



## LEVEL OF PROFESSIONAL BURNOUT AMONG FAMILY PHYSICIANS IN THE REPUBLIC OF MOLDOVA AND CERTAIN ASPECTS REGARDING ITS CONTRIBUTING FACTORS

Victoria CIORNEI<sup>1</sup> , Adriana PALADI<sup>2</sup>

<sup>1</sup> Public Medical-Sanitary Institution Ciorescu Health Center, Chişinău, Republic of Moldova

<sup>2</sup> School of Public Health Management, Nicolae Testemitanu State University of Medicine and Pharmacy, Chişinău, Republica Moldova

Corresponding author: Victoria Ciornei, e-mail: [vick.oprea@gmail.com](mailto:vick.oprea@gmail.com)

<https://doi.org/10.38045/ohrm.2025.2.04>

CZU: 159.944:616-051

### ABSTRACT:

<b>Introduction</b>	Family medicine represents a key component of the healthcare system, a specialty characterized by fragmented work, high demands from patients/families/communities, and often conflicting interactions, all of which are conditions that predict stress and the onset of burnout. The aim of this study was to assess the degree to which family physicians in the Republic of Moldova are affected by professional burnout, as well as to identify its determining factors.
<b>Materials and methods</b>	The research was conducted as a descriptive cross-sectional study from November 2023 to February 2024, on a sample of 352 family doctors.
<b>Results</b>	The results show that 100% of family physicians were affected by professional burnout. The most prominent dimension of the burnout syndrome was psycho-emotional exhaustion, with a high level identified in 45.5% of respondents. Family physicians in the younger age group (36-45 years) were more affected by burnout. Family physicians working in urban areas were more affected than those in rural areas. According to the respondents, professional factors were the main contributors to the development of burnout syndrome.
<b>Conclusions</b>	The professional burnout syndrome was identified in all family physicians involved in the study, with the dimension of psycho-emotional exhaustion being the factor with the greatest impact.
<b>Keywords</b>	Professional burnout syndrome, burnout syndrome, family physician, primary healthcare.

### NIVELUL DE ARDERE PROFESIONALĂ AL MEDICILOR DE FAMILIE DIN REPUBLICA MOLDOVA ŞI UNELE ASPECTE PRIVIND FACTORII CONTRIBUTIVI AI ACESTUIA

<b>Introducere</b>	Medicina de familie reprezintă o verigă esențială a sistemului de sănătate, specialitate ce presupune muncă fragmentată, solicitare majoră de la pacienți/familie/comunitate, interacțiuni adesea conflictuale, condiții ce prezic stresul și apariția burnout-ului. Scopul cercetării a fost de a evalua gradul de afectare prin sindromul de ardere profesională a medicilor de familie din Republica Moldova, precum și factorii determinanți ai acestuia.
<b>Materiale și metode</b>	Cercetarea a fost realizată având la bază un studiu de tip selectiv descriptiv, efectuat în perioada noiembrie 2023-februarie 2024, asupra unui eșantion de 352 de medici de familie.
<b>Rezultate</b>	Rezultatele arată că sindromul de ardere profesională a afectat medicii de familie în proporție de 100%. Cea mai exprimată dimensiune a sindromului burnout a fost epuizarea psiho-emoțională, nivel înalt depistat la 45,5% dintre respondenți. Mai afectați de burnout au fost medicii de familie de vârstă tânără între 36-45 de ani. Medicii de familie din mediul urban sunt mai afectați decât cei din mediul rural. În viziunea respondenților, factorii profesionali sunt principalii care au condus la instalarea sindromului de ardere profesională.
<b>Concluzii</b>	Sindromul arderii profesionale a fost depistat la toți medicii de familie implicați în cercetare, dimensiunea epuizare psiho-emoțională fiind factorul cu cel mai mare impact.
<b>Cuvinte cheie</b>	Sindromul arderii profesionale, sindromul burnout, medic de familie, asistența medicală primară.

