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Measuring health and disability of Ukrainian cadets – translation and cross-cultural adaptation of the WHODAS 2.0

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ABSTRACT

Introduction. The WHODAS 2.0 questionnaire is used internationally to assess disability. The goal was to perform a cross-cultural adaptation and validation of the Ukrainian version of WHODAS 2.0, and examine the tool's efficacy, particularly for screening studies.

Methods. The participants of the study were cadets ($n = 256$, age – 18–21 years). This study used the Ukrainian versions of WHO Disability Assessment Schedule 2.0 (36 items, self-administered, WHODAS) and Medical Outcomes Study: 36-Item Short Form Survey (MOS SF-36). The WHODAS was translated according to the WHO protocol. The level of disability, quality of life, and complaints of injuries and pain during training were assessed.

Results. Translation into Ukrainian of WHODAS was conducted. The overall score of the WHODAS questionnaire correlates with the values of the MOS SF-36 questionnaire scales. Numerous negative moderate or significant correlations were found between virtually all MOS SF-36 questionnaire scales and WHODAS domains. The strength and number of correlations in the study group were lower than in populations with significant health disorders. The level of vitality, fatigue and low efficiency were critical for the respondents.

Conclusions. The Ukrainian version of the 36-item WHODAS questionnaire is easy to use and is suitable for use in the form of interviews to assess the health, functioning, and disability of the general population. This tool will contribute to the more effective clinical practice of clinical professionals, in particular in rehabilitation, and will enable the integration of research results related to the assessment of the level of disability at the national and international levels.

Key words: disability, health, functioning, rehabilitation

Introduction

Nowadays, in Ukraine, the structure of disability clearly distinguishes a group consisting of people who have wholly or partially lost their ability to work due to injuries, contusions, and injuries during military service. In the Law of Ukraine "About modification of the Law of Ukraine "About the status of war veterans, guarantees of their social protection" military invalids include servicemen (reservists, conscripts) of military formations formed following the laws of Ukraine, which protected the independence, sovereignty and territorial integrity of Ukraine and became disabled due to injury, contusion or mutilation; members of voluntary formations who have become disabled; persons who voluntarily provided for the anti-terrorist operation and became disabled, etc. Since 2014, the number of servicemen participating in hostilities has increased due to Russia's military actions in eastern Ukraine (anti-terrorist operation). According to the data published on the Ministry of Defense of Ukraine website, at the end of 2016, 187,741 persons of the Armed Forces of Ukraine had already received the status of participants in hostilities. According to preliminary estimates, as a result of Russia's invasion of Ukraine in 2022, more than 10,000 servicemen received physical injuries or wounds. Therefore, in addition to direct medical, rehabilitation, psychological and social assistance, it remains essential to establish military personnel's level of functioning, recovery, and disability.

Ukraine has adopted the Convention on the Rights of Persons with Disabilities. The state guarantees this category of people their inalienable right to life, equality before the law, access to financial resources and property, and protection against discrimination and abuse. It also identifies and removes barriers for people with disabilities and provides them with a decent standard of living. It should be noted that currently, almost every participant in hostilities who has physical injuries or wounds or needs rehabilitation assistance will undergo a medical and social examination to determine the group of disability or evaluate the percentage of disability. This is crucial to design an individual rehabilitation program or establish the need for certain benefits. Today, in the conditions of war on the Ukraine territory, providing a full range of measures for medical, social, and professional rehabilitation of military personnel is still relevant, and one of the important steps is to use valid tools to assess vital activity and social adaptation.

Measurement tools that assess activity and participation are essential in the rehabilitation process [1]. The World Health Organization Disability Assessment Schedule (WHODAS 2.0) is a tool introduced in International Statistical Classification of Diseases and Related Health Problems (11th revision, section V) and provides a broad implementation of the International Classification of Functioning, Disability, and Health model. The WHODAS 2.0 questionnaire does not focus on assessing individuals from a limited group of nosologies or population groups. As a result, it can be used to assess disability in the general population and compare the disabilities and impacts of rehabilitation in individuals with various health conditions, diseases, injuries, mental or emotional problems, and alcohol or drug problems [2, 3]. With WHODAS 2.0, both functioning and disability can be assessed, and the tool has sufficient sensitivity to identify changes that occur under the influence of various interventions, particularly rehabilitation. WHODAS 2.0 is recommended by the DSM-5 (Diagnostic and Statistical Manual of Mental Disorders) Disability Study Group as the best tool for assessing disability for use in research and routine clinical practice [4].

