

Likholetov Y. O. Quality of life of civilian persons with adaptation disorders who have experienced psycho-social stress under the conditions of military conflict. *Journal of Education, Health and Sport*. 2021;11(2):156-170. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2021.11.02.016> <https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2021.11.02.016> <https://zenodo.org/record/4768349>

The journal has had 5 points in Ministry of Science and Higher Education parametric evaluation. § 8. 2) and § 12. 1. 2) 22.02.2019.  
© The Authors 2021;

This article is published with open access at Licensee Open Journal Systems of Nicolaus Copernicus University in Torun, Poland  
Open Access. This article is distributed under the terms of the Creative Commons Attribution Noncommercial License which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited. This is an open access article licensed under the terms of the Creative Commons Attribution Non commercial license Share alike. (<http://creativecommons.org/licenses/by-nc-sa/4.0/>) which permits unrestricted, non commercial use, distribution and reproduction in any medium, provided the work is properly cited.  
The authors declare that there is no conflict of interests regarding the publication of this paper.

Received: 11.01.2021. Revised: 10.02.2021. Accepted: 26.02.2021.

## QUALITY OF LIFE OF CIVILIAN PERSONS WITH ADAPTATION DISORDERS WHO HAVE EXPERIENCED PSYCHO-SOCIAL STRESS UNDER THE CONDITIONS OF MILITARY CONFLICT

Y. O. Likholetov

State Institution "Dnipropetrovsk Medical Academy of the Ministry of Health of  
Ukraine"

### Abstract

**The objective:** to conduct a comparative analysis of the quality of life of civilians who have experienced psychosocial stress in a military conflict, and justify the differentiation of therapeutic approaches in providing specialized medical care. **Materials and methods.** Clinical, psychopathological and psychodiagnostic methods were used. Three groups were formed. They included 109 persons experienced psychosocial stress during military conflict. The first group (G1) consisted of fallen servicemen wives (n=6); group 2 (G2) included mothers, fathers and wives of unaffected combatants who returned to peaceful life (n=71); 32 internally displaced persons (12 men and 20 women) were included to group 3 (G3). The survey was conducted in accordance with the principles of bioethics and deontology. **Results.** All the persons were diagnosed with mental disorders of the F43.2 cluster - adaptive disorders. It has been revealed that the lowest scores in most spheres of life, both individual and integrated, had IDPs. Low scores of IDPs may show both a conscious and an unconscious desire to draw attention to their psychological and social problems, as this group is the least socially protected and receives the least social support from the state. The attitude of society to this group is also ambiguous, in contrast to the attitude to combatants and their family's

members. This can have a significant impact on the self-esteem of QLI primarily related to social functioning. QLI in all areas did not differ significantly between relatives of the fallen and relatives of unaffected combatants, which gives grounds to consider them as the same in QLI characteristics. The ratio of QLI in different areas in these groups was different, which indicates the complexity and multifactorial impact of different factors on the assessment of QLI in combatants' relatives and IDPs. The features identified should be taken into account when developing treatment-and-rehabilitation and preventive measures for these contingents.

**Key words: adaptation disorders; relatives of combatants; migrants; quality of life.**

**Introduction.** The United Nations recognizes military action as one of the most global, large-scale and dangerous threats to the individual, human society and humanity as a whole, and the slogan "save future generations from the scourge of war" - an expression of the most important task of each state and the world community [1]. Despite the efforts of the progressive forces of mankind, hostilities continue in various countries. In total, more than 80 long-term military conflicts are going on in the world, one of which is unfolding on the territory Ukraine [2 - 4].

Military action is one of the factors with the greatest negative social impact and an example of widespread and pervasive violence, which inevitably affects public relations, economy, health care system and social stability of a country embroiled in military conflict. The situation is complicated by insufficient development of measures to prevent and reduce this negative impact [5 - 7].

Armed conflict has a large-scale negative impact on social psychology, leading to the stratification of society and formation of confrontational social dichotomies: the aggressor - the victim, the military – the civilians, own people – strangers. This further complicates the socio-psychological situation in the country by a mechanism of vicious circle to which identity and retributive collective action, and this becomes almost universal [8, 9] situation.

Despite the undeniable negative impact of military conflicts on the psyche of all people involved, this problem has not yet been adequately addressed. The main focus of society is on political, military, economic, security aspects, although understanding the patterns of social transformations associated with military conflicts is impossible without understanding the perception of ex-combatants themselves of their lives, its goals, objectives, their place in society, estimation of their own past including the experience of participation in

hostilities and the use of this experience in civilian life, psychological change and new psychological models.

**The purpose of the study:** to conduct a comparative analysis of the quality of life (QLI) of civilians who have experienced psychosocial stress in a military conflict, and justify the differentiation of therapeutic approaches in providing specialized medical care.

**Contingent and research methods.** To achieve the purpose mentioned, meeting the principles of bioethics and deontology, 109 people experienced psychosocial stress in a military conflict were surveyed. Among them widows of the fallen servicemen, reference relatives of combatants who returned to peace life, and IDPs. Three groups were formed: group 1 (G1) included 6 wives of fallen servicemen; group 2 (G2) included mothers, fathers and wives of unaffected combatants (71 persons); to group 3 (G3) 32 IDPs (12 men and 20 women) were included. All subjects were diagnosed with non-psychotic mental disorders of the F43.2 cluster - adaptive disorders.

To study QLI, as a basic indicator of psychosocial functioning success, J. E. Mezzich et al. method ( in N. O. Maruta adaptation, 2004) was used. Statistical analysis was performed with the use of the licensed application package Statistica 13 (StatSoftInc., USA). Statistical analysis included the formation of descriptive statistics, assessment of the nature of the distribution of features and graphical analysis of the data obtained. The discrepancy analysis was performed using the non-parametric Mann – Whitney’s test.

**Results and discussion.** We analyzed QLI in different areas in the groups formed. The results of the analysis of QLI quantitative indicators are given in Table. 1 and in fig. 1-14.

Table 1

**Indicators according to J. E. Mezzich et al. method of assessing the quality of life in adaptation of N. O. Maruta, points**

QL sphere	Indicator M ± m / Me / Q25 / Q75			P		
	G1	G2	G3	G1vsG2	G1vsG3	G2vsG3
1	2	3	4	5	6	7
Physical well-being	6.83 ± 2.14 / 6.50 / 5.00 / 8.00	7.21 ± 1.41 / 8.00 / 6.00 / 8.00	4.75 ± 1.87 / 5.00 / 3.50 / 5.50	> 0.05	<0.05	<0.01
Psychological / emotional well-being	6.50 ± 2.59 / 6.50 / 5.00 / 8.00	6.41 ± 2.17 / 7.00 / 6.00 / 8.00	6.41 ± 1.52 / 6.00 / 5.00 / 8.00	> 0.05	> 0.05	> 0.05