### ABBREVIATIONS:

SAP	- Professional Burnout Syndrome;
AMP	- Primary Healthcare;
EGPRN	- European General Practice Research Network;
IMSP AMT	- Public Medical-Sanitary Institution Territorial Medical Association;
OMF	- Family Physician's Office;
CS	- Health Center;
CMF	- Family Physicians' Center.

## INTRODUCTION

---

Professional burnout among family physicians is a current and important problem in the medical field globally (1).

Primary healthcare provided by the family physician together with their team represents the first point of contact between the healthcare system and the individual, ensuring non-discriminatory access and including activities such as prevention, early disease detection, counseling, curative care, and support, all aimed at meeting the health needs of the community (2). In this context, the family physician becomes responsible for managing the multitude of events that lead to a decline in the health status of the individual, the family, and society as a whole. As a consequence, the exhaustion of work resources can lead to professional burnout – a condition that causes physical, psychological, and emotional disorders, resulting from insufficient control of chronic workplace stress, and becoming a significant public health issue (3).

The topic of professional burnout was first addressed by the American psychoanalyst H.J. Freudenberger in 1974 in his work “*Staff Burn-out*” (4). In the early 1980s, it was postulated that: “*Burnout is the index of the mismatch between what people are and what they have to do; it represents the erosion of values, dignity, spirit, and will – an erosion of the human soul*”. It is a modern “disease” of the century – complex and three-dimensional – characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment. It spreads rapidly like a tornado, sweeping away countless specialists and causing deep fractures in the system. *Emotional exhaustion* is the core and most commonly encountered component of professional burnout, defined by a feeling of emotional strain that leads to the complete depletion of one’s emotional resources. *Depersonalization* refers to the tendency to develop negative, hostile, cold, or demeaning attitudes toward others. *Reduced personal accomplishment* is characterized by feelings of reduced productivity and a lack of confidence in one’s ability to succeed at work (5).

The development of professional burnout syndrome among healthcare workers has been widely studied in recent years. It has been shown that physicians in frontline specialties, such as family medicine, are at the highest risk of developing professional burnout, as the profession involves daily communication, responsibility, overwhelming workloads, extended hours, and limited time to complete tasks (6). There is a paradox between the ideals and the reality of family physicians’ work. Primary healthcare (AMP) should function as a priority within the healthcare system, aiming at prevention, health promotion, and diagnostic and curative care. In reality, however, it is driven by disease-centered actions, fragmented work, high demands from patients/families/communities, often conflicting interpersonal relationships, and low salaries. These conditions are predictors of occupational stress and the onset of burnout (7).

Primary healthcare providers are vulnerable to distress, which directly impacts their health and is often accompanied by job dissatisfaction and the intention to leave the profession. Consequently, the physician-patient relationship can become a source of conflict, and the quality of services provided declines. Ultimately, all stakeholders are affected: the patient, the institution, and the healthcare system itself (3).

Globally, the reported prevalence of burnout among family physicians is variable, with data ranging from 2.8% to 85.7%. In 2008, a European study (EGPRN) on burnout among family physicians showed that burnout is a common issue for family doctors across Europe, with high levels reported in two-thirds of the study’s respondents (6). A study conducted in the Czech Republic in January–February 2023, which aimed to estimate the prevalence and asso-

ciated determinants of professional burnout among family physicians, found that 21.8% of family doctors experienced a high level of burnout across all three dimensions. The most affected dimension was reduced personal accomplishment (56.2%), followed by emotional exhaustion (50.2%) and depersonalization (40.5%) (8). A study carried out in the Republic of Moldova within IMSP AMT Râșcani during 2018–2019 showed that one in four family physicians exhibited a high level of emotional exhaustion, one in five reported a high level of depersonalization, and one in six experienced a high level of reduced personal accomplishment in their professional activity.

Despite the large number of international studies focused on professional burnout syndrome, in the Republic of Moldova the issue of professional burnout syndrome (SAP) among family physicians is not addressed in a comprehensive manner, either from the perspective of the specific manifestation profile or from the standpoint of socio-demographic data (9). This observation highlights the importance of conducting a national-level study to identify the scope and prevalence of the phenomenon, as well as the factors associated with its development.