Translation and adaptation of WHODAS 2.0 were carried out in different languages [5–10], sufficient attention is paid to the study of psychometric properties on the example of patients with different nosologies [11–17], as well as for different groups in high-income countries [3, 18], middle-income countries [18], and developing countries [9, 20].

Ukraine has been working hard to improve its healthcare rehabilitation system. Along with developing a much-needed legal and regulatory framework, research into the rehabilitation needs of various population segments is being conducted; the Ukrainian version of the International Classification of Functioning, Disability, and Health is still being implemented, and the feasibility of implementing standardized approaches to rehabilitation effectiveness is being investigated. At the same time, no assessment instruments that are consistent with the International Classification of Functioning, Disability, and Health idea and tailored to the Ukrainian population exist. This makes clinical and epidemiological research more difficult, inhibits screening studies, and lowers the quality of healthcare services in Ukraine. The goal was to do a cross-cultural adaptation and validation of the Ukrainian version of WHODAS 2.0, then examine the tool's efficacy, particularly for screening studies.

Subjects and methods

Participants

The total number of participants was 256 males. The participants of the study were cadets of the Armed Forces of Ukraine. In research took part cadets of mechanized and tank troops, whose training and professional activities in comparison with other types of the ground forces (in particular, cadets of rockets and artillery troops) mainly goes with more physical loading.

The average age of the first-year respondents was 18.5 ± 2.2 , the second year – 19.3 ± 1.76 , and the third year – 21.1 ± 2.8 (Figure 1). Furthermore, 141 (55 %) of the respondents said they had experienced trauma and/or discomfort during the training session. The overall number of injuries and pain syndromes stated by the cadets was 246, with 93 (38%) being the first-year cadets, 58 (23%) – the second-year cadets, and 95 (39%) the third-year cadets.

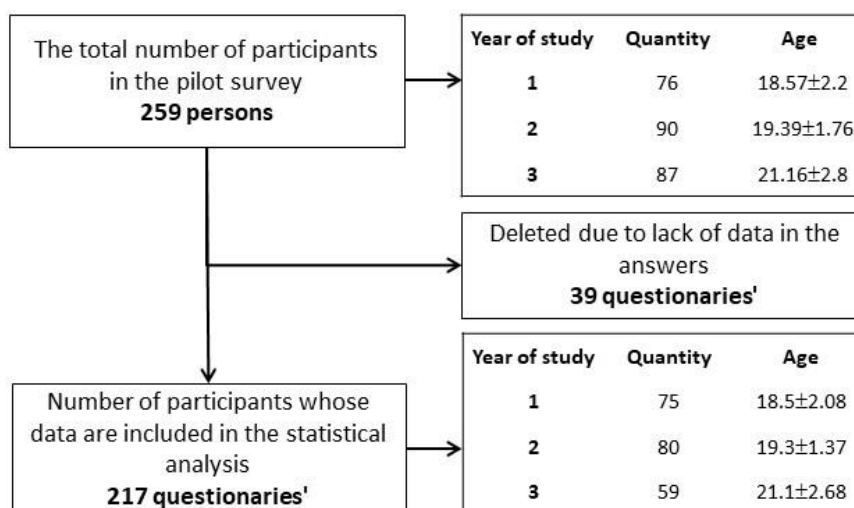


Figure 1. Structure and anthropometric characteristics of the study participants

Tools

This study used the Ukrainian versions of WHO Disability Assessment Schedule 2.0 (36 items, self-administered) and Medical Outcomes Study: 36-Item Short Form Survey.