1	2	3	4	5	6	7
Self-service and independence of actions	8.50 ± 2.74 / 9.50 / 9.00 / 10.00	9.25 ± 1.59 / 10.00 / 9.00 / 10.00	8.81 ± 1.20 / 9.00 / 8.50 / 10.00	> 0.05	> 0.05	<0.01
Working capacity	7.33 ± 1.63 / 7.00 / 7.00 / 8.00	8.10 ± 1.65 / 8.00 / 7.00 / 10.00	5.88 ± 1.39 / 5.00 / 5.00 / 7.00	> 0.05	<0.05	<0.01
Interpersonal interaction	8.67 ± 1.03 / 9.00 / 8.00 / 9.00	8.90 ± 1.15 / 9.00 / 8.00 / 10.00	7.19 ± 1.42 / 7, 00 / 6.00 / 9.00	> 0.05	<0.05	<0.01
Socio-emotional support	6.67 ± 3.44 / 7.00 / 5.00 / 10.00	6.31 ± 2.42 / 7.00 / 5.00 / 8.00	5.50 ± 2.78 / 6.50 / 3.50 / 8.00	> 0.05	> 0.05	> 0.05
Community and service support	6.50 ± 2.07 / 5.50 / 5.00 / 8.00	6.38 ± 2.49 / 7.00 / 4.00 / 8.00	6.44 ± 1.54 / 6.00 / 5.00 / 8.00>	> 0.05	> 0.05	> 0.05
Personal realization	6.83 ± 1.17 / 7.00 / 6.00 / 8.00	7.37 ± 1.66 / 8.00 / 7.00 / 9.00	6.88 ± 1.50 / 7, 00 / 5.00 / 8.00	> 0.05	> 0.05	> 0.05
Spiritual realization	6.83 ± 2.23 / 6.00 / 5.00 / 9.00	7.14 ± 2.08 / 8.00 / 5.00 / 9.00	6.44 ± 1.13 / 7, 00 / 5.00 / 7.00	> 0.05	> 0.05	> 0.05
General perception of life	7.33 ± 2.16 / 7.50 / 6.00 / 9.00	7.15 ± 2.02 / 8.00 / 5.00 / 9.00	6.97 ± 1.91 / 7 .00 / 5.50 / 9.00	> 0.05	> 0.05	> 0.05
Subjective well-being / satisfaction	20.67 ± 5.79 / 22.00 / 14.00 / 26.00	20.77 ± 3.94 / 22.00 / 19.00 / 24.00	18.13 ± 3, 08 / 18.50 / 15.00 / 20.50	> 0.05	> 0.05	<0.01
Performance of social roles	31.33 ± 3.01 / 32.00 / 28.00 /	33.62 ± 3.90 / 33.00 / 31.00 /	28.75 ± 2.71 / 28 .00 / 28.00 / 29.50	> 0.05	> 0.05	<0.01

1	2	3	4	5	6	7
	34.00	37.00				
External living conditions	20.00 ± 6.66 / 20.00 / 15.00 / 27.00	19.83 ± 5.08 / 19.00 / 15.00 / 24.00	18.38 ± 4.89 / 19 , 50 / 14.50 / 23.00	> 0.05	> 0.05	> 0.05
Quality of life indicator	7.20 ± 1.50 / 7.25 / 6.10 / 8.60	7.42 ± 1.00 / 7.50 / 6.90 / 8.10	6.53 ± 0.87 / 6 , 60 / 5.95 / 7.05	> 0.05	> 0.05	<0.01

In general the groups under study had moderate QLIs in the main areas.

The indicator of physical well-being was the lowest among IDPs -  $4.75 \pm 1.87$  points, significantly ( $p < 0.05$ ) higher it was among relatives of the fallen, and the highest ( $p < 0.01$ ) - among relatives of unaffected combatants (Fig. 1).

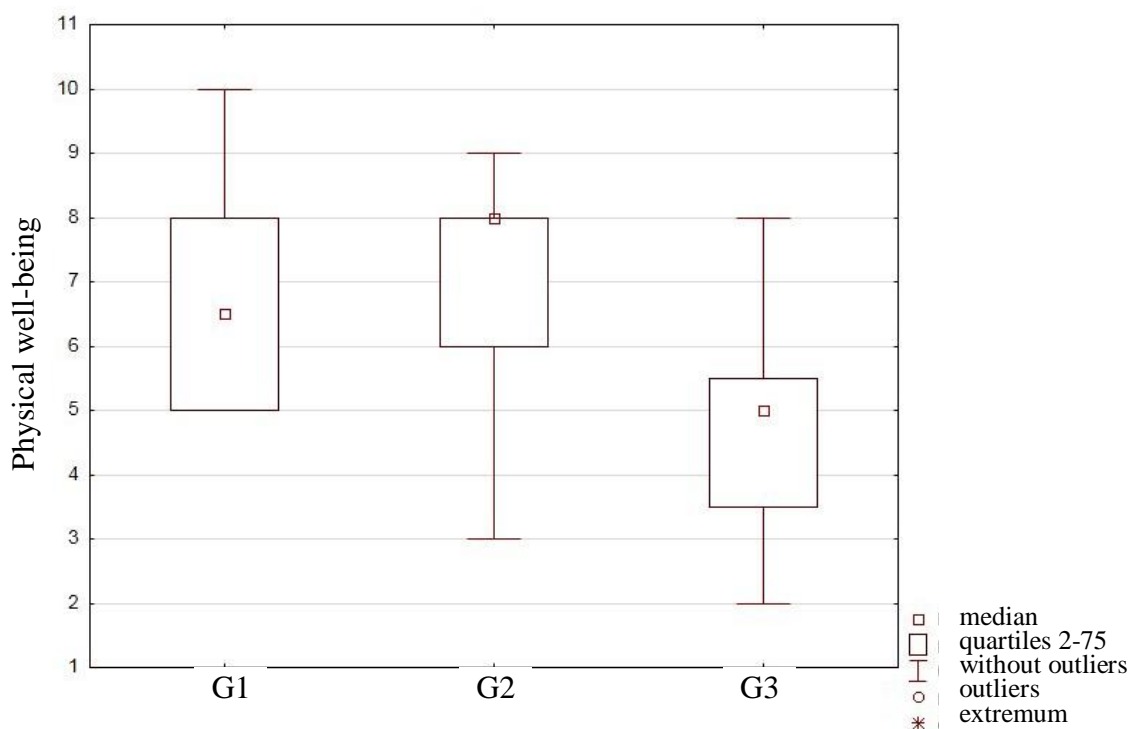


Fig. 1. Quantitative indicators of physical well-being according to J. E. Mezzich et al. method of assessing the quality of life (adaptation of N. O. Maruta, points)

Indicators in the field of psychological / emotional well-being in the persons under survey were close in all three groups, and did not differ significantly ( $p > 0.05$ ): relatives of

the fallen had average value  $6.50 \pm 2.59$  points, relatives on unaffected combatants, had -  $6.41 \pm 2.17$  points, IDPs -  $6.41 \pm 1.52$  points (Fig. 2).