## AIM OF THE STUDY

To assess the level of professional burnout among family physicians and to explore its predictive factors.

## MATERIALS AND METHODS

To achieve the stated objective, a descriptive cross-sectional study was conducted by surveying a representative sample of 352 family physicians. Considering that the population of family physicians in the Republic of Moldova is finite (the number of family physicians in 2021 was 1,656), the sample size was calculated using the formula for descriptive studies in finite populations. The calculated sample size was verified using EpiInfo for descriptive study sample estimation (parameters considered: number of family physicians – 1,656; design effect – 1.0; standard error – 5%;  $p = 0.5$ ). The recalculation reduced the required number of respondents to 312, to which 10% was added to account for non-responses, establishing a final sample size of 343 family physicians. The sample size was determined to allow for the identification of weak correlations and is representative of the entire population of family physicians in the Republic of Moldova. Inclusion criteria for the study were: family physicians employed in medical-sanitary institutions in the Republic of Moldova who expressed informed consent to participate. Based on the Maslach Burnout Inventory model, a research instrument was developed in accordance with scientific standards and international study data. The questionnaire consisted of three parts: (i) the socio-demographic section, covering eight general characteristics of the sample; (ii) the second part, based on the Maslach Scale (*Burnout Inventory*), which includes 25 items structured into three dimensions (emotional exhaustion, depersonalization, and reduced personal accomplishment) and evaluates the level of professional burnout; and (iii) the final part, which includes seven questions aimed at exploring predictive and protective factors for professional burnout. The instrument was piloted and applied in a previous study conducted in 2023 in the Republic of Moldova (10). Questionnaire distribution considered institutional level, geographic distribution, and availability for participation. A total of 260 responses were collected online. Additionally, 200 printed questionnaires were distributed across various primary healthcare institutions (OMF, CS, CMF, AMT), of which 97 were returned,

with five being invalidated. Data collection took place from November 2023 to February 2024. Descriptive statistics were presented based on variable type, central tendency and variation values depending on the distribution shape for numerical variables and proportions with 95% confidence intervals for non-numerical variables. The Shapiro–Wilk test was used to assess data distribution normality. IBM SPSS was used to generate bivariate correlations, with a significance level of  $p < 0.05$  applied for the chi-square test.

## RESULTS

During data processing, data were disaggregated according to various analytical criteria: age, gender, work experience, work environment, type of AMP (Primary Healthcare) institution, etc.

### LEVELS OF SAP (PROFESSIONAL BURNOUT SYNDROME)

According to the data obtained from the application of the Maslach Scale, 100% of surveyed family physicians reported being affected by professional burnout syndrome; the mean score obtained was 64.32 (median = 64, IQR = 18). The lowest score recorded was 36 points (the minimum score on the scale being 25 points), found in three questionnaires, while the highest score recorded was 120 points (maximum score being 125 points), according to Maslach Burnout Inventory standards. Family physicians are affected by professional burnout syndrome to varying degrees. The majority of respondents (62.8%; 95% CI 57.6–67.7) experienced a moderate level of burnout. A low level of burnout was observed in 16.2% of participants (95% CI: 12.7–20.4), while 21.0% of family physicians (95% CI: 17.1–25.6) registered a high level of professional burnout (Fig. 1).

