

Self-assessment of the quality of life by Ukrainians during martial law and ways to improve it

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ABSTRACT

Aim: To study the quality of life in Ukraine during martial law and identify priority areas for its improvement.

Materials and Methods: The research was conducted in 2023–2024. It involved 159 respondents of different genders and age. Research methods: bibliographic, self-assessment of quality of life (survey), medical, and statistical. The author's questionnaire consists of 6 blocks and contains 77 questions.

Results: It has been established that 51.6 % of the respondents are dissatisfied with their health, 65.4 % – with the health care system in Ukraine, 52.2 % – with the education system; housing conditions during the war deteriorated by 34.6 %; the number of those satisfied with their financial situation decreased from 52.8 % to 37.7 %, with their place of work – from 83.0 % to 67.3 %; the level of satisfaction with the quality of life decreased from 76.1 % to 31.5 %. Priority areas for improving the quality of life of Ukrainians in the postwar period have been identified: maintaining public health, improving the quality of medical services, providing housing and employment, increasing access to and quality of education, improving the environmental situation, increasing incomes, social assistance, modernizing infrastructure, stabilizing the socio-political situation, etc.

Conclusions: It has been found that during the war, there were significant negative changes in the quality of life of the Ukrainian population. The findings should be considered when public health experts develop practical recommendations for improving the quality of life of the Ukrainian population during and after the war.

KEY WORDS: quality of life, war, martial law, population of Ukraine

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INTRODUCTION

In modern research [1, 2], there is no single approach to assessing the quality of life; each of the developed approaches is based on the objectives of the research being conducted and the specifics of the research object (country, region, locality, etc.). The concept of “quality of life” characterizes both material human benefits (welfare, prosperity, housing conditions, etc.) and intangible ones (social, economic, environmental, socio-political living conditions, health, education, security, participation in public life, leisure, etc. [1, 3].

Scientists [4] believe that “quality of life” includes such structural elements as the quality of the population (demographic characteristics, health status of the population, level of education, etc.), quality of the environment (natural and environmental conditions, economic development of territories, development of social infrastructure, level of personal safety), quality of

activity (quality of work, recreation, domestic, spiritual, cultural and socio-political spheres of life).

The quality of life varies significantly around the world. It depends on many factors, including the natural, social, economic, and socio-political environment in which the population lives, health status, level of education, satisfaction with the profession, housing conditions, etc. [5] Today, the quality of life in Ukraine is low compared to economically developed countries. According to international studies, Ukraine ranks 77th among 191 countries regarding quality of life (human development index) and 92nd in happiness among 150 countries [6, 7].

According to the results of studies [8], the quality of life of the population of Ukraine is assessed by statistical data on the quality of the natural, social, economic, and socio-political environment, as well as by the level of satisfaction of each member of society with the goods

that are valuable to them – material wealth, place of work, health status, living conditions, environmental situation, personal safety, social well-being, etc. At the same time, the issue of assessing the quality of life of the Ukrainian population during wartime and finding ways to improve it remains insufficiently researched.

AIM

The aim is to study the quality of life in Ukraine during martial law and identify priority areas for its improvement.

MATERIALS AND METHODS

The research was conducted in 2023-2024. It involved 159 respondents of different genders belonging to various age groups – from 18 to 75 years old. The 18-25, 26-35, and 46-65 age categories are represented in approximately the same ratio – up to 30 %; the respondents under 18 – 2.5 %, 66-75 – 1.3 %. 97.5 % of the respondents live in Ukraine, 2.5 % live abroad. Among the surveyed respondents, 61.0 % are married, 39.0 % are single. The research results were processed at the Department of Physical Education and Sport Improvement of Zhytomyr Ivan Franko State University (Zhytomyr, Ukraine).

Research methods: bibliosemantic, self-assessment of quality of life (according to the author's questionnaire), medical and statistical. The bibliosemantic method was used to study the literature on the chosen topic (18 sources from PubMed, Scopus, Web of Science, Index Copernicus, and other databases were analyzed). The method of self-assessment of the quality of life was used to survey the population of Ukraine using the author's questionnaire to determine the level of satisfaction of the population with various aspects of their lives; the author's questionnaire consisted of six blocks of questions: Block 1. General Information About Respondents (8 questions); Block 2. Natural Environment (8 questions); Block 3. Social Environment (20 questions); Block 4. Economic Environment (14 questions); Block 5. Socio-Political Environment (25 questions); Block 6. Ways to Improve the Quality of Life in Ukraine (2 questions). In total, the questionnaire contains 77 questions. The questionnaire was anonymous without any references to the authors of the article in the answers. The results were used for scientific purposes only. Questionnaire was assessed by the experts in this field (1 professor and 3 associate professors) and was approved by the Academic Council of Zhytomyr Ivan Franko State University (Protocol No. 9 dated 10.02.2023). The medical and statistical method was used to process the experimental data obtained during the research.

