chronological sequence of seizure semiology is used to describe seizures, not just the first sign.
6.	Epileptic negative myoclonus is considered a type of seizure.

When studying medical expert cases, it was found that in the description of neurological status during examinations by MSEC neurologists and in medical documentation (conclusions of neurologists, psychiatrists, discharge letters), anamnestic data regarding markers of impaired consciousness were not collected, there is no characteristic of the ability to respond to verbal and motor tasks during and after an epileptic seizure. Therefore, doctors of medical institutions should use the fundamental structure of the classification of epileptic seizures, ILAE, 2017, with revision in 2025 (focal, generalized, unknown, and unclassifiable), see Tables 1, 2; Figs. 2, 3. The revised 2025 seizure classification follows the same structure as the 2017 version, retaining four main classes: focal and generalized seizures, unknown (for cases where the distinction is impossible), and unclassified (a temporary class when no additional information about the seizure is available). The need for the revision arose from clinical implementation issues, concerns about application in different healthcare settings, and translation issues. The fundamental structure remains the same, but the refinements, particularly in the terminology for focal seizures, enhance clarity and usability for both primary care providers and epilepsy specialists to determine the extent of functional impairment and predict the course of the disease [11, 20, 27].

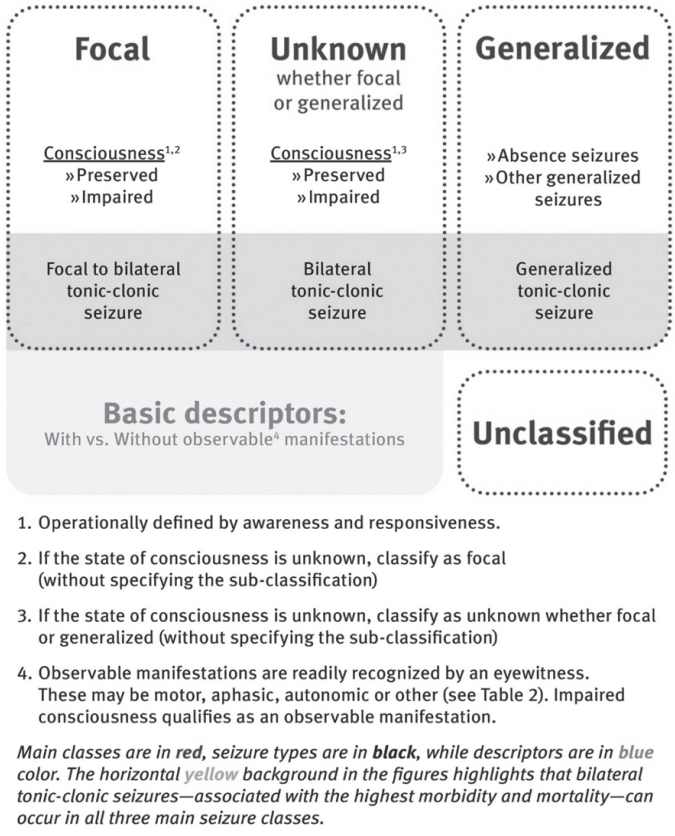

Fig. 2. Classification of epileptic seizures 2025 revision [6].

Focal seizures occur in neurons limited to one hemisphere, can be discretely localized or more widely spread to cortical and subcortical structures. The clinical manifestations of the attack depend on the localization of the epileptic focus. If the ictal activity spreads to both hemispheres, then bilateral tonic-clonic seizures occur, which are focal seizures. However, the clinical manifestations are accompanied by loss of consciousness and bilateral tonic muscle activation at the end, followed by clonic convulsions with a progressive decrease in frequency due to an increase in periods of silence of tonic muscle activity. The onset of such an attack is focal (local), and then bilaterally tonic-clonic, sometimes asymmetric. Unknown seizures, this is when there is not enough information to determine the type of attack, but the doctor is sure that these were manifestations of an epileptic seizure [7–9, 11, 20].

Regarding determining the patient's impairment of consciousness, medical personnel should conduct behavioral testing during the interview (recollection of events and the degree of reaction during the attack) of the patient and his environment (Table 2). Descriptors can be used to characterize the attacks further (Fig. 3).