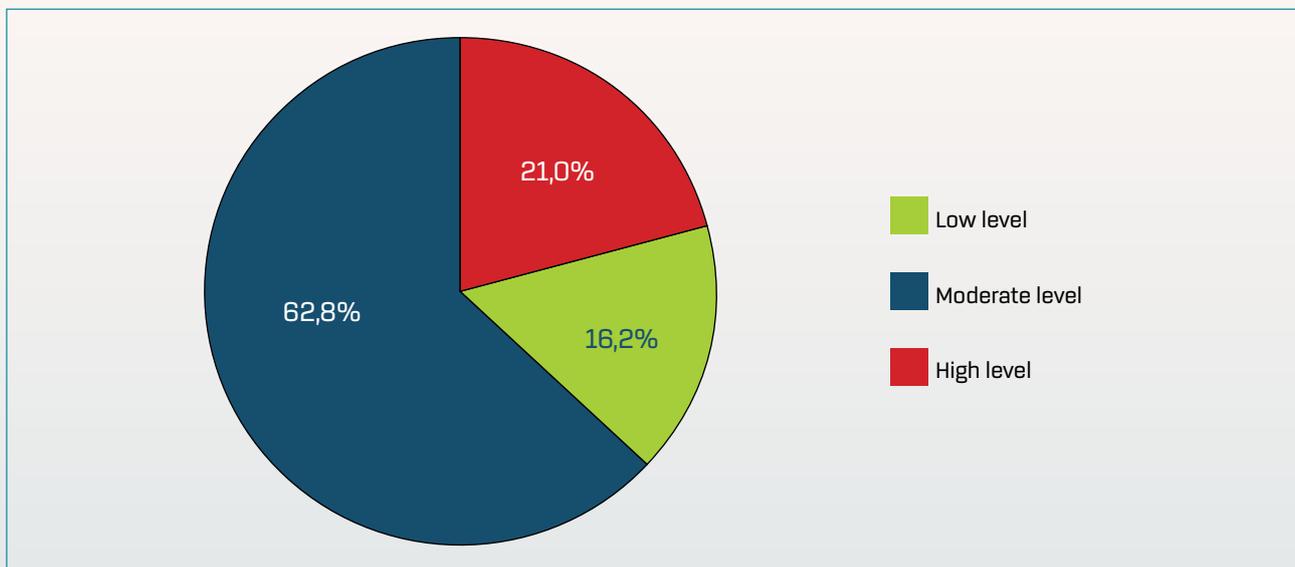


Figure 1. Levels of professional burnout among family physicians, %.

Analyzing the level of professional burnout in terms of its three dimensions – emotional exhaustion, depersonalization, and reduced personal accomplishment – we note that the dimension of SAP (Professional Burnout Syndrome) with the “highest level” of impact is psycho-emotional exhaustion. Thus, a “high” level of impact is found in 45.4% of respondents (95% CI 40.3–50.7) for psycho-emotional exhaustion, in 6.3% of respondents (95% CI 4.2–9.3) for depersonalization, and in 12.2% of respondents (95% CI 9.2–16.1) for reduced personal accomplishment (Fig. 2).