WHO Disability Assessment Schedule 2.0 (WHODAS 2.0) is a general tool developed on the conceptual basis of the International Classification of Functioning, Disability, and Health [21, 22] that allows

characterizing the level of health and the limitation of daily activity. It consists of six scales: cognition (6 items), mobility (5 items), self-care (4 items), getting along with people (5 items), life activities (9 items), and participation (8 items). The findings were presented in detail for each specific domain, with 0 points representing the best result and 100 points representing the worst [23]. The WHO integrated evaluation method and the SPSS algorithm were used to calculate the results.

Medical Outcomes Study: 36-Item Short Form Survey (MOS SF-36) is a general tool for evaluating health-related quality of life. The questionnaire consists of 36 questions grouped into eight scales – physical functioning (10 items), physical role functioning (4 items), emotional role functioning (3 items), vitality (4 items), bodily pain (2 items), general health (5 items), social functioning (5 items), and mental health (5 items). In addition, the SF-36 yields two summary scores – the physical component summary (PCS) and mental component summary (MCS) scores. The questions concern the respondent's experience during the last 30 days. Each scale's result was assessed on a 100-point scale, with the higher the score, the higher the respondents' quality of life was. Scores below 50 for the overall physical and mental components indicate a lower quality of life than the general population's average.

Procedure

The World Health Organization gave the Lviv State University of Physical Culture permission to translate and distribute WHODAS 2.0. (36 items for self-administration). As a result, a scientific group was formed to work on the questionnaire's cultural adaptation. Translation, proofreading, and distribution management were all coordinated by the head of the research group (K. T-C). WHODAS 2.0 (36 points, for self-administration) was translated and linguistically evaluated in four stages, according to the WHO protocol "WHODAS 2.0 Translation Package (Version 1.0)" [24] (Table 1).

Table 1. Stages of translation of the WHODAS 2.0

Stage	The content of stage	Participants	Number of people	Result
1	Initial translation into Ukrainian	A group of translators and bilingual experts	4	Ukrainian version of the questionnaire WHODAS-UA-1
2	Reverse translation of selected terms and phrases	Independent linguist, unfamiliar with the original text and terms	1	Linguistic assessment protocol
3	Group discussion to clarify the translation. Resolving differences to obtain a final translation	Translators, reverse translator and expert group	4	Ukrainian version of the questionnaire WHODAS-UA-2
4	Editing WHODAS-UA-2 to avoid any typographical, spelling, or grammatical errors	Editor of scientific literature (physical education, physical therapy, health), whose native language is Ukrainian	1	Final Ukrainian version (WHODAS-UA-3)

The WHODAS-UA-3 (36 points for self-administration) was tested among cadets at the Armed Forces of Ukraine. Respondent surveys were conducted in May 2021. The survey was conducted in the form of a questionnaire, with questions being self-administered. The general questionnaire consisted of three parts – a general section (socio-demographic data, information on the presence of injuries and complaints of pain) and parts with questionnaires WHODAS 2.0 and MOS SF-36. If answers were missed, the completed questionnaire was not further analyzed. Some of the WHODAS 2.0 questionnaire responses did not contain all the answers. So, they were eliminated, and the total number of eliminated questionnaires constituted 39.

Statistical analysis

In the course of statistical analysis, methods of descriptive statistics were used (mean value (M), standard deviation (SD), and mathematical statistics (Spearman's rank correlation coefficient was used to identify and assess the tightness of the relationship). Statistical analysis was performed using SPSS programs (Statistical Package for the Social Sciences, Version 23).

Ethical approval

The research related to human use has complied with all the relevant national regulations and institutional policies, has followed the tenets of the Declaration of Helsinki, and has been approved by the bioethical commission of Lviv State University of Physical Culture on the organization (letter dated 24.05.2021, No. 359) endorsed the study. Informed consent was obtained from all individuals included in this study.

Informed consent

Each participant was given information about the study's goal and objectives and granted informed consent to participate in it and the processing of personal data; every precaution was made to ensure that the responses were anonymous.

Results

Following the initial stage, a list of discussion terms and phrases for reverse translation was compiled, and they were subsequently discussed with the experts. The main task of this stage of the work was to preserve the questionnaire's contextual integrity and analyze the extent to which the Ukrainian version of the questionnaire (see Annex) corresponds in content to the original one. Specialists in rehabilitation, including physical therapy, occupational therapy, and physical and rehabilitation medicine, were involved in the expert discussion. Among the experts were two national trainers from the International Classification of Functioning, Disability, and Health. Furthermore, 17 phrases were discussed with experts before a final decision was reached on their wording.