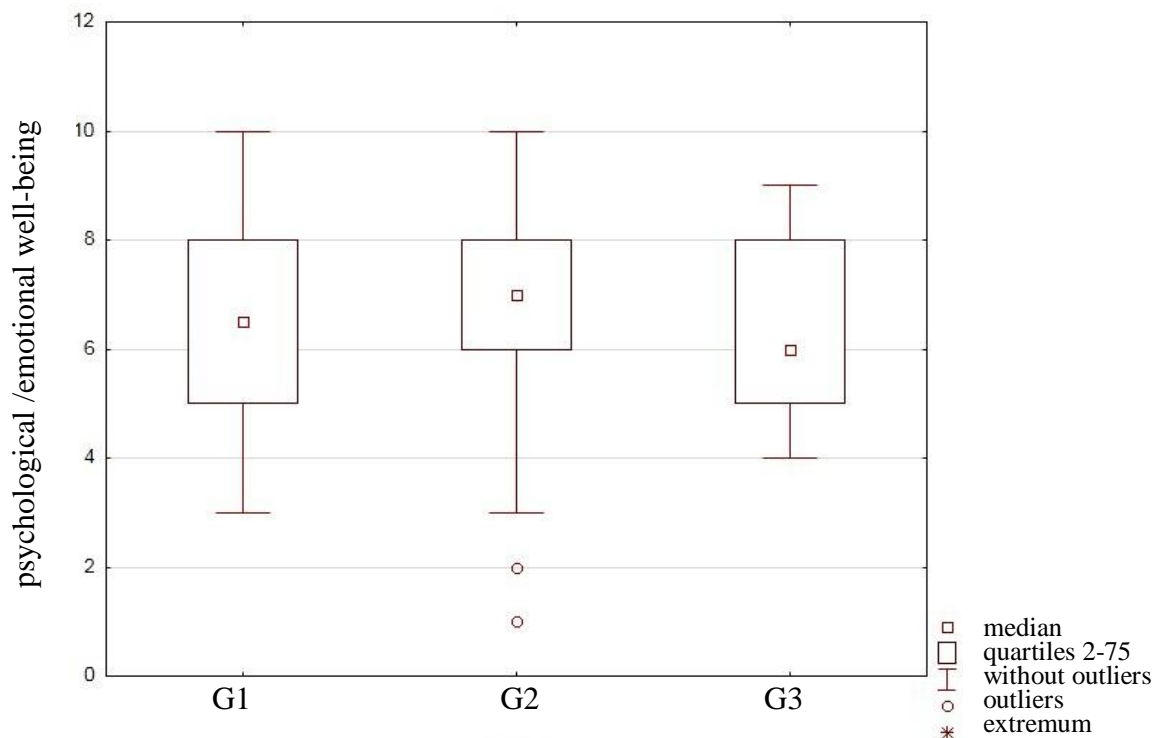


Fig. 2. Quantitative indicators of psychological /emotional well-being according to J. E. Mezzich et al. method of assessing the quality of life ( adaptation of N. O. Maruta, points).

In the area of self-service and independence of action the lowest rates were found in the relatives of the fallen -  $8.50 \pm 2.74$  points; IDPs had insignificantly higher indicators -  $8.81 \pm 1.20$  points,  $p > 0.05$ , and in relatives of unaffected combatants they were significantly ( $p < 0.01$ ) higher:  $9.25 \pm 1.59$  points (Fig. 3).

The lowest indicators of QLI in the field of working capacity were found in IDPs:  $5.88 \pm 1.39$  points; they were higher in the relatives of the fallen:  $7.33 \pm 1.63$  points, these indicators were the highest in the relatives of unaffected combatants and constituted  $8.10 \pm 1.65$  points. The differences are significant when comparing G1 and G3 ( $p < 0.05$ ) and G2 and G3 ( $p < 0.01$ ) (Fig. 4).

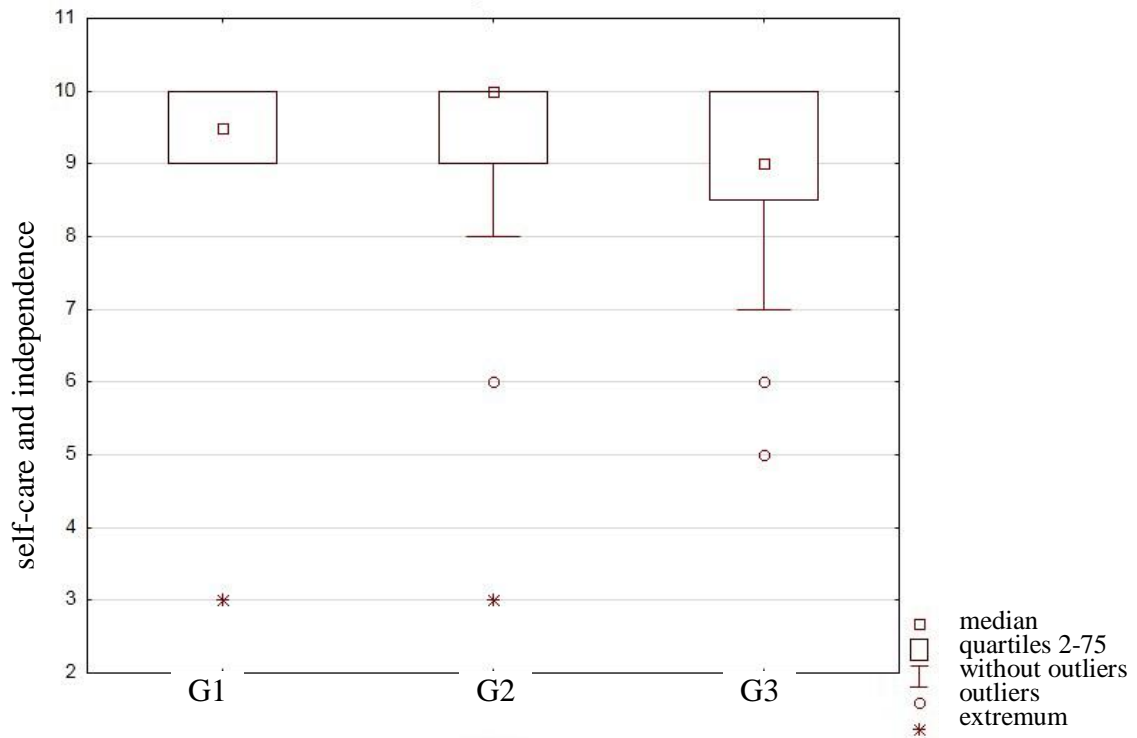


Fig. 3. Quantitative indicators of self-care and independence of action according to J. E. Mezzich et al. method of assessing the quality of life (adaptation of N. O. Maruta, points)