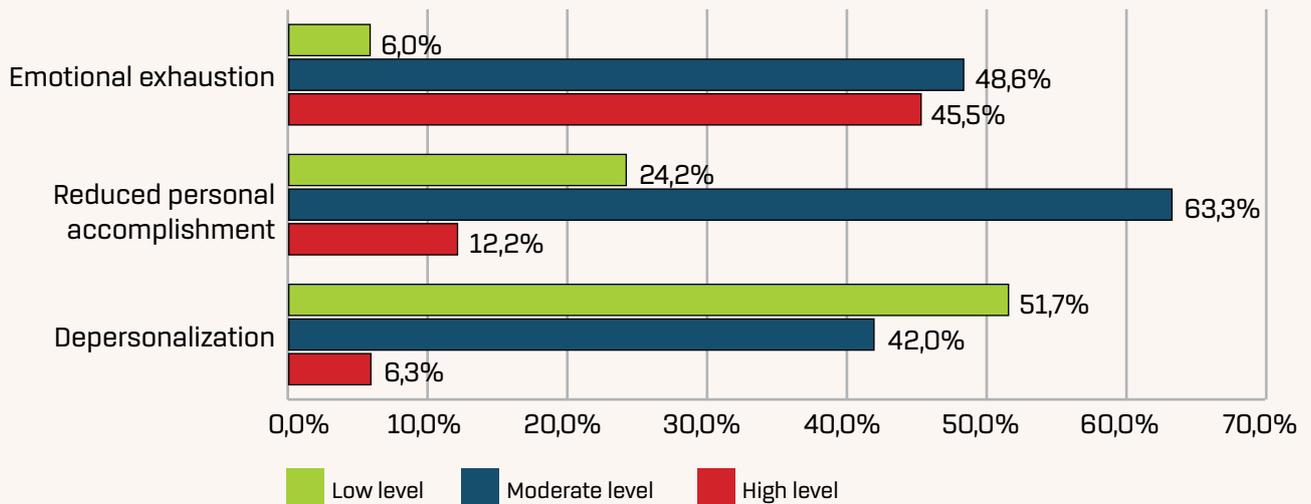


Figure 2. Levels of impact on family physicians by dimensions of professional burnout syndrome, %.

In the study, professional burnout syndrome among family physicians was analyzed in relation to age, work environment, type of institution, workload, etc. Accordingly, a high level of professional burnout was more frequently recorded (28.4%) among respondents in the 36–45 age group. The least affected by a high level of burnout were those aged 26–35 – 10.9%. At first glance, it appears that burnout levels increase with age, peaking in the 36–45 age group; however, from a statistical point of view, no significant correlation was found (t-test = 0.046,  $p = 0.52$ ). Nonetheless, when analyzing the burnout dimension with the highest level of impact among family physicians – psycho-emotional exhaustion – and age, a statistically significant relationship was observed using the chi-square test ( $p < 0.05$ ,  $p = 0.02$ ).

Assessing the level of professional burnout according to the work environment, we find that 28.1% of physicians working in rural areas and 34.7% of those in urban areas experience a moderate level of burnout. A high level of exhaustion was reported by 7.4% of respondents from rural settings compared to 13.6% from urban areas. Analyzing the degree of impact from professional burnout syndrome by type of employing institution, we observe that a higher proportion (27.6%) of family physicians working in territorial medical associations (located in urban areas) reported a high level of burnout, whereas those working in family physician’s offices showed a lower proportion of high burnout – 17.1%. About 70% of the study population work more than 35 hours per week, and these respondents are the most affected by a high level of burnout – 25.1%. Therefore, as the number of working hours increases, the level of professional burnout is also higher. Applying the chi-square test and the correlation coefficient, we found a positive correlation between these variables ( $p < 0.05$ ;  $p = 0.01$ , t-test = 0.13).

#### PREDICTIVE FACTORS OF PROFESSIONAL BURNOUT SYNDROME IN FAMILY PHYSICIANS

The study explored the respondents’ views on the determining factors that may lead to professional burnout. It is worth noting that, according to the participants’ perspectives, the etiology of professional burnout syndrome is multifactorial, and the interaction between these elements contributes to the onset of the phenomenon.

