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## IMPOSTORS AMONG FAMILY DOCTORS

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### Summary

**Introduction.** Human resources policy issues in medicine have always played a significant role in ensuring quality medical care for the population. Young specialists face high labor market demands and constant management pressure, without having ready adaptation strategies. The beginning of a success story is always challenging, and sometimes the impostor syndrome can have its influence. Persistent self-doubt leads to emotional exhaustion and the development of a cynical attitude towards others, which can further transform into burnout syndrome.

**The aim:** To analyze the prevalence of the impostor phenomenon among young doctors in the field of «General Practice – Family Medicine» and explore potential correlations with burnout syndrome.

**Materials and methods.** We conducted an anonymous cross-sectional survey of 27 young family doctors using The Clance Impostor Phenomenon Scale and Maslach Burnout Inventory Human Services Survey for Medical Personnel. The research procedure adhered to accepted moral norms, rights, interests, and personal dignity of the participants, in line with the principles of bioethics outlined in the Helsinki Declaration «Ethical Principles for Medical Research Involving Human Subjects» and the «Universal Declaration on Bioethics and Human Rights (UNESCO)».

**Results.** All respondents demonstrated a certain level of impostor syndrome severity, which might be related to a shift in professional role – the transition from intern to independent practitioner – a family doctor. Every fourth intern already showed signs of emotional exhaustion and depersonalization, with 7% having developed burnout syndrome. It is not excluded that these changes are linked to working conditions and military actions on the territory of Ukraine.

**Conclusions.** Nearly half of the respondents were categorized under intermediate burnout syndrome profiles (Overloaded, Ineffective, Detached), which can be corrected with timely identification and effective management. Without exception, all respondents exhibited various degrees of the impostor phenomenon. The impostor syndrome is closely related to emotional exhaustion ( $p=0.002$ ) and depersonalization ( $p=0.000214$ ) within the structure of burnout syndrome, allowing for the development of new correction approaches and optimization of burnout prevention strategies.

**Key words:** family doctors, impostor syndrome, burnout syndrome

### INTRODUCTION

Introduced in Ukraine in recent decades, the competency-based approach has become a catalyst for changes in both quantitative and qualitative dimensions of educational outcomes. Due to its evident advantages, such as bridging gaps between different global education systems, creating prerequisites for integration into the European space, and enhancing the connection between theoretical knowledge and practical needs, this reform direction undoubtedly strengthens the national educational environment and allows learners to acquire quickly the necessary level of professional competence [1]. However,

the continuous increase in quality criteria contributes to elevated stress levels among young professionals who are just embarking on their career paths. It is precisely at the outset of their journey to success and upon assuming a new social role that the impostor syndrome (or «impostor phenomenon») exerts its influence – a psychological phenomenon where individuals suffer from pervasive self-doubt about their abilities, achievements, and professional success [2]. In other words, they believe that their success depends solely on their ability to confidently demonstrate their pseudo-competence, hindering their successful integration into a new environment, adaptation, and professional growth [3]. The frequency of this syndrome is

higher among professionals in the intellectual sphere and is influenced by the absence of clear quality standards for work and a lack of feedback mechanisms (medical personnel, chief executives, academic staff, etc.) [4]. Persistent doubts about their achievements lead to emotional emptiness and can quickly transform into burnout syndrome [5].

**The aim:** to analyze the prevalence of the impostor syndrome among young doctors specializing in «General Practice – Family Medicine» and explore possible correlations with burnout syndrome.

## MATERIALS AND METHODS

A cross-sectional study was conducted using a questionnaire without randomization. Actual anonymous surveying took place immediately after the completion of the state certification for the title of specialist doctor in June 2023 and included two questionnaires. The first one was the «Clance Impostor Phenomenon Scale» (CIPS), consisting of 20 statements rated on a 5-point scale (Likert scale), where 5 indicates complete agreement with the statement and 1 indicates complete disagreement. If the total score ranges from 0 to 40, there are no impostor syndrome manifestations; 41-60 indicates a mild degree; 61-80 indicates a moderate degree; and over 81 points indicates a severe degree. It should be noted that in Ukraine, this test is still undergoing adaptation; currently, it is the most acceptable tool in practice for assessing the expression of the impostor syndrome. We assessed the reliability of the questionnaire using Cronbach's Alpha method ( $\alpha=0.94$ ), indicating high consistency of the Ukrainian version of the questionnaire used in the actual study.