The respondents' subjective responses were used to assess the presence of trauma and pain syndromes. Among the respondents, 141 (55%) said they had experienced trauma and/or discomfort during the training session.

To better understand the factors that may have affected the constraints of life during the previous 30 days, the cadets were asked to answer the following question: "Have you been plagued by pain in any part of your body during the last month? If so, estimate its intensity." The respondents provided 318 replies in total (Table 2), allowing them to more precisely identify the location of pain (depending on the body part) and its intensity. The results suggest that moderate-intensity pain (140 cases, accounting for 44% of the total) and low-intensity pain (140 cases, accounting for 20.5% of the total) predominate (97 cases, accounting for 20.5% of the total). In 16.9% and 7.2 % of the responses, respectively, they identified severe and very severe pain that disturbed them in the previous 30 days. The lower extremity, head, chest, back, and upper extremities were the most painful areas.

Table 2. Complaints about pain and its intensity in different parts of the body in cadets for the last 30 days ($n = 259$)

Anatomical part	Number of persons that had pain complaints <i>n</i> (%)	Pain intensity				
		Mild <i>n</i> (%)	Moderate <i>n</i> (%)	Severe <i>n</i> (%)	Terrible <i>n</i> (%)	Unbearable <i>n</i> (%)
Lower limb	83 (32.04)	22 (8.49)	44 (16.99)	10 (3.86)	6 (2.32)	1 (0.39)
Upper limb	41 (15.83)	16 (6.18)	20 (7.72)	5 (1.93)	–	–
The thoracic spine	53 (20.46)	16 (6.18)	23 (8.88)	10 (3.86)	4 (1.54)	–
Lower back	26 (10.04)	9 (3.47)	10 (3.86)	4 (1.54)	3 (1.16)	–
Head	57 (22.01)	16 (6.18)	27 (10.42)	12 (4.63)	2 (2.70)	–
Neck	25 (9.65)	9 (3.47)	7 (2.70)	5 (1.93)	3 (1.16)	1 (0.39)
Abdomen	26 (10.04)	8 (3.09)	7 (2.70)	6 (2.32)	3 (1.16)	2 (2.70)
Thorax	7 (2.70)	1 (0.39)	2 (2.70)	2 (2.70)	2 (2.70)	–

The cut-off point for the diagnosis of limitation of vital activity is indicated with 95 percentile [25], which is an estimate of 50 points per WHODAS [21] according to the normative data for the general population. The 90th percentile level can be considered as the screening value with the lowest specificity value [25], which is 35 points for the general population according to the WHODAS questionnaire. The overall result of the respondents in our sample was 35.28 points for the 95th percentile and 26.42 points for the 90th percentile (Table 3).

Table 3. Level of health and the limitation of daily activity (assessment with WHODAS 2.0)

P	Points							
	Do1	Do2	Do3	Do4	Do51	Do52	Do6	GS
100	85	87.5	60	100	100	78.57	62.5	63.21
95	35	43.75	20	50	50	42.86	45.83	35.28
90	30	31.25	10	41.67	30	35.71	37.5	26.42
70	15	6.25	0	16.67	0	14.29	20.83	12.45
50	5	0	0	0	0	0	8.33	6.6
35	0	0	0	0	0	0	0	2.83
30	0	0	0	0	0	0	0	1.89
25	0	0	0	0	0	0	0	0.94
20	0	0	0	0	0	0	0	0

Notes. P – percentile value; Do1 – cognition; Do2 – mobility; Do3 – self-care; Do4 – getting along with people; Do51 – life activities: household work; Do52 – life activities: work/school; Do6 – participation; GS – general score

According to the results of the study, the general score as per the WHODAS 2.0 was 0 points in 24.42% (53 participants) of the 217 respondents (Table 4). The overall score of the remaining participants was 16.6 ± 12.05 points on average. The domains life activities: household work (33.27 ± 22.58 points), getting along with people (27.52 ± 18.57 points), and life activities work/school (26.83 ± 19.20 points) received the highest scores, while cognition (19.30 ± 13.98 points) and self-care (19.38 ± 11.05 points) received the lowest one.

