THE NATURE OF THE MANIFESTATION OF PROCRASTINATION AMONG MEDICAL UNIVERSITY TEACHERS DURING THE PERIOD OF ALTERED PSYCHO-EMOTIONAL STATE DURING FORCED SOCIAL DISTANCING DUE TO THE COVID-19 PANDEMIC AND ITS IMPACT ON THE QUALITY OF LIFE

ABSTRACT

Introduction. According to scientific data, unemployed, lonely and students are most prone to procrastination. And what about teachers, in particular, higher education institutions? There is not enough data in the available literature. As practice shows, in the case of teachers, procrastination or postponement can manifest itself in the form of stress caused by failure to fully realize goals and plans vital to the individual. Negative consequences are expressed both in reduced work capacity and in acute emotional experiences of one's own failure, dissatisfaction with the results of one's work.

The aim of the study was to investigate and evaluate the level of anxiety, depression and the nature of manifestations of procrastination among teachers of the Ivano-Frankivsk National Medical University during the period of altered psycho-emotional state during forced social distancing in connection with the COVID-19 pandemic and its impact on social functioning and quality of life.

Materials and methods: The survey was voluntary and anonymous. The research was approved by the Bioethics Committee of Ivano-Frankivsk National Medical University and conducted according to the principles of the Helsinki Declaration. We used two clinical test methods to identify emotional disturbances: the Hospital Anxiety and Depression Scale (HADS) and the Montgomery-Asberg Depression Rating Scale (MADRS) (Zigmond A.S. et al., 1983; Svanborg P., 2001). In order to assess the degree of expressiveness of the propensity to postpone matters "for later" among the surveyed teachers, we created a special Google questionnaire created on the basis of data. "Questionnaire to study the propensity of the individual to procrastination" (Shivari O.A., 2015), which is a modification of the "General Procrastination Scale" (Lay, C., 1986) and consists of two scales: "Personally
conditioned procrastination scale" (Scale I) and "Situationally conditioned procrastination scale" (Scale II). Scale I indicates the general level of procrastination, and Scale II - motivational procrastination, its high indicators suggest that the questionnaire will perform some work only in the presence of motivation. In addition, in order to assess the quality of life, the data of "The Quality of Life Enjoyment and Satisfaction Questionnaire - Short Form (Q-LES-Q-SF)" were evaluated. (Endicott J; Rapaport MH; Clary C; Fayyad R). The statistical analysis of the results was performed using STATISTICA 7.0 software packages and the package of statistical functions of Microsoft Excel.

Results and discussion: Were interviewed 214 teachers of various departments of the Ivano-Frankivsk National Medical University: 174 (81.6%) women, 40 (18.6%) - men. 58 interviewees (27.1%) worked at theoretical departments, 156 (72.9%) – at clinical departments. The analysis of the results of the survey according to the «Personally conditioned procrastination scale» showed that 32 (14.9%) of the teachers interviewed by us have had a low, 96 (44.8%) - medium, and 86 (40.3%) - a high level of personal tendency to procrastination. Data of "Situationally conditioned procrastination scale" showed that 54 (25.2%) have had a low level of situational procrastination, 76 (35.5%) - medium and 84 (39.3%) - high, respectively. Based on the results of the survey on the HADS scale, a normal level of anxiety-depressive symptoms (0 - 7 points on a scale) was found in 9 (15.5%) workers from the theoretical departments and in 52 (33.3%) - clinical departments. According to the data of the conducted questionnaire according "The Quality of Life Enjoyment and Satisfaction Questionnaire - Short Form (Q-LES-Q-SF), the least satisfied respondents were by daily functioning, present depressed mood, inability to perform housework efficiently and to spend leisure time interestingly, engage in hobbies or even perform professional duties.

Conclusions. The complex of research methods made it possible to comprehensively consider procrastination as a model of the behavior of the subjects and to determine the factors influencing its occurrence during the period of changes in the psycho-emotional state caused by forced distancing in connection with the Covid-19 pandemic and to study the relationship of procrastination with the level of quality of life (from the point of view of satisfaction and enjoyment of life). The main reasons for procrastination were dominated by: lack of motivation to work; stress, as a result of uncertainty and fear of the future; laziness; limited "live" communication and an excess of virtual, external distractions. It is noteworthy that among teachers this phenomenon is not limited to academic procrastination, in most cases everything is fine in this cluster, but more often it extends to homework, interpersonal communication, social and personal life. Attention is drawn to the fact that among teachers this phenomenon is not strictly limited to academic procrastination, but extends to household tasks, interpersonal communication, social and private life.