To assess burnout syndrome, we used the Maslach Burnout Inventory Human Services Survey for Medical Personnel (MBI HSS (MP)), which consists of 22 statements. The evaluation of results was conducted using standard methodology [6]. The sample size comprised 27 doctors, the complete graduating class of intern doctors in 2023 from the Department of Family Medicine at the Faculty of Postgraduate Education and Propaedeutics of Internal Medicine.

Following the recommendations of the MBI HSS (MP) questionnaire authors, all participants ( $n=27$ ) were categorized into five profiles: «Burned-Out» (individuals with high scores on the emotional exhaustion and depersonalization scales according to the MBI), «Engaged» (individuals with low scores on emotional exhaustion and depersonalization scales, and high scores on the personal accomplishment scale), «Overloaded» (characterized by high levels of emotional exhaustion only), «Detached» (this profile is formed due to the presence of cynicism), and «Ineffective» (low level of professional accomplishment). According to the assessment standards of the MBI HSS (MP), individuals with the «Engaged» profile do not show any signs of burnout syndrome. The «Overloaded», «Ineffective»

and «Detached» profiles are intermediate with respect to burnout syndrome risks and are amendable to correction. Respondents falling under the «Burned-Out» profile are more likely to have developed burnout syndrome.

The procedure of our conducted research fully adhered to widely accepted moral norms, requirements for the observance of rights, interests, and personal dignity of research participants, in accordance with the principles of bioethics outlined in the Helsinki Declaration «Ethical Principles for Medical Research Involving Human Subjects» and the «Universal Declaration on Bioethics and Human Rights (UNESCO)». All participants provided informed consent to participate in the survey.

Statistical data analysis and presentation of results were carried out using Microsoft Excel and SPSS v29 trial. The distribution of results obtained in the actual study was assessed using the Shapiro-Wilk test. The majority of the data (90%) showed a normal distribution, allowing us to subsequently utilize parametric statistical criteria. The critical level of statistical significance was set at  $p<0.05$ .

## RESULTS

Our study involved 27 young doctors specializing in «General Practice – Family Medicine», who completed their internship in June 2023 and received their specialist medical practitioner certificates. The respondents had an average age of  $M=24.9$  ( $SD=0.57$ ) years, with a majority of females (25 individuals) and 2 males.

According to our data, the lowest score obtained from the CIPS questionnaire was 42, indicating that all respondents exhibited manifestations of the impostor syndrome ranging from mild to severe (Fig. 1). This underscores the presence of this psychological phenomenon among all intern doctors who transition from the student to independent practitioner role when assuming the new social role of a family doctor.

The impostor syndrome is a genuine form of intellectual self-doubt, characterized by a combination of tendencies towards perfectionism, anxiety, and low self-esteem. According to our data, nearly half of the young family doctors exhibited scores corresponding to moderate and severe levels of expression for these components in their personality structure. This primarily indicated an inability to acknowledge their real achievements, knowledge, successes, competencies, and skills. It is worth noting that manifestations of the impostor syndrome become more pronounced in competitive work environments, during transitions to new job positions, or when acquiring higher-ranking positions. This aligns with the design of the actual study, as the survey was conducted during the transition from intern to independent practitioner, a phase where the competitive aspects of young professionals' development increase, along with their responsibilities and demands for evaluating professional abilities.

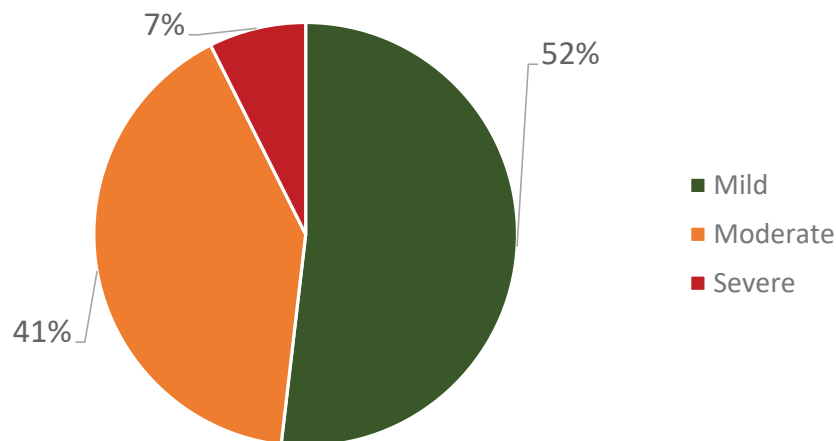


Figure 1. Distribution of respondents according to the degree of severity of impostor syndrome