Data collection, processing, and analysis of the research results were performed on a personal computer using MS Excel, a software package that allows statistical data processing methods. Consent to voluntary participation in the survey was obtained from all the respondents involved in the study. This research followed the regulations of the World Medical Association Declaration of Helsinki – ethical principles for medical research involving human subjects.

RESULTS

When analyzing the answers to the questions in Block 1 of the questionnaire, it was found that the majority of the respondents have higher education (44.6 %), one-third have completed secondary education (34.6 %), and the rest have specialized pre-university education (20.8 %). Among the respondents, the largest groups of professions were represented by military personnel (30.2 %), healthcare workers (18.9 %), students (17.0 %), and employees of educational institutions (11.9 %). Most respondents live in urban areas (60.4 %), while the rest (39.6 %) live in rural areas. The residents of Zhytomyr, Vinnytsia, and Kyiv oblasts accounted for 69.2 %, Poland – 1.3 %, Slovakia, and the United States – 0.6 % each. The remaining 28.3 % of the respondents live in Ternopil, Khmelnytskyi, Lviv, Sumy, Kharkiv, Kirovohrad, and Donetsk oblasts of Ukraine. All settlements where the respondents live are located in the territory controlled by Ukraine.

The answers to the questions in Block 2 of the questionnaire (Natural Environment) showed that 77.4 % of the respondents are not satisfied with the environment in Ukraine, and 86.8 % are convinced that the environmental situation in the country has deteriorated during the full-scale war. Among the main environmental problems that worsen the state of the environment, the respondents mentioned: ecological pollution from industrial enterprises and factories (52.2 %); air pollution due to a large number of vehicles (46.5 %); the presence of landfills near housing (37.1 %); environmental pollution due to enemy bombing (30.2 %); water pollution (18.9 %); radiation emissions (10.1 %); and mining plants (1.9 %).

The analysis of the questions in Block 3 (Social Environment) revealed that 65.4 % of the respondents are dissatisfied with the health care system in Ukraine, and only one-third of the respondents (34.6 %) are satisfied. At the same time, 51.6 % of the respondents are dissatisfied with their health. This is quite understandable since only 31.4 % of the respondents adhere to a healthy lifestyle. Less than half of the respondents (47.8 %) are satisfied with the education system in

Ukraine. Most of the respondents (79.2 %) are quite confident with their education level. It was found that before the war, 96.9 % of the respondents had adequate living conditions, while during the war, living conditions deteriorated for 34.6 % of the respondents and did not change for 60.4 %. It was found that the frequency of attending cultural and entertainment events during the war decreased from 81.7 % to 32.0 %. The number of respondents who regularly engage in physical exercises and sports decreased from 54.1 % before the war to 30.8 % during the war; those who could afford a resort vacation decreased from 64.8 % to 17.0 %. Before the war, the respondents' satisfaction with the work of transportation in Ukraine was 76.2 %, and during the war, it was 56.6 %.

The analysis of the questions in Block 4 (Economic Environment) revealed that 52.8 % of the respondents were satisfied with their financial situation before and 37.7 % during the war. Before the war, 83.0 % of the respondents were satisfied with their jobs, while during the war – 67.3 %. Before the war, 44.0 % of the respondents were satisfied with their financial income (salary, pension, scholarship), while during the war – 41.5 %. 6.3 % of the respondents lost their property and housing during the war. Before the war, 47.2 % of the respondents assessed the cost of utilities as high, while it was 81.1 % during the war. Before the war, 10.1 % of the respondents reported poor quality food, and during the war – 26.4 %. It is worth noting that the surveyed population of Ukraine is trying to improve their financial situation by working at several jobs – 22.6 %; help from relatives – 16.4 %; and social benefits – 10.1 %. Before the war, 86.2 % of the respondents considered their standard of living satisfactory, 8.8 % – high; during the war, satisfactory – 71.1 %, high – 4.4 %.

The analysis of the questions in Block 5 (Socio-Political Environment) revealed the level of satisfaction of the Ukrainian population with the socio-political situation in the country before the war: yes – 10.7 %; not quite – 67.9 %; no – 21.4 %. During the war, the share of the respondents who were dissatisfied with the socio-political situation in the country increased to 51.6 %, while those who were satisfied decreased to 5.1 %. During the war, the number of respondents who considered themselves to have low income increased from 16.4 % to 23.3 %.