Table 2

Descriptions of focal seizures and seizures, focal or generalized, unknown [6]

Somatotopic modifiers Side (left, right, bilateral-symmetric, bilateral-asymmetric) + Body part		
1. Elementary motor phenomena		
Akinetic Astatic Atonics Clonic Dystonic Epileptic nystagmus Epileptic spasm	Eye blinking Eye deviation Gyratory Head orientation Ictal paresis Myoclonic	Myoclonic-atonic Negative myoclonus Tonic (focal tonic, chapeau de gendarme, fencing posture) Tonic-clonic (figure-of-four) Versive
2. Complex motor phenomena*		
Automatisms – Gestural automaton-distal – Gestural automatisms-genital – Gestural automatisms-proximal – Ictal grasping	– Mimic automatisms (gelastic, dacrystic) – Oro-alimentary automatisms – Verbal automatons – Vocal automatons *Hyperkinetic behavior*	
3. Sensory phenomena**		
Auditory Body-perception Illusion Depersonalization Gustatory Olfactory	Somatosensory – painful – non-painful Vestibular /dizziness Visual	
4. Cognitive and language phenomena		
Aphasis Forced thinking	Dysmnesia – amnesia – Déjà vu/jamais vu/dreamy state / or nostalgia	
5. Autonomic phenomena#		
Cardiovascular – Ictal asystole – Ictal bradycardia – Ictal tachycardia *Cutaneous/thermoregulatory* – Flushing – Piloerection – Sweating epigastric	*Gastrointestinal* – Flatulence – Hypersalivation – Nausea, voming – Sialorrhea – Spitting	*Pupillary* – Miosis – Mydriasis *Respiratiry* – Apnea – Choking – Hypoventilation Urinary – Incontinence – Urinary urge
6. Effective (emotional) phenomena		
Anger Anxiety Ecstatic/bliss Fear Guilt	Mirth Mystic Sadness Sexual	
7. Indescribable aura** Postictal phenomena		
Autonomic signs Blindness (hemianopsia or amaurosis) Confusion Headache Language dysfunction	Nose-wiping Palinacousis Paresis (Todd's paresis) Psychiatric signs Unresponsiveness	

Notes: *Observable manifestations; **Not observable manifestations; #Possibly observable manifestations. If phenomena not listed above occur during the seizure, they are added to the free text. Awareness and responsiveness define consciousness and hence are classifiers. All items in this table are defined in the semiological glossary.

Interpreting the data obtained during the study, it can be noted that since 2022, an increase in primary disability due to epilepsy has been detected for the able-bodied population, which, due to young age, is determined by the third and first groups of disability in war conditions. Therefore, a significant share of primary disability due to this pathology and the presence of problems in the system of organizing the provision of medical care and early rehabilitation for these patients are of particular concern [1].

Comparative analysis showed that the rates of primary disability due to epilepsy, both in the working population and in adults, are practically the same, with fluctuations within 10 %.

This indicated that the country still had war problems, including medical and social issues, when the patient's nighttime routine was disrupted, which possibly worsened the patient's life and caused an increase in attacks.

This is manifested by the fact that during an epileptic seizure, the patient may lose control of his behavior, creating dangerous conditions for the life of the patient himself and those around him. However,

the degree of social insufficiency to a certain extent depends on the severity and other clinical features of the seizure; in particular, twilight disorders of consciousness, prolonged dysphoria, serial seizures, and epileptic statuses should be distinguished [12–17].

