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УСТОЙЧИВОСТЬ К СТРЕССУ В УСЛОВИЯХ ПАНДЕМИИ COVID-19
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STRESS RESILIENCE UPON THE PROLONGED COVID-19 PANDEMIC
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Резюме. В статье представлено сравнение устойчивости к стрессу до и после пандемии среди различных групп населения Республики Беларусь и групп населения западных стран.

Ключевые слова: устойчивость к стрессу, пандемия, частота возникновения стресса, дистресс.

Resume. This article includes the comparison of stress resilience before and after the pandemic among different population groups of the Republic of Belarus and the population groups in western countries.

Keywords: stress resilience, COVID-19 pandemic, frequency of stress, distress.

Relevance. An epidemic caused by COVID-19 with its high unpredictability and limited control is a source of a variety of pandemic-related effects. One of the effects is the influence on stress resilience among different population groups. Therefore, the relevance of understanding of the problem of stress resilience before and after the pandemic can help people with stress disorders.

Aim: to outline the differences of stress resilience before and after the pandemic among different population groups of the Republic of Belarus against the population groups in western countries.

Objectives:

1. To extract and analyze the findings of the survey Association between psychological resilience and changes in mental distress during COVID-19 pandemic conducted by researchers in Mental Health and Psychiatry from the USA, Germany and Australia.

2. To carry out a survey among different age groups regarding personal assessments of stress resilience before and after the pandemic.

3. To draw out and examine the results of the survey Stress resilience upon the prolonged COVID-19 pandemic in Belarus.

4. To contrast the outcomes of the two surveys addressed and to come to appropriate conclusion.

Materials and methods. A survey of different age groups was carried out, which includes personal assessments regarding stress resilience before and after the pandemic. Participants numbered 58 persons of which 24.1 % (14) were male citizens and 75.9% (44) female citizens of Belarus. The article The impact of the prolonged COVID-19 pandemic

on stress resilience mental health: A critical review across waves was used for comparison. This article contains an overview on how the pandemic impacts mental health and influences stress resilience of 1468 participants.

Results and their discussion. The survey includes participants numbered 58 persons of which 24 % (14) were male citizens and 76% (44) female citizens of Belarus.



Fig. 1 – Stress resilience before and after the pandemic

The questionnaire contains answers from people of a wide age range (17-70), although the overwhelming majority is made up of responders aged 17-20. The evaluation of the survey shows that there is a change in stress resilience among the different population groups in Belarus.

The bar diagram presented above shows that the stress resistance was assessed to be rather moderate (63.8%-37) than high (29.3%-17) or low (10.3%-6) before the COVID-19 pandemic. However after the pandemic there is a shift regarding the assessments of the stress resilience. The majority (60.3%-35) still have a moderate stress resilience. On the one hand, fewer people (24.1%-14) feel a high stress resilience, on the other hand, more people (15.5%-9) perceive a low stress resilience. Generally the graph illustrates a slight downward trend in the high zone of stress resilience, as well as in the zone of moderate stress resilience contrasted to a significant upward trend in the low zone of stress resilience in the period following the COVID-19 pandemic.

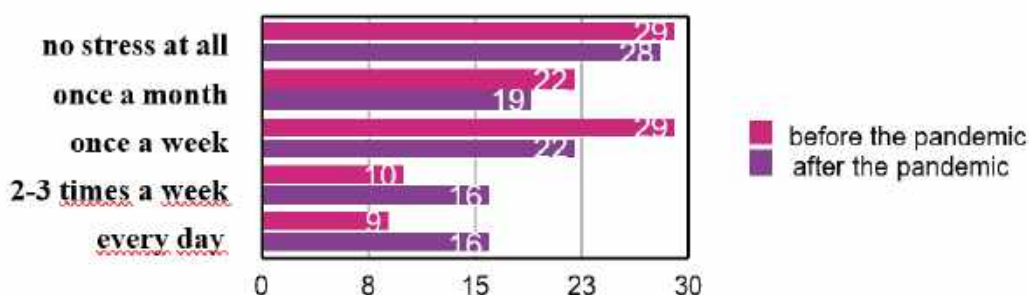


Fig. 2 – Frequency of stress exposure

Stress resilience is closely connected to the frequency of the feeling of stress.

The bar chart shows the frequency of experiencing stress before and after the COVID-19 pandemic. Before the pandemic 29.3% of the participants do not experience stress at all, 22.4% once a month, 29.3% once a week, 10.3% two or three times a week and 10.3% every day. After the pandemic the frequency of stress experience increased. 27.6% of the

participants still do not experience stress at all, 19% were confronted with stress once a month, 22.4% once a week, 15.5% two or three times a week and 15.5% were confronted with stress every day. So there is a general change regarding the frequency of stress exposure. On the one hand, there were upward trends regarding the frequency of stress in general. On the other hand, fewer people feel stressed once a month (19%) or once a week (22%) after the pandemic, but more people are confronted with stress two or three times a week (16%) or daily (16%) in comparison with the stress incidence before the COVID-19 pandemic.