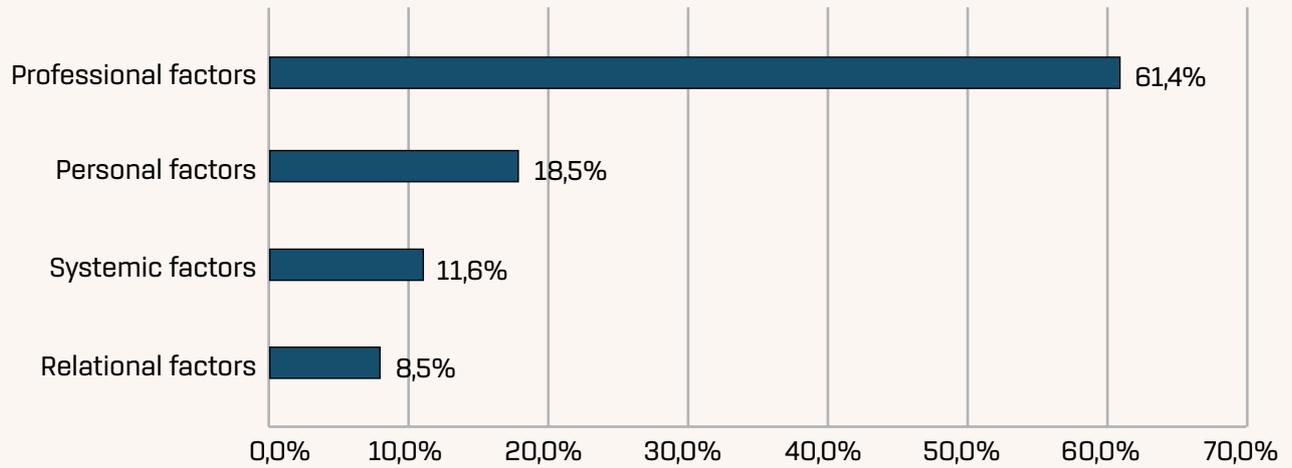


Figure 3. Factors that can lead to the development of professional burnout syndrome, %.

A significant percentage of family physicians (61.4%) consider that professional factors – such as high workload, working conditions, working overtime, lack of meal breaks, etc. – are the main contributors to exhaustion. Personal factors – such as age, lack of self-confidence, disappointment, chronic fatigue, lack of knowledge in information technology, etc. – are indicated by 18.5% of respondents. Systemic factors, including insufficient human resources, remuneration, and stress, are mentioned by 11.6% of respondents. Finally, relational factors are mentioned by the smallest proportion (8.5%), encompassing issues such as the administration’s attitude towards employees, the psychosocial climate within the team, and strained relationships with patients, colleagues, superiors, etc. (Fig. 3).

Exploring family physicians’ opinions on factors that could mitigate professional exhaustion reveals that the majority of respondents identified several key preventive measures. The most frequently mentioned was an adequate work schedule (74.0%), followed by support from superiors and colleagues (68.0%), sufficient human resources (67.0%), and adequate working conditions (65.0%). Support from loved ones and professional training were mentioned by 46.0% and 31.0% of respondents, respectively (Fig. 4).

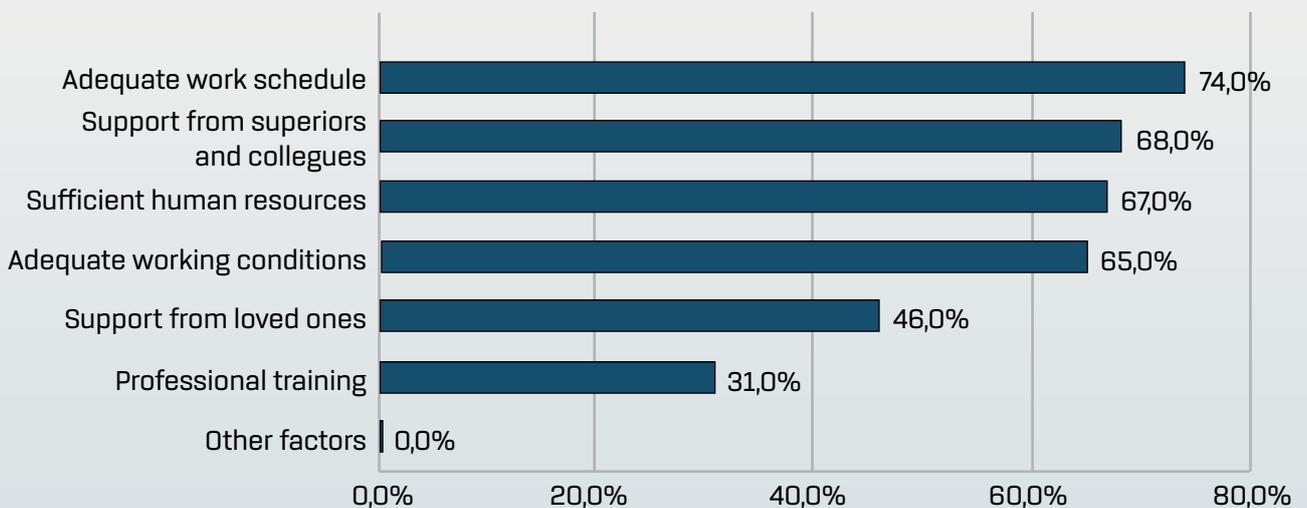


Figure 4. Factors that could mitigate professional exhaustion, %.