**KEYWORDS**

procrastination, teachers, higher medical education, quality of life, mental health, physical health, COVID-19.
According to scientific data, unemployed, lonely and students are most prone to procrastination. And what about teachers, in particular, higher education institutions? Most scientists are inclined to think that the main reason for the prevalence of this phenomenon is scientific and technological progress, which leads to an increase in the pace of life with increasingly strict deadlines for the completion of works and increased requirements for their quality. This phenomenon is more typical of citizens of technologically developed and developing countries. It is noted that the propensity to procrastination is much more characteristic of mental work specialists, which includes teachers of higher educational institutions, in particular doctors, than for workers engaged in physical activity (Babatina, Svitenko, 2019, Romash, 2020).

The essence of the "procrastination" phenomenon is that, while maintaining visible activity, human activity ceases to be productive. The negative consequences of procrastination are manifested not only in a decrease in success and productivity of activities, but also in acute emotional experiences caused by one's own failure, dissatisfaction with the results of one's activities. This entails a loss of faith in oneself, in one's strengths, a decrease in self-esteem, and can plunge a person into a chronic sense of guilt. Another scientific fact: a number of psychosomatic diseases can arise due to the postponement of cases. That is why the process of procrastination is considered as a mechanism that triggers destructive phenomena both physiologically (a state of stress, anxiety, apathy, etc.) and psychologically (a sense of guilt, a sense of failure, low self-efficacy, etc.), causing a violation of social well-being (Yekhalov, Kravets, Barannik, Pylypenko, Sydorenko, 2021).

Thus, although the phenomenon of procrastination was the subject of research by many scientists in foreign and domestic
science, this problem was hardly studied among teachers of higher educational institutions, in particular medical ones. In addition, the social significance of the increase in the number of people who procrastinate and the harmful effect of this phenomenon on the individual, testifies to the undeniable relevance and importance of this research.

**PURPOSE**

The aim of the study was to investigate and evaluate the level of anxiety, depression and the nature of manifestations of procrastination among teachers of the Ivano-Frankivsk National Medical University during the period of altered psycho-emotional state during forced social distancing in connection with the COVID-19 pandemic and its impact on social functioning and quality of life.

**METHODOLOGY**

The survey was voluntary and anonymous. We used two clinical testing methods to detect emotional disorders: the Hospital Anxiety and Depression Scale (HADS) and the Montgomery-Asberg Depression Rating Scale (MADRS) (Zigmond A.S. et al., 1983; Svanborg P., 2001).

In order to assess the degree of expressiveness of the propensity to postpone matters "for later" among the surveyed teachers, we created a special Google questionnaire created on the basis of data. "Questionnaire to study the propensity of the individual to procrastination" (Shivari, 2015), which is a modification of the "General Procrastination Scale" (Lay, C., 1986) and consists of two scales: "Personally conditioned procrastination scale" (Scale I) and "Situationally conditioned procrastination scale" (Scale II). Scale I indicates the general level of procrastination, and Scale II - motivational procrastination, its high indicators suggest that the questionnaire will perform some work only in the presence of motivation.

In addition, in order to assess the quality of life, the data "The Quality of Life Enjoyment and Satisfaction Questionnaire - Short Form (Q-LES-Q-SF)" (Endicott J; Rapaport MH; Clary C; Fayyad R), which consists of 16 items. In this questionnaire, each question is rated on a 5-point scale from 1 (very bad) to 5 (very good). Scores for individual items are added together and reported as the highest possible percentage. The short form Q-LES-Q-SF is identical to the general functioning subscale of the larger instrument of the Quality of Life Satisfaction and Enjoyment Questionnaire (Q-LES-Q).