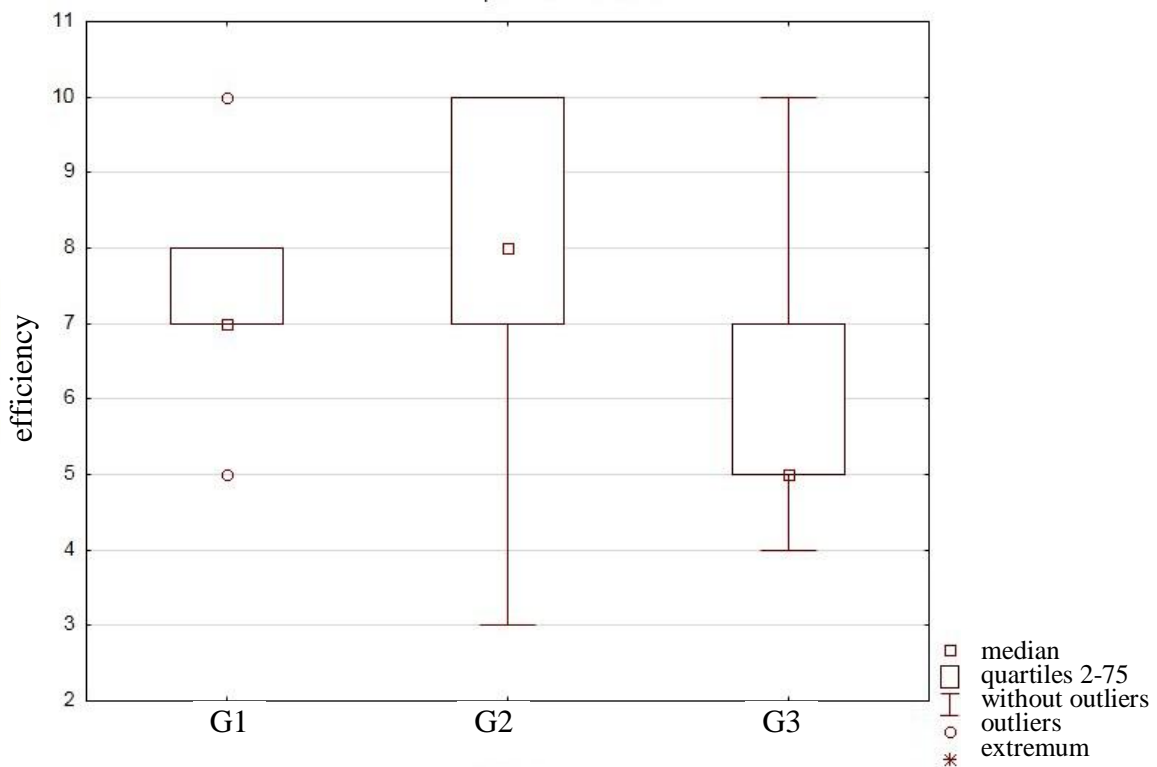


Fig. 4. Quantitative indicators of efficiency according to J. E. Mezzich et al. method of assessing the quality of life (adaptation of N. O. Maruta, points)

Similar patterns were found in the field of interpersonal interaction: the lowest rate of QLI in this area was found in IDPs:  $7.19 \pm 1.42$  points; in the relatives of the fallen it was higher -  $8.67 \pm 1.03$  points, and the highest it was in the relatives of unaffected combatants:  $8.90 \pm 1.15$  points. Differences are significant when comparing G1 and G3 ( $p < 0.05$ ) and G2 and G3 ( $p < 0.01$ ) (Fig.5)

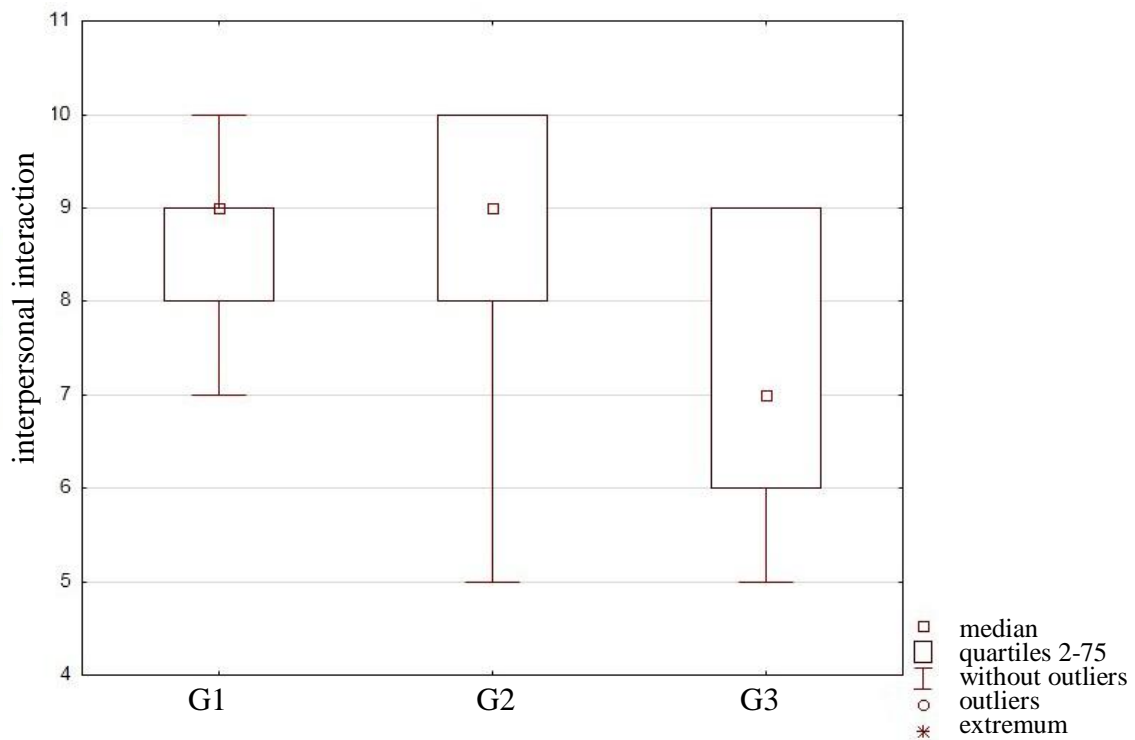


Fig. 5. Quantitative indicators of interpersonal interaction according to J. E. Mezzich et al. method of assessing the quality of life (adaptation of N. O. Maruta, points)

There were no significant differences in the indicators of QLI in the groups under study in the field of socio-emotional support. The highest rates were found in relatives of the fallen -  $6.67 \pm 3.44$  points, slightly lower they were in the relatives of unaffected combatants -  $6.31 \pm 2,42$  points, and the lowest indicators were found among IDPs -  $5.50 \pm 2.78$  points. Differences in quantitative indicators are not statistically significant ( $p > 0.05$ ) (Fig. 6).

QLI in the field of public and service support did not differ significantly. Insignificantly ( $p > 0.05$ ) higher they were among the relatives of the fallen -  $6.50 \pm 2.07$  points, slightly lower among IDPs -  $6.44 \pm 1,54$  points, and the lowest they were in the relatives of unaffected combatants -  $6.38 \pm 2.49$  points (Fig. 7).



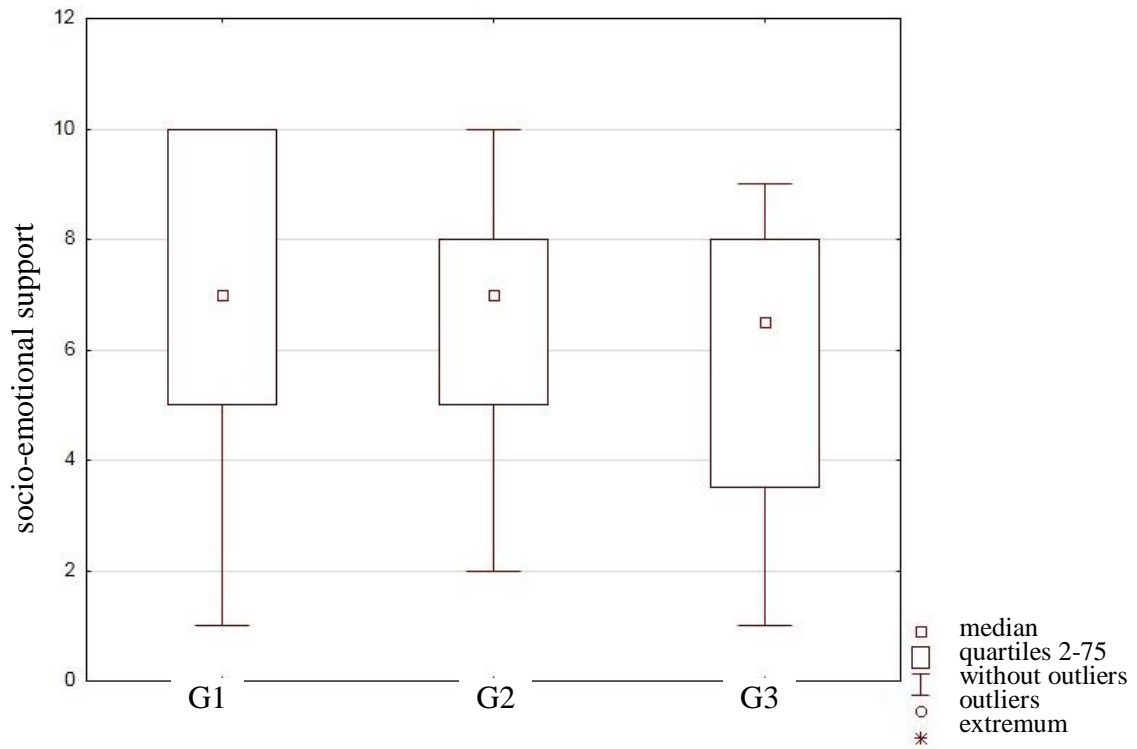


Fig. 6. Quantitative indicators of socio-emotional support according to J. E. Mezzich et al. method of assessing the quality of life (adaptation of N. O. Maruta, points)