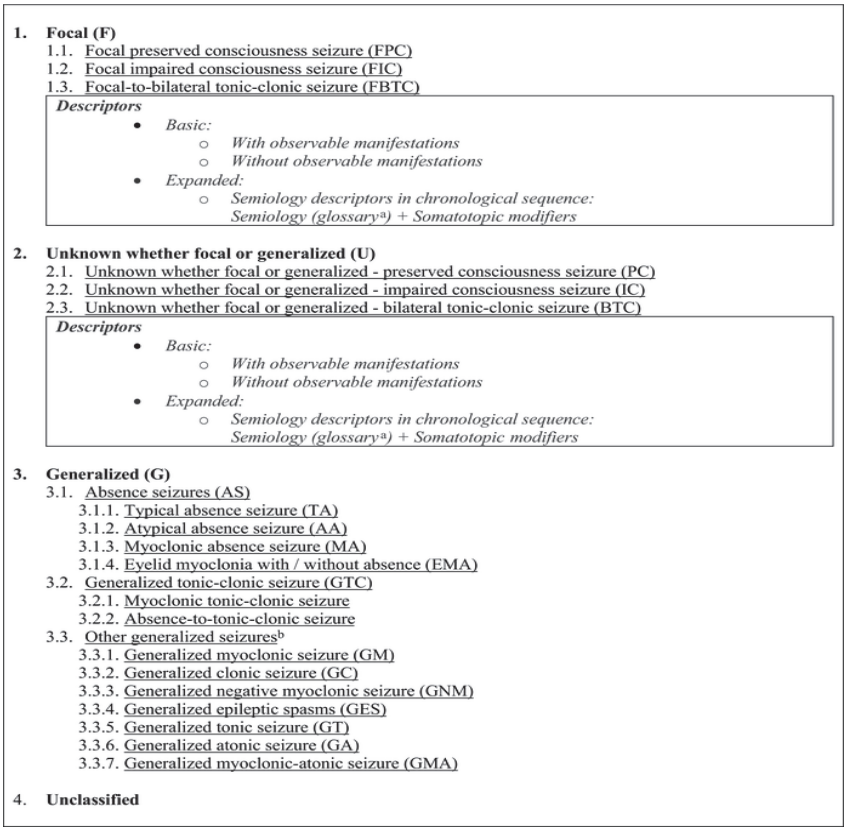

Fig. 3. Classification of epileptic seizures 2025 revision [6].

It is essential to understand that disability is not a static condition, even if there is a category of lifelong conditions. The review makes it possible to establish a deterioration or improvement in the condition, since the state monitors the implementation of the rehabilitation program. However, in the absence of the need to undergo constant verification of the presence of a limitation of vital activity, it is possible to miss the moment of transition to a more socially protected group due to the deterioration of the condition or the appearance of additional diseases that are not always associated with the main one [1].

All of the above made it possible to conduct a factor analysis of the cause-and-effect relationship of the formation of primary disability in the working-age population due to epilepsy, which is of great theoretical and practical importance for creating a concept for preventing and reducing disability, which became the basis for further reforming the system of providing medical expert services within the framework of functioning assessment centers.

Systematization of the obtained data determines that epilepsy is a set of heterogeneous syndromes, characterized by the coexistence of convulsive or non-convulsive seizures, generalized or focal in combination with mental, personality, or behavioral disorders, and continues to be a disease that disrupts the daily functioning and quality of life of patients. Epilepsy patients have a higher risk of developing various mental disorders compared to patients with other neurological diseases; sometimes, mental disorders can be misdiagnosed as primary mental disorders [8–11].

Therefore, when determining the impairment of daily functioning, it is necessary to consider epilepsy as a starting point for taking measures to improve medical, psychological, and social services, considering various comorbidities. These approaches determine the novelty of the problem in assessing the daily functioning of this category of patients.

Conclusions

1. Literature review has shown that neurological diseases are one of the leading causes of disability worldwide, with the Global Burden of Disease (GBD) study showing that the number of people living with brain diseases will double by 2050. Service provision for these diseases is inadequate, particularly in low- and middle-income countries or those in conflict situations. Around the world, people living with neurological disorders and related disabilities continue to face difficulties in accessing treatment and rehabilitation, and many also face discrimination and human rights violations.

2. To reduce and prevent disability due to nervous system diseases in Ukraine, it is necessary to implement the Neurology Action Plan, which was unanimously adopted in 2022 by the Seventy-fifth World Health Assembly, to improve services, which includes strengthening policies, systems and services, raising awareness, reducing discrimination and promoting research and innovation. The plan contains 10 goals that countries should achieve by 2031 with the support of national and international partners and the WHO Secretariat.

3. Since 2022, an increase in primary disability due to epilepsy has been detected for the able-bodied population, which is determined by the third and first groups of disability in war conditions. Of particular concern is the significant share of primary disability due to this pathology and the presence of

problems in the system of organizing the provision of medical care and preventing the deterioration of the disease.