Statistical processing of the results was carried out using STATISTICA 8.0 (StatSoft, Serial STA862D175437Q) software packages and Microsoft Excel statistical functions package. Arithmetic mean (M) and standard error (±m) were used to describe quantitative characteristics. The reliability of the obtained indicators was confirmed by the calculation of errors for relative values, and the probability of a difference in the data in the compared groups was proven based on the calculation of the t-coefficient (Student's t-criterion).

We performed the correlation analysis using the Pearson coefficient. The direction of the connection was indicated by the sign "-" - reverse connection, or "+" - forward connection. We evaluated the strength of the correlation by the following gradations: \( r = 0.3 \) – weak, \( r = 0.3-0.5 \) – moderate, \( r = 0.5-0.7 \) – significant, \( r = 0.7-0.9 \) is strong, \( r = 0.9-0.99 \) is very strong. We used median (Me), mode (Mo) and interquartile range: lower-upper quartile (LQ-HQ) to describe quantitative features.
We calculated the odds ratio (OR), the standard error of the odds ratio (S) and assessed the statistical significance of this relationship by calculating its 95% confidence interval (CI): its lower and upper limits. We took 0.05 as the critical level of significance when testing statistical hypotheses (Mintser, Voronenko, Vlasov, 2003).

The study was approved by the Bioethics Committee of the Ivano-Frankivsk National Medical University and was conducted in accordance to the basic principles of GMP (1996), ethical principles of scientific medical research with human participation - the Helsinki Declaration of the World Medical Association (Helsinki 1964, 2000 ed.).

RESULTS AND DISCUSSION

We interviewed 214 teachers of various departments of the Ivano-Frankivsk National Medical University. Most of the respondents were women, 174 (81.6%), while only 40 (18.6%) were men. (Fig. 1.).

Fig. 1. Distribution of respondents by gender.

The profile of the departments whose employees were interviewed is presented in Figure 2. According to the obtained data, 58 interviewees (27.1%) worked at theoretical departments, while 156 (72.9%) – at clinical departments. In particular, 76 therapists, 33 surgeons, 18 pediatricians, 8 pharmacists, and 29 dentists were among those surveyed.

Fig. 2. Distribution of respondents by profile of departments.
The analysis of the results of the survey according to the «Personally conditioned procrastination scale» (Scale I) showed that 32 (14.9%) of the teachers interviewed by us have had a low, 96 (44.8%) - medium, and 86 (40.3%) - a high level of personal tendency to procrastination (fig 3 a). The analysis of the results "Situationally conditioned procrastination scale" (Scale II) showed that 54 (25.2%) of the teachers interviewed by us have had a low level of situational procrastination, 76 (35.5%) - medium, and 84 (39.3%) - high, respectively (fig 3 b).

![Image](image1.png)

**Fig. 3** Distribution of respondents depending from the level of personally conditioned (a) and situationally conditioned (b) manifestation of procrastination.

Based on the results of the survey on the HADS scale (Fig. 4 a) and 4 b)) during the period of altered psycho-emotional state, a normal level of anxiety-depressive symptoms (0-7 points on a scale) was found in 9 (15.5%) workers from the theoretical departments and in 52 (33.3%) - clinical departments. Symptoms of "borderline" states (8-10 points on a scale) were found in 33 (56.8%) and 49 (31.4%) of teachers from the theoretical and clinical departments, respectively. Clinically pronounced anxiety and depression (11-21 points) were found in 16 (27.7%) of teachers from the theoretical and 55 (35.3%) from the clinical departments.

![Image](image2.png)

**Fig. 4** Distribution of respondents depending on the level of manifestation of anxiety-depressive symptoms (according to the HADS scale) of teachers from the theoretical and clinical departments.
The results of the questionnaire conducted according to "The Quality of Life Enjoyment and Satisfaction Questionnaire - Short Form (Q-LES-Q-SF)" are shown in Figure 5. As can be seen from the presented data, the least satisfied examined patients were everyday functioning, low mood, inability to perform qualitatively chores around the house, the impossibility of spending free time, engaging in hobbies or even fulfilling professional duties.