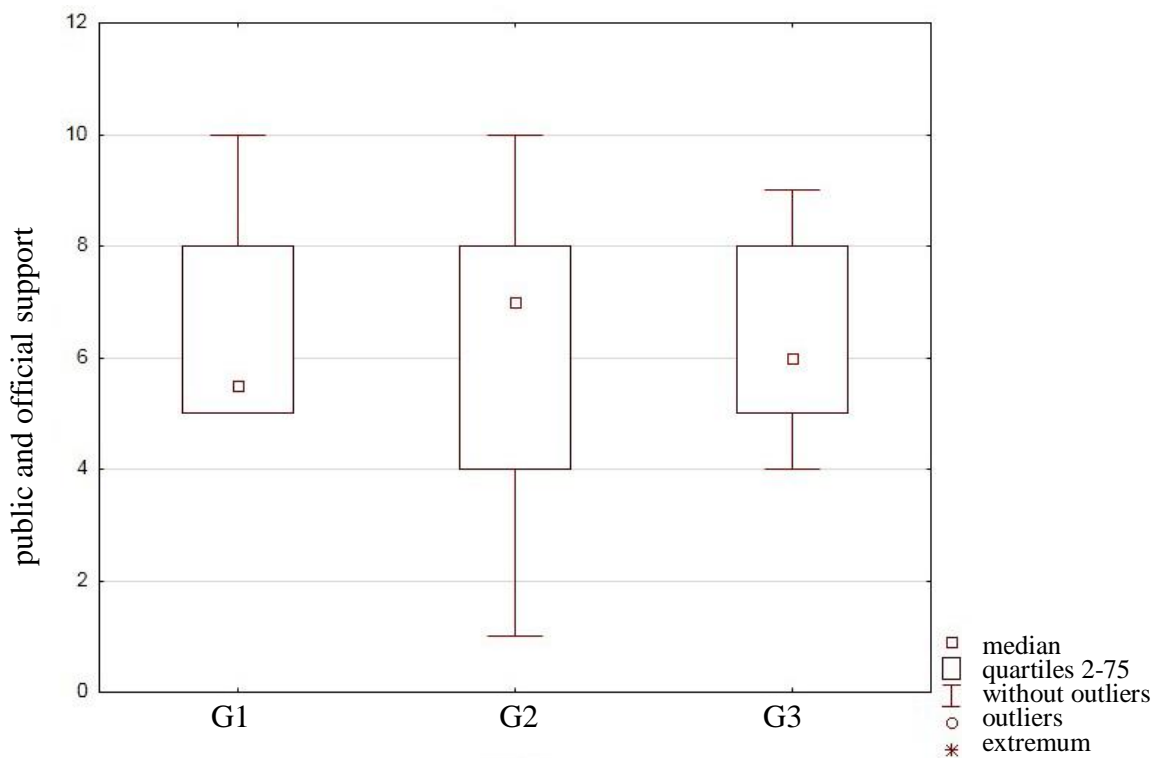


Fig. 7. Quantitative indicators of public and official support according to J. E. Mezzich et al. method of assessing the quality of life (adaptation of N. O. Maruta, points)

There were no significant differences in QLI in the sphere of personal realization, although the ratio between the groups was somewhat different. The highest average value in this area was found in the relatives of unaffected combatants -  $7.37 \pm 1.66$  points, slightly lower it was in IDPs -  $6.88 \pm 1.50$  points, and the lowest in relatives of the fallen -  $6.83 \pm 1.17$  points (Fig. 8).

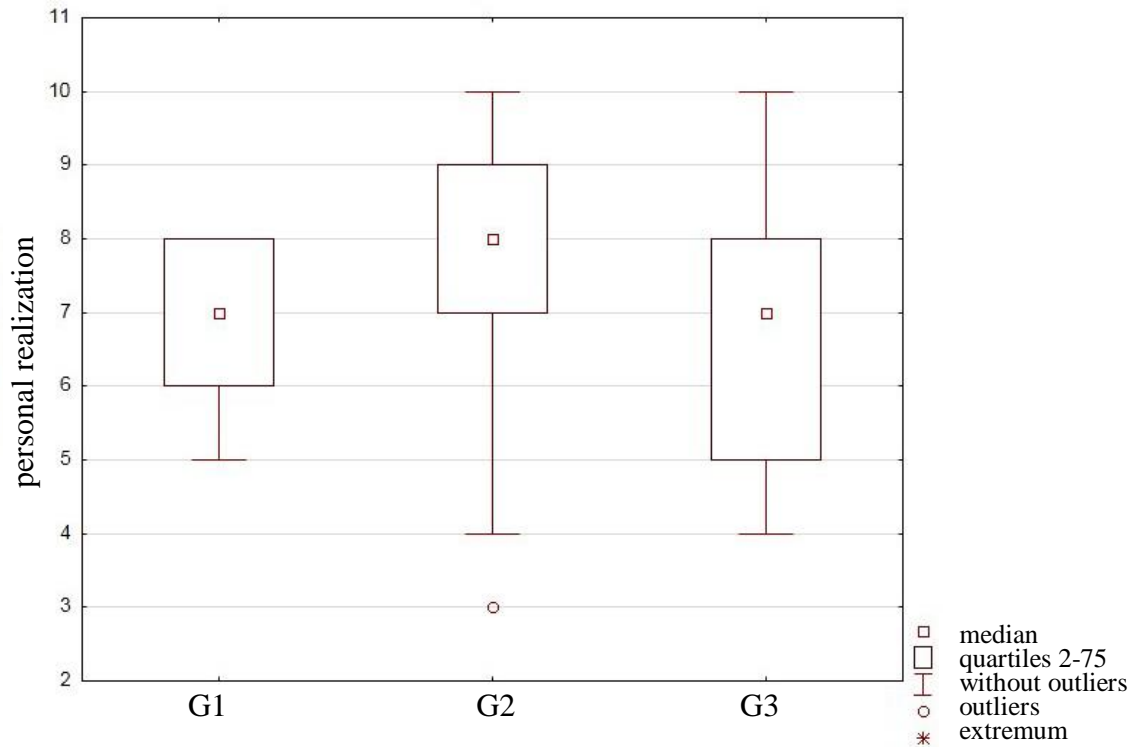


Fig. 8. Quantitative indicators of personal realization according to J. E. Mezzich et al. method of assessing the quality of life (adaptation of N. O. Maruta, points)

Relatives of unaffected combatants had the highest indicators in the field of spiritual realization -  $7.14 \pm 2.08$  points, insignificantly ( $p > 0.05$ ) lower they were among the relatives of the fallen -  $6.83 \pm 2.23$  points, and significantly ( $p < 0.05$ ) lower - in IDPs:  $6.44 \pm 1.13$  points (Fig. 9).