It is important to note that before the war, 86.8 % of the respondents spoke Ukrainian, and 9.4 % spoke russian; during the war, the share of the population speaking Ukrainian increased to 91.8 %, while the share of russian decreased to 2.5 %. A study of the respondents' opinions on the quality of their family relationships revealed a decrease in satisfaction with them during the war in 63.5 % of the respondents, compared to 84.9 %

in the pre-war period. In 0.6 % of the respondents, dissatisfaction with family relationships is related to the forced residence of the family outside of Ukraine.

It has been found that 32.1 % of the respondents are currently dissatisfied with healthcare reforms and 34.0 % with the education system. Most respondents believe that Ukraine had a high level of corruption (78.0 %) and bribery (65.4 %) before the war. 74.8 % of the respondents expressed the opinion that the level of corruption in the country has increased even more in the current situation; the same applies to domestic bribery (63.5 %).

A group of the following questions studied the population's level of personal and social well-being. It has been found that during the war, the respondents lost a sense of security (68.6 %), mental health (62.9 %), the ability to relax (50.3 %), friends (39.6 %), physical health (35.2 %), income (26.4 %), etc. The respondents also identified the most important indicators of life satisfaction for them: peace in the country (89.9 %); good health (59.1 %); personal security (49.1 %); love of family members (48.4 %); well-paid job (47.2 %); opportunity to relax (42.8 %); opportunity to receive necessary medical care (42.1 %). When assessing the level of satisfaction with their lives, the respondents said that before the war, 76.1 % were satisfied with their lives. Now, only 31.5 % were satisfied with it (Fig. 1).

According to the questions of Block 6, we investigated the respondents' opinions on the priority areas for improving the quality of life in Ukraine during the war and in the postwar period. According to the results of the analysis of the respondents' answers, the respondents primarily associate the improvement of the quality of life during the war with the following areas: help to the front (59.7 %); maintaining the moral and psychological state of the population (53.5 %); compliance with the law (49.7 %); quality and accessibility of medical care (49.7 %); stabilization of the socio-political situation in the country (47.2 %); the environmental situation in the country (45.3 %); job security (44.0 %); maintaining public health (40.9 %); increasing income levels (39.6 %); collective and personal security (37.7 %); housing security (36.5 %); care for vulnerable groups of the population, social assistance (33.3 %).

According to the respondents, after the war ends, the following quality of life indicators will become a priority for the population: job security (55.3 %); housing security (54.7 %); increase in income (50.3 %); the environmental situation in the country (50.3 %); maintaining public health (49.7 %); stabilization of the socio-political situation in the country (49.1 %); maintaining the moral and psychological state of the population (48.4 %); quality and accessibility of medical care (45.3 %); compliance

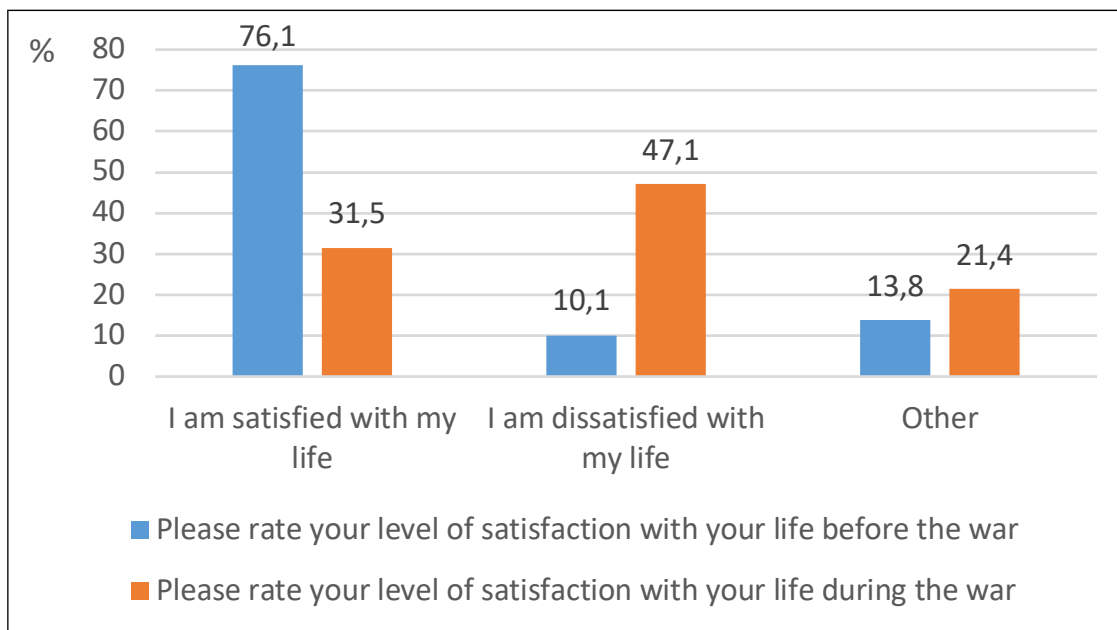


Fig. 1. The respondent's level of satisfaction with their lives before and during the war (n = 159)
Picture taken by the authors