In accordance with the objectives of the actual study, we also conducted an analysis of the results from the MBI HSS (MP) questionnaire to determine the prevalence of burnout syndrome components among young specialists specializing in «General Practice – Family Medicine» (Table 1)

Table 1

#### Survey results of junior family doctors according to MBI HSS (MP)

Components of burnout syndrome	Low level n (%)	Moderate level n (%)	High level n (%)
Emotional exhaustion	6 (22%)	14 (52%)	7 (26%)
Depersonalization	9 (33%)	12 (44%)	6 (23%)
Reduction of personal accomplishment	10 (37%)	13 (48%)	4 (15%)

\*according to the evaluation standard in the MBI HSS (MP) methodology, a low level on the scale of reduction professional abilities has poorer predictive significance

Based on the data we obtained, it was revealed that 2 doctors exhibit an unfavorable profile characterized by high levels of emotional exhaustion, depersonalization, and reduced professional accomplishment. The distribution of intern doctors according to burnout syndrome profiles is presented in Fig. 2. According to our data, the majority of young family medicine professionals (44% of observations) fall into the «Engaged» profile and therefore do not exhibit any signs of burnout syndrome.

Our data also indicates that 26% of young family medicine specialists had an «Ineffective» profile, 19% had an «Overloaded» profile, and 4% of observations showed a «Detached» profile. These profiles, due to the risks of developing burnout syndrome, are considered intermediate and amenable to correction. Unfortunately, 7% of respondents fell under the criteria for the «Burned-Out» profile, and they are more likely to have already developed burnout syndrome.

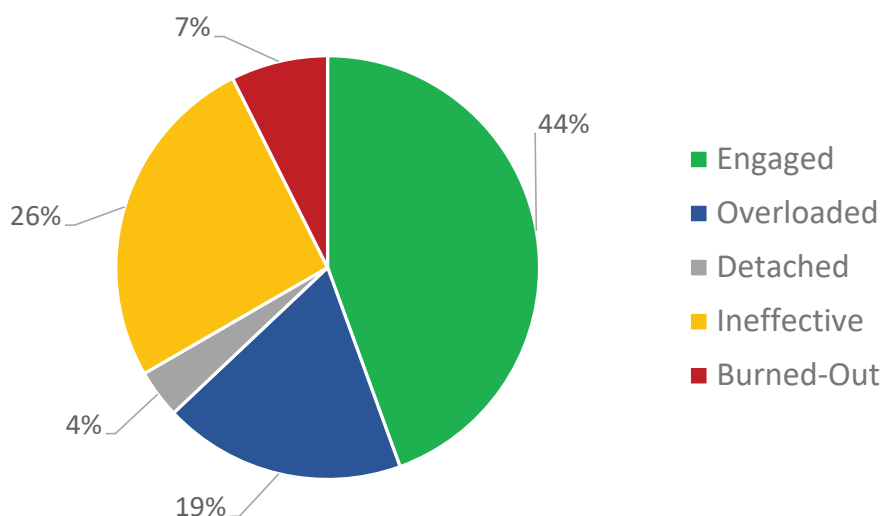


Figure 2. The distribution of intern doctors according to burnout syndrome profiles

The next stage of the actual study involved searching for potential correlational relationships between the impostor syndrome phenomenon and the components of burnout

syndrome. This exploration took into account the similarities and intersections of these components and the psychological predictors that shape these phenomena. (Table 2)

Table 2

### Correlational relationships between the three components of burnout syndrome based on the MBI HSS (MP) questionnaire and scores from the CIPS questionnaire

Components of burnout syndrome	Score on the CIPS questionnaire		Emotional exhaustion	
	r	p	r	p
Emotional Exhaustion	0,533*	0,002	x	x
Depersonalization	0,630*	0,000214	0,636*	0,000182
Reduction of professional abilities	-0,168	0,201	-0,428*	0,013

\* indicates statistically significant correlations.

## DISCUSSION

The assessment of the obtained correlational relationships revealed that the higher the score on the CIPS questionnaire, the more pronounced were the components of burnout syndrome, such as emotional exhaustion ( $p=0.002$ ) and depersonalization ( $p=0.000214$ ). In our opinion, this is a consistent process of psychological exhaustion in individuals due to overstrain of adaptive capacities under the pressure of high demands in the job market and self-doubt (impostor syndrome, which was present in all respondents). It's important to note that the impostor syndrome is an internal experience characterized by a set of beliefs and thoughts that hinder an individual from accepting their achievements, praise, and success, despite evidence to the contrary. Individuals with the impostor syndrome tend to downplay and negate their own successes. Among young medical professionals, this could be triggered by factors such as lack of time, information deficiency, comorbidities in patients, and the inability to track cause-and-effect relationships. In routine practice, this might manifest as physical and emotional fatigue, a lack of resources to fulfill everyday professional tasks due to improper resource allocation, leading to a cynical and detached attitude towards colleagues, one's own work, and even deformation of relationships within the team. It could also be a manifestation of strong dependency of self-esteem on society's opinion.