The indicators of QLI in the field of life general perception did not differ significantly among the representatives of all the groups under study. The highest rate in this area was found in relatives of the fallen -  $7.33 \pm 2.16$  points, slightly lower it was in the relatives of unaffected combatants -  $7.15 \pm 2.02$  points, and the lowest it was in IDPs -  $6,97 \pm 1.91$  points (Fig. 10).

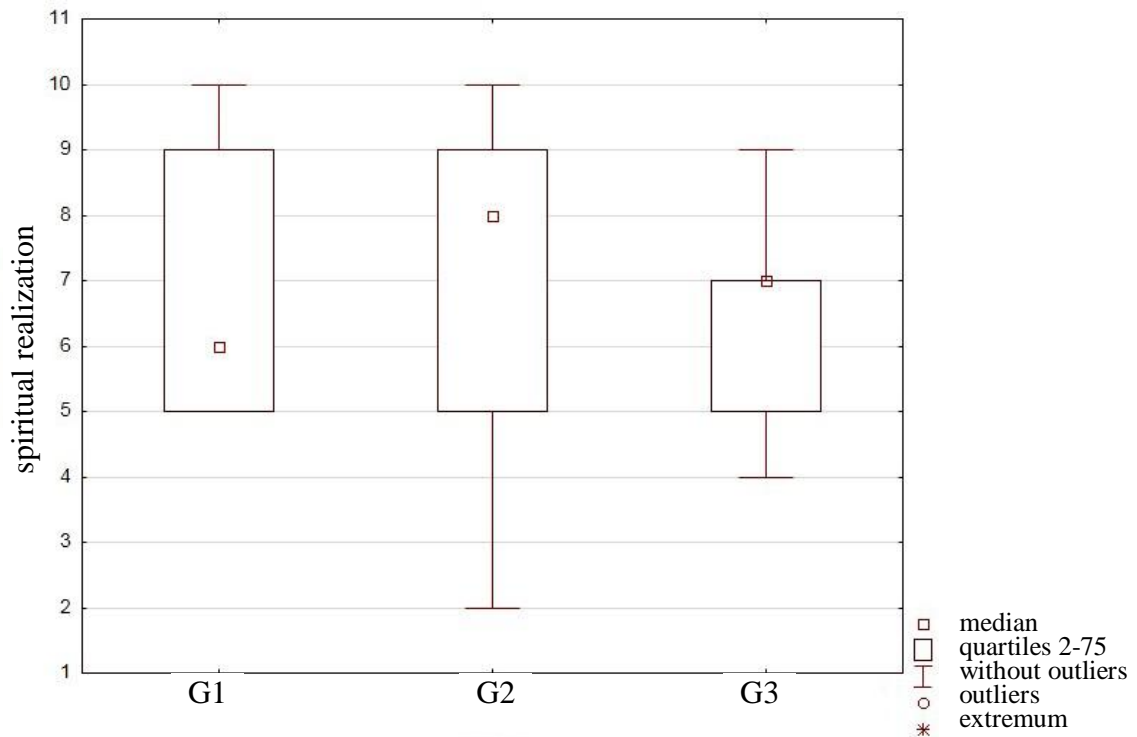


Fig. 9. Quantitative indicators of spiritual realization according to J. E. Mezzich et al. method of assessing the quality of life (adaptation of N. O. Maruta, points)

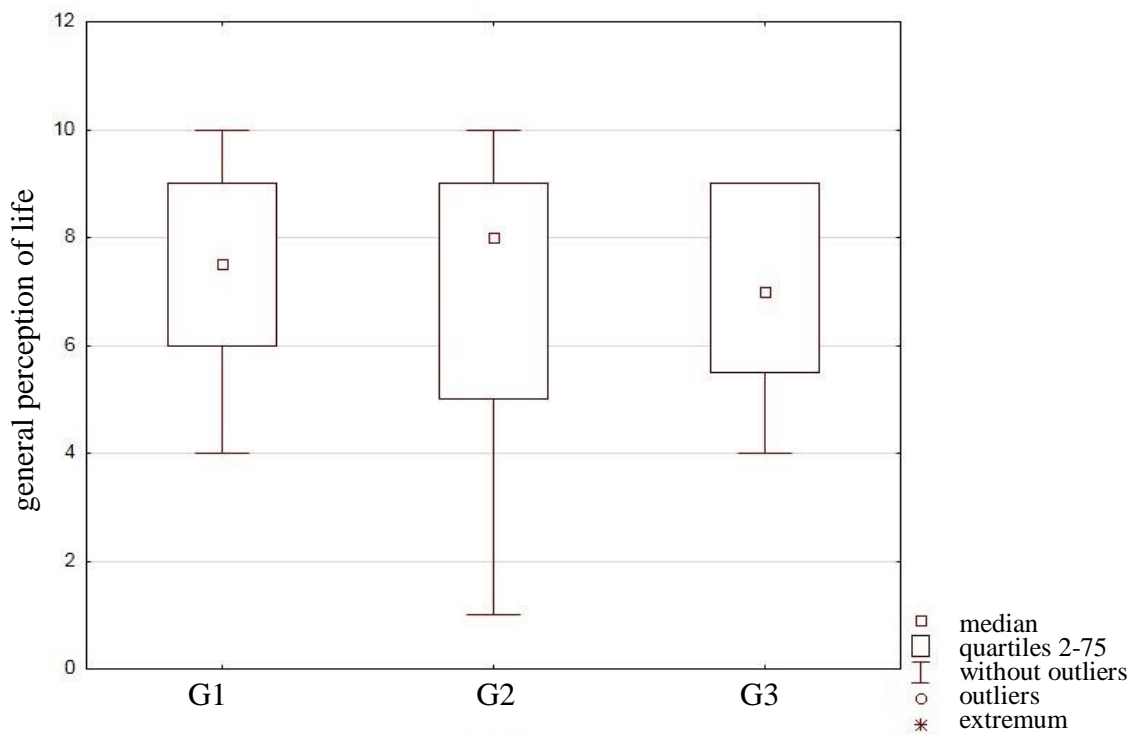


Fig. 10. Quantitative indicators of general perception of life according to J. E. Mezzich et al. method of assessing the quality of life (adaptation of N. O. Maruta, points)

The results of the analysis of QLI in integral spheres are important.

The integrated indicator of subjective well-being / satisfaction was the lowest among IDPs -  $18.13 \pm 3.08$  points; insignificantly ( $p > 0.05$ ) higher it was among relatives of the fallen -  $20.67 \pm 5.79$  points, and significantly ( $p < 0.01$ ) higher it was in the relatives of un affected combatants -  $20.77 \pm 3.94$  points (Fig. 11).