with the law (44.7 %); collective and personal security (37.7 %); social assistance (37.7 %).

DISCUSSION

Modern research on the quality of life is based on the fundamental scientific support of many scientists [5, 9, 10]. Quality of life as a multidimensional concept refers to all spheres of human existence – health, including mental health, well-being, education, medical care, living conditions (housing, material, environmental, socio-political), extends to different levels of society – personal, family, professional and public, consists of objective and subjective components, which are described by various indices (indicators) and is determined by the level of realization of human needs [9, 11].

Based on the results of research by many scientists [1, 3, 8, 12], we have identified the most important problems of the quality of life of the Ukrainian population in wartime compared to peacetime:

- Demographic: the country's population has decreased, and the aging rate and mortality rate have increased;

- Public health and quality of medical services: a significant number of healthcare facilities in Ukraine were destroyed or damaged, which reduced the ability to receive quality medical services; due to constant stressors, the health status of the country's population has deteriorated significantly, a significant part of the population has turned to bad habits; the share of the population in need of rehabilitation measures has increased substantially;

- Security: the level of life safety has significantly decreased for all categories of citizens of the country in the context of war;

- Economy and incomes: since the beginning of the war, 77 % of the surveyed population has seen a decrease in income; 47 % of the employed are unsure of their future; a large number of skilled workers have been lost (due to the mobilization of citizens of working age and those who left the country); financial capabilities of businesses are being exhausted; despite the increase in the subsistence level per person of the minimum wage and pension, as well as state social assistance to people with disabilities, in 2022-2024, the level of real wages decreased by 17.7%; the economic situation of families worsened significantly;

- Education: a large number of educational institutions have been destroyed; the mental health of students, teachers, and lecturers has deteriorated; a significant number of institutions are not equipped with bomb shelters; due to the blackout, there is no uninterrupted power supply and stable access to the Internet; students abroad cannot receive full educational services due to the language barrier or are forced to study remotely under the Ukrainian program;

- Ecology: the state of the environment has deteriorated significantly; from the beginning of the war to the end of 2022, more than 2,200 crimes against the environment were recorded; the hostilities caused significant environmental pollution – air, drinking water, and soil; ecotourism facilities were destroyed, and the diversity of flora and fauna decreased; material damage from air pollution is over UAH 927 billion;

- Labor and working conditions: in 2022, the number of vacancies registered with the State Employment Service decreased by 48 %; the share of employees in the shadow economy increased, and working conditions worsened (over 41 %);

- Housing: a large share of the population lost their homes; a significant number of homes were destroyed; living conditions deteriorated;

- Purchasing power of the population: the cost of food increased by 32.7 %, clothing and footwear by 6.8 %, housing, and utilities by 5.6 %, household appliances and household items by 25.5 %, healthcare services by 17.6 %, transportation by 39.3 %, education by 9.8 %, and communication services by 11 %;

- Civil liberties, leisure, and life satisfaction: the population of Ukraine has lost the ability to move freely around the country and travel abroad, and the ratio between working time and leisure time has been disturbed; the level of life satisfaction has decreased.

It is established that the main directions of the State policy to improve the quality of life of the population of Ukraine are stimulation of economic growth, decentralization of budgetary funds distribution, development of the labor market, improvement of pension provision, improvement of the social support mechanism, development of small and medium-sized enterprises, creation of a system of integration of services, reform of the health care system and housing and communal services [13].

These strategic directions of improving the quality of life of the population of Ukraine are the basis of the country's regional policy, which covers such areas of life as demographic processes, health, social and environmental safety, development of educational and cultural spheres, increase in employment and labor protection, provision of housing, modernization of housing and communal services, strengthening of social integration, participation of the population of the region in the socio-economic, political and cultural life of society, increase in the level of social and personal consciousness [14, 15].