Table 4. Assessment of the level of disability and quality of life in cadets

Indicators	Results, points			
	M	SD	Min	Max
WHODAS 2.0 (n = 217):				
cognition	9.59	13.73	0	85.00
mobility	8.44	17.66	0	100.00
self-care	2.86	8.06	0	60.00
getting along with people	10.83	17.84	0	100.00
life activity: household work	7.51	17.54	0	100.00
life activity: work/school	10.63	16.28	0	78.57
participation	14.25	15.43	0	62.50
General score	10.28	12.00	0	63.21
WHODAS 2.0 (number of persons with a score "0", %):				
cognition (107 / 49.31)	19.30	13.98	5.00	85.00
mobility (132 / 60.83)	22.67	21.86	6.25	125.00
self-care (186 / 85.71)	19.38	11.05	10	60.00
getting along with people (132 / 60.83)	27.52	18.57	8.33	100.00
life activity: household work (168 / 77.42)	33.27	22.58	10	100.00
life activity: work/school (127 / 58.53)	26.83	19.20	7.14	78.57
participation (78 / 35.94)	22.24	13.92	4.17	62.50
General score (53 / 24.42)	16.60	12.05	0.94	63.21
MOS SF-36 (n = 217):				
physical functioning	96.83	9.76	15	100
physical role functioning	87.96	25.40	0	100
bodily pain	80.74	22.30	10	100
general health	74.48	15.23	0	100
vitality	63.42	21.05	0	100
social functioning	80.72	24.14	0	100
emotional role functioning	84.41	32.77	0	100
mental health	69.68	17.98	16	100
physical component summary	53.71	5.05	35.38	67.73
mental component summary	47.97	10.41	8.54	62.35

According to the MOS SF-36, respondents' energy levels were poor (vitality – 63.42 ± 21.05 points). The metric, as mentioned earlier, is approaching a significantly low point (≤ 50 points), which is critical because of the respondents' profession. On the mental health and general health, the indicators of health related quality of life were also in the middle range (75 points ≥ x ≥ 50 points). The mental component summary had a lower value than the population average.

The overall indicator of the WHODAS 2.0 questionnaire correlates with the scale values of the MOS SF-36 questionnaire (Table 5). Numerous negative, moderate or significant correlations were also found between almost all scales of the MOS SF-36 (except for the physical component summary) and WHODAS domains. In particular, there are negative significant correlations between the scales physical functioning and mobility ($r = -0.553$), social functioning and participation ($r = -0.531$); between the general WHODAS score and the vitality ($r = -0.513$) and social functioning ($r = -0.524$). Negative moderate correlations ($r = -0.410 - -0.496$) were found for the total WHODAS indicator and the scales physical functioning, general health, mental health, mental component summary; life activities work/school and physical functioning, vitality, social functioning, mental component summary; participation and vitality, emotional role functioning and mental component summary, getting along with people and social functioning.

Table 5. Correlations (r) of structural parts of WHODAS 2.0 and MOS SF-36

WHODAS domains	Scales / components of the MOS SF-36									
	PF	RF	BP	GH	VT	SF	RE	MH	PCS	MCS
General score	-0.465*	-0.375*	-0.342*	-0.424*	-0.513*	-0.524*	-0.386*	-0.410*	–	-0.431*
Cognition	-0.266*	-0.205*	-0.203 ^{††}	-0.282*	-0.366*	-0.382*	-0.231*	-0.312*	–	-0.296*
Mobility	-0.553* ¹	-0.375*	-0.358*	-0.362*	-0.361*	-0.356*	-0.243*	-0.249*	-0.165 [†]	-0.164 [†]
Self-care	-0.301*	-0.155**	-0.170**	-0.211*	-0.244*	-0.261*	-0.139 [†]	-0.194*	–	-0.152 [†]
Getting along with people	-0.155*	-0.130 [†]	-0.159 [†]	-0.250*	-0.390*	-0.478* ¹	-0.256*	-0.354*	–	-0.398*
Life activities: household work	-0.270*	-0.196 [†]	–	-0.239*	-0.279*	-0.280*	-0.185 [†]	-0.197 [†]	–	-0.181 [†]
Life activity: work/school	-0.420* ¹	-0.392*	-0.288*	-0.396*	-0.432*	-0.456* ¹	-0.381*	-0.340*	–	-0.411*
Participation	-0.389*	-0.391*	-0.390*	-0.386*	-0.496*	-0.531* ¹	-0.453* ¹	-0.387*	–	-0.459* ¹