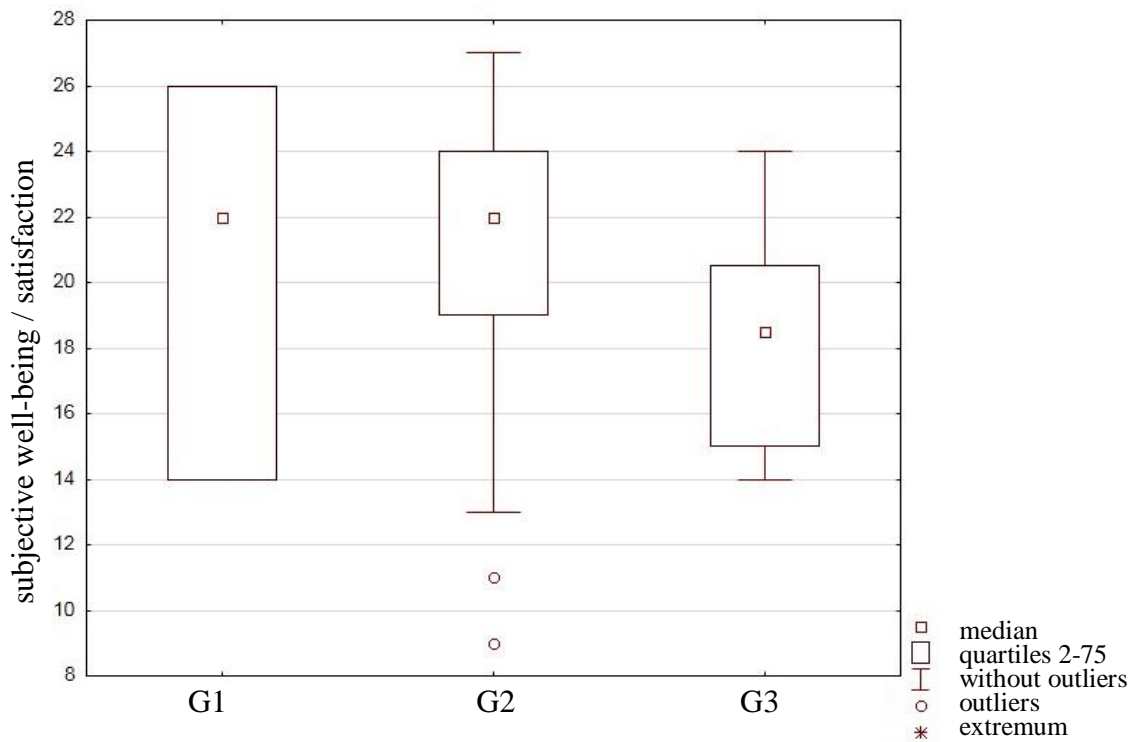


Fig. 11. Quantitative indicators of subjective well-being / satisfaction according to J. E. Mezzich et al. method of assessing the quality of life (adaptation of N.O. Maruta, points)

The integrated indicator of social roles was also the lowest among IDPs -  $28.75 \pm 2.71$  points, insignificant ( $p > 0.05$ ) higher it was among the relatives of the fallen -  $31.33 \pm 3.01$  points, and significant ( $p < 0.01$ ) higher - in the relatives of unaffected combatants -  $33.62 \pm 3.90$  points (Fig. 12).

The integrated indicator of external living conditions did not differ significantly in the groups under study ( $p > 0.05$ ). The lowest value of this indicator was found in IDPs -  $18.38 \pm 4.89$  points, slightly higher it was in the relatives of unaffected combatants and constituted  $19.83 \pm 5.08$  points, and the highest it was in the relatives of the fallen -  $20.00 \pm 6.66$  points (Fig. 13).

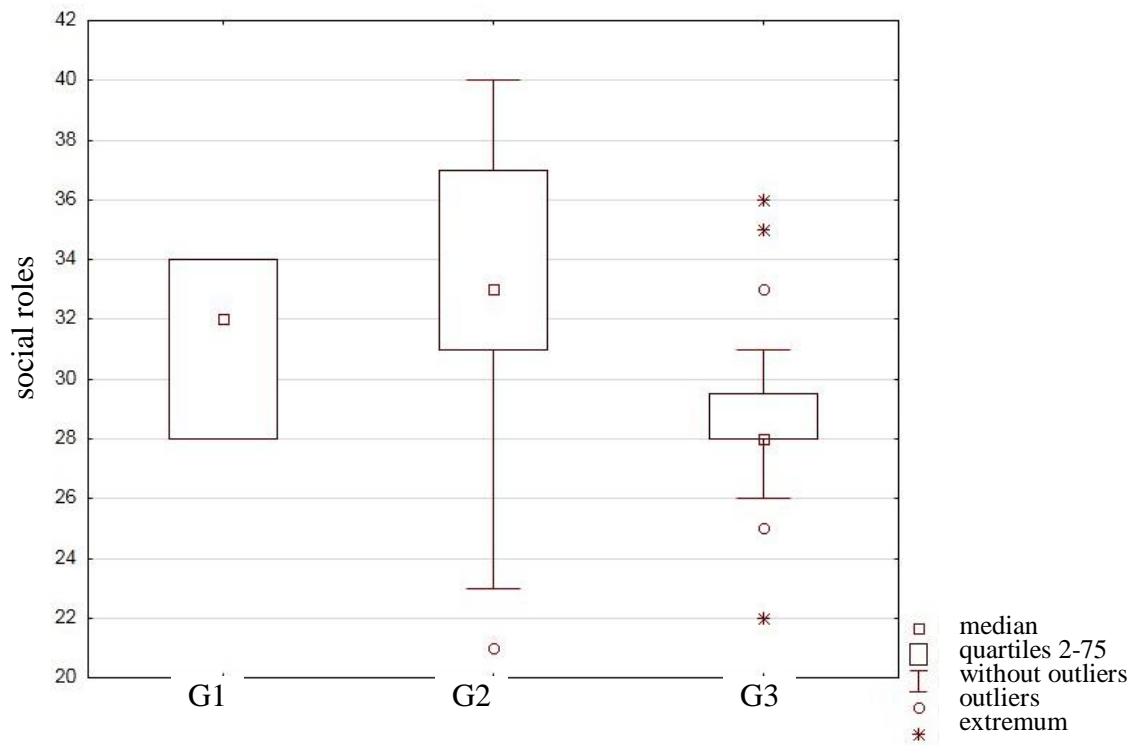


Fig. 12. Quantitative indicators of social roles according to J. E. Mezzich et al. method of assessing the quality of life (adaptation of N. O. Maruta, points)