It is irrelevant, that we did not find a correlation between the impostor syndrome and the level of reduced professional abilities, as the actual study was conducted at the early stage of a young professional's career development and formation as a family doctor. The burnout phenomenon, on the other hand, represents a later stage and a more profound disruption in the destructive burnout model.

The observed interplay between the impostor syndrome and burnout syndrome in young medical professionals provides additional opportunities for preventing burnout and requires further research.

## CONCLUSIONS

1. 44% of young family doctors exhibited normal indicators across all dimensions of the professional burnout syndrome, while an additional 48% were classified under intermediate profiles (Overloaded, Ineffective, Detached), which can be addressed through timely identification and effective management.

2. All respondents displayed manifestations of the impostor phenomenon at varying degrees of intensity.

3. The impostor phenomenon shares a close relationship with emotional exhaustion ( $p=0.002$ ) and depersonalization ( $p=0.000214$ ) within the structure of the professional burnout syndrome, suggesting avenues for developing new corrective approaches and optimizing preventive strategies for BS.

## FUNDING AND CONFLICT OF INTEREST

The authors declare that there is no conflict of interest. This article is self-funded.

## CONTRIBUTION OF THE AUTHORS TO THE ARTICLE:

1. Iryna L. Vysochyna - development of the methodology, coordination of planning and conducting the study.

2. Volodymyr V. Kramarchuk - statistical analysis and data visualisation, drafting the manuscript.

3. Tetiana O. Yashkina - data collection, preparation of the text for publication.

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*Резюме***САМОЗВАНЦІ СЕРЕД СІМЕЙНИХ ЛІКАРІВ**

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**Вступ.** Проблеми кадрової політики в медицині завжди відігравали провідне місце в забезпеченні якісної медичної допомоги населенню. Молоді спеціалісти стикаються з високими вимогами ринку праці та постійним тиском керівництва, не маючи при цьому готових стратегій адаптації. Початок історії успіху завжди важкий, іноді свій вплив має синдром самозванця. Постійні сумніви у власних силах призводять до емоційного знесилення та розвитку цинічного ставлення до оточуючих, що надалі може трансформуватися у синдром професійного вигорання.

**Мета:** проаналізувати розповсюдженість феномену самозванця серед молодих лікарів за фахом «загальна практика – сімейна медицина» та дослідити можливі зв'язки з феноменом професійного вигорання.

**Матеріали та методи.** Нами було проведено анонімне одномоментне анкетування 27 молодих сімейних лікарів з допомогою опитувальників The Clance Impostor Phenomenon Scale та Maslach Burnout Inventory Human Services Survey for Medical Personnel. Процедура проведеного дослідження цілком відповідала загальноприйнятим нормам моралі, вимогам дотримання прав, інтересів та особистої гідності учасників дослідження, власне відповідно до принципів біоетики, викладених у Гельсінській декларації «Етичні принципи медичних досліджень за участю людей» та «Загальній декларації про біоетику та права людини (ЮНЕСКО)».

**Результати.** Всі респонденти продемонстрували наявність синдрому самозванця певного ступеню важкості, що може бути пов'язано зі зміною професійної ролі – перехід від лікаря-інтерна до самостійної одиниці – сімейного лікаря. Кожен четвертий лікар-інтерн вже має прояви емоційного виснаження та деперсоналізації, 7% опитаних мають сформований феномен професійного вигорання. Не виключено, що ці зміни пов'язані з умовами праці та воєнними діями на території України.

**Висновки.** Майже половина респондентів була віднесена до проміжних профілів синдрому вигорання (перевантажений, неефективний, відсторонений), які піддаються корекції за умови вчасного виявлення та вдалого менеджменту. Всі без виключення респонденти мали прояви феномену самозванця різного ступеня вираженості. Синдром самозванця має тісний зв'язок з емоційним виснаженням ( $p=0,002$ ) та деперсоналізацією ( $p=0,000214$ ) в структурі синдрому професійного вигорання, що дозволяє розробляти нові підходи корекції та оптимізувати шляхи профілактики спв.

**Ключові слова:** сімейні лікарі, синдром самозванця, синдром професійного вигорання