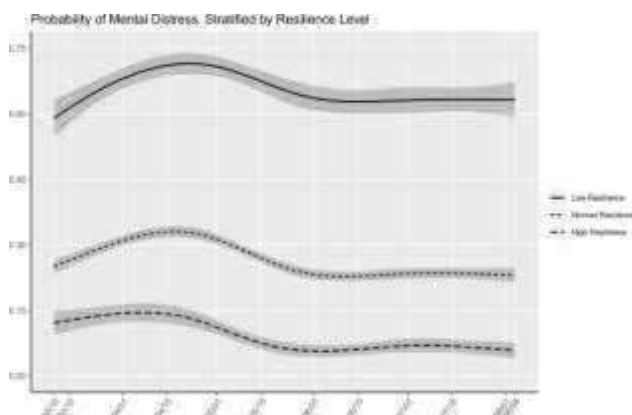


Fig. 3 – Predicted probabilities (bold lines) of mild, moderate, or severe mental distress with 95% confidence intervals (shaded areas) by date of survey completion, stratified by resilience level

Likewise Belarusian citizens in western countries there are also changes regarding stress resilience and increased experiences of distress before and after the pandemic. 1468 participants of which 51 % were female citizens and 49 % were male of USA took part in the survey Association between psychological resilience and changes in mental distress during COVID-19 pandemic. The line graph presented above shows the probability of mental distress stratified by stress resilience level. These findings were taken out of the survey Association between psychological resilience and changes in mental distress during COVID-19 pandemic which was conducted by researchers in Mental Health and Psychiatry from the USA, Germany and Australia. In contrast to the high resilience group, participants in the low and moderate resilience groups experienced increases in mental distress in the early months of the pandemic.

In the longitudinal study, the observation was marked by difference in trajectories of mental distress in connection to self-reported lower stress resilience during the COVID-19 pandemic. The illustrated results reflect the same trend as is shown on the diagram demonstrating the frequency of stress exposure in Belarus. [1]

The table given shows the causes of stress before and after the COVID-19 pandemic. Evidently, there is a shift regarding the role of the experienced causes of stress listed in the table. The lack of rest sufficiency has clearly decreased, so have the difficulties in family relationships. On the other hand, disease exposure, conflicts, phobias, problems in communication and stress caused by professional activities associated with increased responsibility have become things of greater concern.

Tab. 1. Cause of stress before and after the COVID-19 pandemic

Before the pandemic	After the pandemic
Lack of rest sufficient to restore the psyche-47%	Lack of rest sufficient to restore the psyche-31%
Informational overload- 45%	Informational overload- 45%
Disease- 21%	Disease- 36%
Conflicts, phobias, problems incommunication- 28%	Conflicts, phobias, problems incommunication- 30%
Difficult family relationships- 29%	Difficult family relationships-22%

The given table shows the changes regarding the signs of stress before and after the COVID-19 pandemic. Obviously, such signs of stress as anxiety, decrease in performance, depression, apathy and muscle tension

increased after the pandemic. Signs of headache and sleep disturbance stayed the same after the pandemic. All in all very person reacts different to upcoming stress before and after the pandemic and the signs of stress are also individual.

Tab. 2. Signs of stress before and after the pandemic

Signs of stress before the pandemic	Signs of stress after the pandemic
Headache- 45%	Headache- 45%
Increased anxiety- 43%	Increased anxiety- 53%
Decrease in performance- 40%	Decrease in performance- 43%
Depression, apathy- 33%	Depression, apathy- 38%
Sleep disturbance- 43%	Sleep disturbance- 43%
Muscle tension in the head, neck, shoulders, back- 28%	Muscle tension in the head, neck, shoulders, back- 35%

Conclusions:

1. The survey allows us to conclude that both in Belarus and in Western countries there are changes regarding stress resilience which has become lower.

2. Evidently, there is a higher incidence of stress exposure and increased mental distress after the pandemic as compared to the period before the pandemic.

3. The relevance of understanding the problem of stress resilience before and after the pandemic can help people and clinicians to manage stress disorders.

Literature

1. The impact of the prolonged COVID-19 pandemic on stress resilience and mental health: A critical review across waves [Digital resource]/National Library of Medicine- electronic data & program: 2021 Oct 29.- regime on access to resource: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8554139/> (date of use: 12.04.2023)