* – $p < 0,0001$; [†] – $0,02 \leq p \leq 0,04$; ** – $p = 0,01$; ^{††} – $p = 0,002$

PF – physical functioning, RF – physical role functioning, BP – bodily pain, GH – general health, VT – vitality, SF – social functioning, RE – emotional role functioning, MH – mental health, PCS – physical component summary, MCS – mental component summary

¹ these correlation coefficients were expected to be moderate ($r = 0.4-0.6$)

Discussion

The WHODAS 2.0 questionnaire (36 items, self-administered) was translated into Ukrainian for this study; the main objective throughout this phase of the work was to retain contextual equivalence to the original form

of the questionnaire. The assistance of professionals – rehabilitation experts – enabled the final Ukrainian version of the questionnaire to clarify disputed terms and phrases and use the most appropriate of them.

A population of cadets from a higher military educational institution, with a high level of physical activity and working capacity, was studied for the first time in Ukraine. As a result, the analyzed data has a high degree of homogeneity. However, it should be highlighted that many WHODAS 2.0 questions in the study sample received a score of 0 (the answer is “without difficulty”). This makes it challenging to identify minor differences in individuals with minimal difficulties or with the slightest degree of disability [26, 27].

Few studies are using WHODAS 2.0 among former or current military personnel. Most of them are devoted to assessing the disability of veterans and the psychometric characteristics of the questionnaire for this population group [28–35]. The study looks at the analysis of WHODAS 2.0 indicators among cadets of military educational institutions. Therefore, it is not possible to compare the level of disability in this population group across ethnic groups.

The average values of the indicators in the study sample were lower for 90 and 95 percentile when compared to the normative indicators for the general population. The generally accepted cut-off point for determining disability (at the 95th percentile level) for the surveyed sample was 35.28 points, compared to 50 points for the general sample [21], and the cut-off point for screening disability detection (at the 90th percentile level) was 42 points, compared to 35 points for the overall sample. This discrepancy is attributable to the study sample's characteristics. The aggregate WHODAS 2.0 score for the 10 % of respondents with the most significant level of disability was 38.5 ± 9.59 points on average.

Most of the health-related quality of life indicators of the surveyed individuals were at a high level. Respondents have no difficulties performing equivalent physical tasks, their daily activities are unaffected by their health, they have no complaints about their physical health, and their daily and social activities are not affected by their physical or emotional state. At the same time, the responders' level of vitality was crucial; they are exhausted, and their working capacity is lowered. Respondents reported a poor were of their overall health and expressed concern. Although Ukrainian students enrolled in military specialties have the lowest anxiety levels compared to students in other fields [36], low quality of life indicators in terms of the mental component reflects the negative trends that are typical for the Ukrainian population as a whole, which are exacerbated by the pandemic's adverse effects [37]. Previous studies of the quality of life of military students and personnel have identified subpopulations that are characterized by a high level of anxiety and low quality of life parameters, as well as a higher rate of injuries and a more extended rehabilitation period [38], as well as a lower motivation for learning under the chosen specialty [39].

Almost all scales and components of the MOS SF-36 had correlations with the total score according to WHODAS 2.0. The scores on the scales general health, functioning (physical and social), mental health, and mental component summary had a significant and moderate relationship with the level of disability among the cadets.

An analysis of the correlations between the WHODAS 2.0 domains and the MOS SF-36 scales and components found that the domains life activity (work/school) had the largest number of significant and moderate relationships (with the domains of the scales physical functioning, vitality, social functioning, mental component summary) and participation (with vitality, social functioning, emotional role functioning, mental component summary). The study group's strength and the number of correlations were less than in populations with significant health disorders [17, 40].