4. Regional increase in disability rates among the adult and working-age population of Ukraine in 2023 due to epilepsy is noted: Zakarpattia (1.4), Kharkiv (0.8), Odessa (0.8), Lviv (0.7) and Ivano-Frankivsk (0.7) and Zakarpattia (1.8), Kharkiv (1.1) and Odessa (1.0) respectively.

5. The distribution of primary disability by groups retains the trends inherent in previous years: an increase in the frequency and proportion of disabled people of group III among the adult and able-bodied population, but with a negative difference compared to previous years, a gradual increase in disabled people of the first group is determined, which is due to the consequences of war trauma and the development of structural or symptomatic epilepsy.

6. The indicators of primary disability due to epilepsy, both able-bodied and adult, are practically the same, with fluctuations noted within 10 %. This indicated that the country still had, in addition to medical and social problems, the problems of war, when the patient's night regime was disturbed, and military injuries increased.

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EFFICACY, SAFETY, AND FUTURE DIRECTIONS OF ADVANCED THERAPY METHODS FOR PATIENTS WITH INFLAMMATORY BOWEL DISEASES

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Crohn's disease and ulcerative colitis are the most common inflammatory bowel diseases. They are chronic diseases characterized by inflammation of the gastrointestinal tract that lead to poor quality of life and disability for patients around the world. The number of people with inflammatory bowel disease worldwide is approximately five million, however, the exact number is unknown, as prevalence data may vary depending on the level of health care, diagnosis, and access to treatment in different countries. The causes of these diseases are multifactorial, but one of the main ones is dysregulation of the immune system. Treatment of such patients is aimed at achieving and maintaining periods of remission. The development of newer therapies, including biologics and oral small molecules, targets different immune response mechanisms, opening up new opportunities for treatment. New therapies can significantly improve the quality of life by helping to achieve and maintain remission. However, their cost remains an important aspect that needs to be addressed in the context of treatment accessibility.

Key words: inflammatory bowel disease, Crohn's disease, ulcerative colitis, rheumatoid arthritis, advanced therapy.

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ЕФЕКТИВНІСТЬ, БЕЗПЕКА ТА ПЕРСПЕКТИВИ СУЧАСНИХ МЕТОДІВ ТЕРАПІЇ ПАЦІЄНТІВ ІЗ ЗАПАЛЬНИМИ ЗАХВОРЮВАННЯМИ КИШЕЧНИКА

Хвороба Крона та неспецифічний виразковий коліт є двома найбільш поширеними запальними захворюваннями кишечника. Це хронічні хвороби, які характеризуються запаленням шлунково-кишкового тракту і призводять до погіршення якості життя та інвалідизації пацієнтів по всьому світу. Загальна поширеність запальних захворювань кишечника становить приблизно п’ять мільйонів осіб, проте, точна цифра може варіювати, оскільки дані про поширеність можуть змінюватися в залежності від рівня медичного обслуговування, діагностики та доступу до лікування в різних країнах. Причини цих захворювань є багатофакторними, однак однією з основних є дисрегуляція імунної системи. Лікування таких пацієнтів спрямоване на досягнення та підтримку періодів ремісії. Розвиток новітніх методів лікування, зокрема біопрепаратів, а також пероральних малих молекул, які націлені на різні механізми імунної відповіді, відкриває нові можливості для пацієнтів. Нові методи лікування можуть значно покращити якість життя, допомагаючи досягти та підтримувати ремісію, хоча питання їх вартості залишається важливим аспектом, який потребує уваги в контексті доступності лікування.

Ключові слова: запальні захворювання кишечнику, хвороба Крона, неспецифічний виразковий коліт, ревматоїдний артрит, розширена терапія.

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Expanded therapy is a term applied to biologics as well as small molecules that are commonly used for moderate to severe Crohn's disease (CD) and ulcerative colitis (UC) [20]. This therapy targets several immune pathways that play a role in the immune dysregulation, and occurs in inflammatory bowel disease (IBD). Small-molecule oral medications are prescribed once or twice a day. Biologic drugs are large molecules administered intravenously (IV) and/or subcutaneously with a variable dosing