To improve the quality of life of the population, Ukraine develops and implements State targeted social programs, namely: affordable housing for such categories of the population as military personnel, medical workers, and educators – “E-Home”; “Youth of Ukraine”; national-patriotic education; combating human trafficking; childbirth assistance, baby packages; rehabilitation and health improvement programs for children with disabilities and from low-income families – “E-Health Care”; a social program for psychological support of the population of 150 communities of Ukraine referred to as “Resilience Center”; medical programs named “Affordable Medicines”, “Help for Joints”, “I See”, etc. At the level of territorial communities, there are also regional targeted social programs, such as “Preventing and Counteracting Domestic Violence and/or Gender-based Violence”, “Safe City”, etc.

However, according to experts [16], the measures currently being taken in Ukraine to improve the population's lives are insufficient. Given the profound consequences of the war for the economy, environment, health, medical and educational spheres of life, security, civil liberties, etc., measures to improve the quality of life of the population at the level of the state, society, each family and individual require fundamental changes. Taking into account the results of our research and based on the conclusions of scientists in this field [2, 4, 11, 17, 18], we have identified priority areas for improving the quality of life of the population of Ukraine during the war and, especially after its end:

- in the postwar period, housing problems of the population can be solved by repairing the partially destroyed property, subsidizing rental housing, and rebuilding the country's housing stock;

- given the growing volume of environmental pollution in the country, in the postwar period, it will be necessary to improve existing and develop new standards for emissions and discharges using international grants and loans;

- promising areas of the country's recovery in the area of “population income” are economic development and bringing the levels of minimum and real wages closer to the standards of remuneration in the EU countries; increasing the purchasing power of the population; minimizing the risk of poverty and social exclusion of the weakest categories of the population; preventing poverty and social exclusion among internally displaced persons;

- the country's infrastructure and digital network, which was destroyed by the war, needs to be restored and modernized;

- the state's priority task is to rebuild healthcare facilities, improve the quality of service provision and simplify access to specialized medical care; master new modern methods of laboratory diagnosis, treatment, rehabilitation, and prevention; further develop the digitalization of the medical industry, including the spread of contemporary health monitoring applications, the introduction of electronic prescriptions, etc.;

- an important area of improving the quality of life in Ukraine is the creation of a safe environment and the involvement of the population in a healthy lifestyle;

- it is necessary to create and fund a psychological rehabilitation service for the military and civilians;

- improving the accessibility and quality of education is a priority for the state in the postwar period. The younger generation needs modern, competitive educational programs that are unified with programs from other countries, which will create the necessary conditions for international academic mobility of students and academic staff.

CONCLUSIONS

It has been established that the quality of life of the Ukrainian population has significantly decreased as a result of hostilities. The environmental situation has deteriorated dramatically (86.8 %). The population is particularly concerned about environmental pollution from industrial facilities, a large number of vehicles, landfills near housing; destruction of nature due to enemy bombing, reduced water quality due to the destruction of the Kakhovka hydroelectric power plant, emissions from the Zaporizhzhia nuclear power plant, etc. 51.6 % of the respondents are dissatisfied with their health, but only 31.4 % adhere to a healthy lifestyle. More than half of the respondents are dissatisfied with the education system in Ukraine, and more than 20 % of them are unable to access education because of the war. The living conditions of the population have deteriorated significantly during the war. Before the war, only 3.1 % were dissatisfied with them; now, it is a third of the respondents. The share of people attending cultural and sporting events during the war has significantly decreased. The number of people satisfied with their financial situation has decreased (from 52.8 % to 37.7 %), as well as with their place of work (from 83.0 % to 67.3 %). Only 5.8 % are satisfied with the socio-political situation in the country. The share of the population belonging to the lower class in terms of income

has increased (from 16.4 % to 23.3 %). During the war, the number of Ukrainian citizens who speak Ukrainian has increased (from 86.8 % to 91.8 %). According to the respondents, the level of corruption (74.8 %) and bribery (63.5 %) in Ukraine has increased during the full-scale war. During the full-scale war, the respondents lost their sense of happiness, peace, joy, optimism, security, mental health, and relaxation. Feelings of fatigue, exhaustion, depression, and caution replaced this.

During the war, life satisfaction decreased from 76.1 % to 31.5 %. To improve the quality of life in a state of war, the respondents suggest that the state authorities should pay attention to priority areas such as providing the population with housing and employment, improving the environmental situation in the country, maintaining public health, increasing incomes, social assistance, and stabilizing the socio-political situation in the country. The importance of these quality-of-life indicators should increase in the postwar period.

PROSPECTS FOR FURTHER RESEARCH

A comparative analysis of the quality of life of the Ukrainian population living in urban and rural areas during the war is planned.

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CONFLICT OF INTEREST

The Authors declare no conflict of interest

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