Limitation

The study's findings should be treated with some limitations. The study did not test the sensitivity of the tool (ability to track improvements/deteriorations in health). Since the respondents involved in the survey can be described as a general sample, the differentiation of respondents into individual groups (depending on health status and nosology) did not make sense. In the current study there was no assessment of test-retest reliability. Also further analyzes of the Ukrainian version of WHODAS 2.0 are planned, including discriminatory power. As final note, there was a gender discrepancy in the sample group, all of participants were male. The benefits include the use of a standardized methods for evaluation of reliability, validity and responsiveness of the Ukrainian version of the WHODAS 2.0 (36-items). The correlation between the results of our study and the results reported by other authors who made validation studies of the 36-item WHODAS is a further bonus.

Conclusions

The Ukrainian version of the WHODAS 2.0 questionnaire (36 items for self-administration) is simple to use and can be used as an interview to assess the general population's health, functioning, and disability. In addition, the questionnaire is useful for obtaining information about the level of health and functioning of young male servicemen who are at high risk of injury and disability.

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Disclosure statement

No author has any financial interest or received any financial benefit from this research.

Conflict of interest

Authors state no conflict of interest.

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Annex. Translation into Ukrainian items of WHODAS 2.0

Чи виникали у вас труднощі упродовж останніх 30 днів із:		
Розуміння та спілкування	D1.1	Зосередженням на чомусь протягом десяти хвилин?
	D1.2	Запам'ятовуванням виконати щось важливе?
	D1.3	Аналізом та пошуком розв'язання проблем у повсякденному житті?
	D1.4	Виконанням нового завдання, для прикладу: з'ясувати, як дістатися до нового місця?
	D1.5	Загальним розумінням того, що говорять люди?
	D1.6	Початком і підтриманням розмови?
Пересування у просторі	D2.1	Тривалим стоянням, наприклад упродовж 30 хвилин?
	D2.2	Вставанням із положення сидячи?
	D2.3	Пересуванням вдома?
	D2.4	Виходом із дому?
	D2.5	Прогулянками на велику відстань, скажімо на 1 км (або еквівалентно)?
Догляд за собою	D3.1	Миттям усього тіла?
	D3.2	Одяганням?
	D3.3	Споживанням їжі?
	D3.4	Залишитися самому (-ій) на кілька днів?
Взаємодія з людьми	D4.1	Взаємодією з незнайомими людьми?
	D4.2	Підтриманням дружніх відносин?
	D4.3	Взаємодією з близькими людьми?
	D4.4	Пошуком нових друзів?
	D4.5	Сексуальною активністю?
Життєва активність	D5.1	Виконанням домашніх обов'язків?
	D5.2	Належним виконанням найбільш важливих домашніх обов'язків?
	D5.3	Виконанням всієї домашньої роботи, яку потрібно було зробити?
	D5.4	Швидким виконанням домашньої роботи у разі потреби?
	D5.5	Щоденною роботою/навчанням?
	D5.6	Належним виконанням найважливіших робочих / навчальних завдань?
	D5.7	Виконанням всієї роботи, яку ви повинні зробити?
	D5.8	Швидким виконанням роботи у міру потреби?
Участь у житті суспільства	D6.1	Наскільки великі проблеми у вас виникали з участю у громадській діяльності порівняно з іншими людьми (наприклад, у святкових, релігійних або інших заходах)?
	D6.2	Наскільки великі проблеми виникали у вас через бар'єри або перешкоди у вашому середовищі?
	D6.3	Наскільки великі проблеми виникали у вас із відчуттям власної гідності через ставлення та дії інших людей?
	D6.4	Скільки часу ви витратили, щоб поліпшити стан свого здоров'я?
	D6.5	Наскільки сильними були ваші емоційні переживання через стан здоров'я?
	D6.6	Наскільки фінансово затратним є стан вашого здоров'я для вас і вашої родини?
	D6.7	Наскільки великі проблеми виникали у вашій сім'ї через проблеми з вашим здоров'ям?
	D6.8	Наскільки великі проблеми виникали у вас в тому, щоб робити щось самостійно для відпочинку або задоволення?