**Fig. 5. Average data interviewing of respondents according to «The Quality of Life Enjoyment and Satisfaction Questionnaire - Short Form (Q-LES-Q-SF)»**

**CONCLUSIONS**

The complex of research methods made it possible to comprehensively consider procrastination as a model of the behavior of the subjects and to determine the factors influencing its occurrence during the period of changes in the psycho-emotional state caused by forced distancing in connection with the Covid-19 pandemic and to study the relationship of procrastination with the level of quality of life (in terms of satisfaction and enjoyment of life). Among the main reasons for procrastination, the following prevailed: lack of motivation to work; stress, as a result of uncertainty and fear of the future;
laziness; limited "live" communication and an excess of virtual, external distractions. It is noteworthy that among teachers this phenomenon is not limited to academic procrastination, in most cases everything is fine in this cluster, but more often it extends to homework, interpersonal communication, social and personal life.

According to the obtained data, among the teachers of the medical university, procrastination can manifest itself in the form of stress caused by the non-realization of goals and plans that are vital for the individual. Negative consequences are expressed both in reduced work capacity and in acute emotional experiences of one's own failure, dissatisfaction with the results of one's work. The fact that among teachers this phenomenon is not limited only to academic procrastination, in most cases everything is fine in this cluster, draws attention, but more often extends to household tasks, interpersonal communication, social and private life.

CONFLICT OF INTERESTS

The Authors declare no conflict of interest.

REFERENCES


Література

Анотація

Актуальність. Згідно з науковими даними, найбільше до прокрастинації схильні безробітні, самотні та студенти. А як же викладачі, зокрема, вищих навчальних закладів? У доступній літературі недостатньо даних.

Мета дослідження. Дослідити та оцінити рівень тривожності, депресії та характер проявів прокрастинації викладачів Івано-Франківського національного медичного університету в період змін психоемоційного стану під час вимушеного соціального дистанціювання у зв’язку з пандемією COVID-19 та її вплив на соціальне функціонування та якість життя.


Результати та обговорення. Було опитано 214 викладачів різних кафедр Івано-Франківського національного медичного університету: 174 (81.6%) жінки, 40 (18.6%) – чоловіки. 58 опитаних (27.1%) працювали на теоретичних кафедрах, 156 (72.9%) – на клінічних. Аналіз результатів опитування за «Особистісно обумовленою шкалою прокрастинації» показав, що 32 (14.9%) опитаних нами вчителів мали низький, 96
(44,8%) – середній, 86 (40,3%) – високий рівень особистісної схильності до прокрастинації. Дані «Шкали ситуативно зумовленої прокрастинації» показали, що 54 (25,2%) мають низький рівень ситуативної прокрастинації, 76 (35,5%) – середній і 84 (39,3%) – високий відповідно. За результатами опитування за шкалою HADS нормальний рівень тривожно-депресивної симптоматики (0-7 балів за шкалою) виявлено у 9 (15,5%) співробітників теоретичних кафедр і у 52 (33,3%) - клінічних. Згідно з даними проведенного опитувальника Q-LES-Q-SF, обстежені найменш задоволені повсякденного життєдіяльностю, присутністю депресивного настрою, нездатністю ефективно виконувати роботу по дому та цікаво проводити дозвілля, займатися хобі або навіть виконувати професійні обов'язки.

**Висновки.** Комплекс методів дослідження дозволив всебічно розглянути прокрастинацію, як модель поведінки досліджуваних, та визначити фактори, що впливають на її виникнення в період змін психоемоційного стану, спричиненого вимушеним дистанціюванням у зв'язку з пандемією COVID-19 та вивчити зв'язок прокрастинації з рівнем якості життя. Серед основних причин прокрастинації переважали: відсутність мотивації до роботи; стрес, як результат невизначеності та страху перед майбутнім; лінь; обмеженість «живого» спілкування та надлишок віртуальних, зовнішніх відволікаючих факторів. Звертає на себе увагу той факт, що серед викладачів це явище не обмежується лише академічною прокрастинацією, у більшості випадків у цьому кластері все гаразд, але частіше поширюється на домашні завдання, міжособистісне спілкування, соціальне та особисте життя.

**КЛЮЧОВІ СЛОВА**

прокрастинація, вчителі, вища медична освіта, якість життя, психічне здоров'я, фізичне здоров'я, COVID-19.