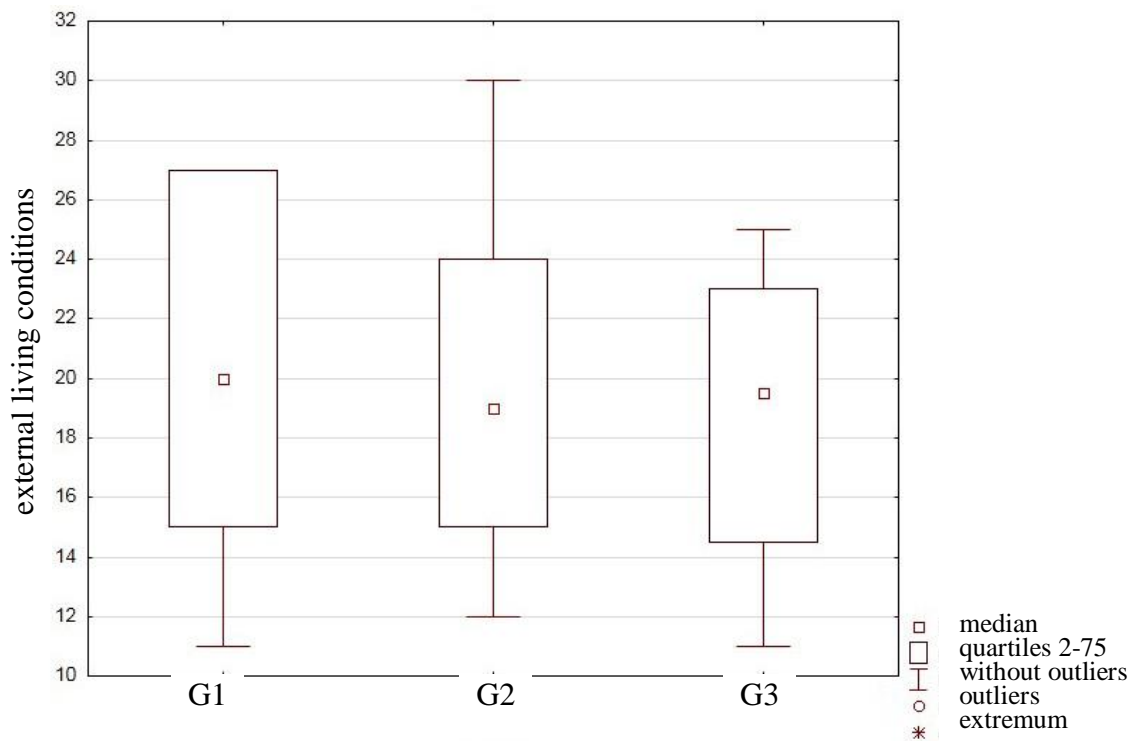


Fig. 13. Quantitative indicators of external living conditions according to J. E. Mezzich et al. method of assessing the quality of life (adaptation of N. O. Maruta, points)

The total quality of life indicator was the lowest among IDPs -  $6.53 \pm 0.87$  points, slightly ( $p > 0.05$ ) higher it was among the relatives of the fallen and constituted  $7.20 \pm 1.50$  points, and the highest ( $p < 0.01$ ) it was in the relatives of unaffected combatants -  $7.42 \pm 1.00$  points (Fig. 14).

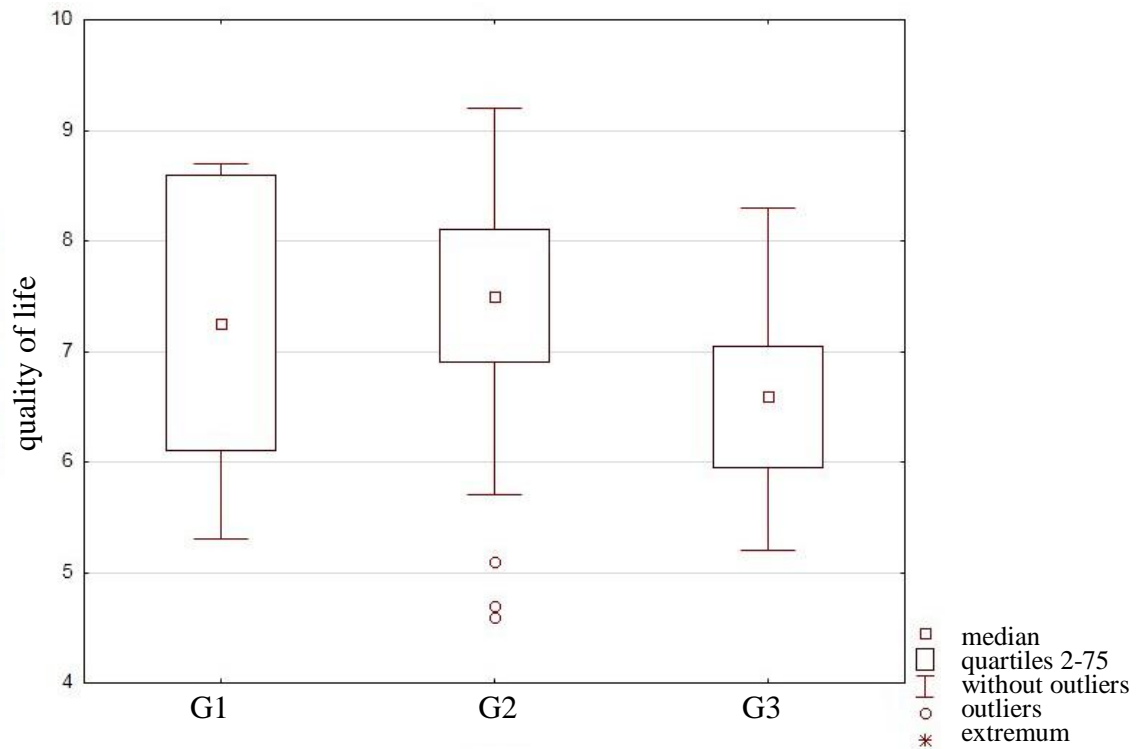


Fig. 14. Quantitative indicators of integrated quality of life according to J. E. Mezzich method of assessing quality of life (adaptation of N. O. Maruta, points)

Thus, the lowest scores in most areas of life, both individual and integrated, were found in IDPs. In our opinion, when interpreting these indicators, it should be borne in mind that QLI were formed on the basis of their self-assessment by the subjects. Low scores of IDPs may show both a conscious and an unconscious desire to draw attention to their psychological and social problems, as this group is the least socially protected and receives the least social support from the state. The attitude of society to this group is also ambiguous, in contrast to the attitude to combatants and members of their families. All this can have a significant impact on the self-esteem of QLI in various areas, primarily related to social functioning. QLI in all areas, as well as integrated QLI, did not differ significantly between relatives of the fallen and relatives of unaffected combatants. This, in our opinion, gives grounds to consider them as the same in QLI characteristics. At the same time, it should be noted that the ratio of QLI in different areas in these groups was different, which indicates the

complexity and multifactorial impact of various factors on their assessment by relatives of combatants and IDPs.

**Conclusion.** The identified patterns should be taken into account when developing correctional and prevention programs for these contingents.

**References:**

1. Peace and Security / Bulletin on United Nations. New York: UN, 2020. 36 p.
2. Andreouli E., Howarth C. National identity, citizenship and immigration: Putting identity in context // *Journal for the Theory on Social Behaviour*. 2013. Vol. 43(3). P. 361-382.
3. Gomez-Suarez A., Newman J. Safeguarding political guarantees on the Colombian peace process: Have Santos and FARC learnt the lessons from the past? // *Third World Quarterly*. 2013. Vol 34(5). P. 819-837.
4. Hopkins N., Blackwood L. Everyday citizenship: Identity and recognition // *Journal on Community & Applied Social Psychology*. 2011. Vol. 21. P. 215-227.
5. Howarth C., Andreouli E., Kessi, S. Social representations and the politics on participation / in P. Nesbitt-Larking, C. Kinnvall, T. Capelos, & H. Dekker (Eds.), *The Palgrave handbook on global political psychology* (pp. 19-38). Basingstoke, United Kingdom: Palgrave Macmillan. 2014.
6. Jovchelovitch S., Priego-Hernandez J. Underground sociabilities: Identity, culture and resistance on the favelas on Rio0-de- Janeiro. Brasilia, Brazil: UNESCO. 2013. 246 p.
7. Kaplan O., Nussio E. Community counts: The social reintegration on ex-combatants on Colombia. Bogota. 2013.
8. Ugarriza J. E., Craig, M. J. There levance on ideology to contemporary armed conflicts: A quantitative analysis on former combatants on Colombia // *Journal of Conflict Resolution*. 2013. Vol. 57(3). P. 445-477.
9. Goldstein-Piekarski A. N., Korgaonkar M. S., Green E., Suppes T., Schatzberg A. F., Hastie T. et al. Human amygdala engagement moderated by early life stress exposure is a biobehavioral target for predicting recovery on antidepressants // *Proc. Natl. Acad. Sci. U.S.A.* 2016. Vol. 113. P. 11955–11960.