## DISCUSSION

The results of the conducted research demonstrate that family physicians have an increased risk of being affected by professional burnout syndrome. Regarding professional burnout syndrome in family physicians, the factor with the greatest impact is emotional exhaustion, at 45.5%, which aligns with data from several international studies. A study conducted in Portugal aimed at assessing the level of professional burnout among family physicians, on a sample of 371 respondents, obtained comparable results, with the highest scores observed for the psycho-emotional exhaustion dimension (11). Another study conducted in 2023 on a sample of 127 family physicians found comparable results (3). A meta-analysis conducted by Shen et al. (2022) showed that emotional exhaustion is the dimension with the highest scores among primary care physicians (8). Therefore, it can be presumed that personnel working in primary healthcare daily face various complex tasks, influenced by diverse stressors, requiring high emotional involvement due to the specific nature of the profession.

The main risk factors for SAP (Professional Burnout Syndrome) identified in the study are: young age, an urban work environment, and workload. Comparable results have been reported by several studies conducted in recent years on primary healthcare physicians, which note the highest exposure to professional burnout syndrome among young medical professionals during their professional adaptation period (13).

According to several studies, the main triggers for professional stress and workplace exhaustion in family physicians are working conditions and high workload, unrealistic expectations for completing tasks within limited timeframes, an increasing number of patients, and insufficient human, financial, and material resources (12, 13). These factors are also considered triggers for SAP (Professional Burnout Syndrome) by a significant proportion of respondents (61.4%) in our study as well.

## CONCLUSIONS

1. Professional burnout syndrome in family physicians is a widespread phenomenon, with 100% of study respondents showing signs of it. Among the three dimensions of the syndrome, *psycho-emotional exhaustion* affects a significant portion of the study population at a high level (45.5%).
2. Younger family physicians, those working in AMTs (Territorial Medical Associations – urban areas), and those with a higher workload (over 35 working hours per week) are more exposed to the risks of SAP (Professional Burnout Syndrome).
3. According to respondents' perceptions, improving working conditions, ensuring sufficient human resources, and providing social support can contribute to creating a healthy work environment, which acts as a protective factor against professional burnout syndrome.

**CONFLICT OF INTEREST** The authors have no conflicts of interest to declare.

**ETHICS APPROVAL** Ethical approval was not required by the Ethics Committee as it does not contain any ethical risks. The research consists of a survey of adults that maintains all rigor for anonymizing data and maintaining participant confidentiality.

**FUNDING STATEMENT** The article represents a synthesis of the results of the study conducted within the master's thesis defended in 2023 at the School of Public Health Management.

## REFERENCES

- Mîslițchi V, Mardici N. Sindromul arderii profesionale: profil notabil. *Dialog intercultural polono-moldovenesc*. 2022;V(2):152-156. Available at: [https://ibn.idsi.md/sites/default/files/imag\\_file/152-156\\_31.pdf](https://ibn.idsi.md/sites/default/files/imag_file/152-156_31.pdf) [Accessed on 2024-04-28].
- Gvernul Republicii Moldova. Hotărârea Guvernului RM cu privire la aprobarea Programului unic al asigurării obligatorii de asistență medicală: nr. 1387 din 10.12.2007. Monitorul Oficial al Republicii Moldova. 2007; nr. 198-202: art.1443. Available at: [https://www.legis.md/cautare/getResults?doc\\_id=126829&lang=ro](https://www.legis.md/cautare/getResults?doc_id=126829&lang=ro). [Accessed on 2024-04-11].
- Monsalve-Reyes CS, San Luis-Costas C, Gómez-Urquiza JL, Albendín-García L, Aguayo R, Cañadas-De la Fuente GA. Burnout syndrome and its prevalence in primary care nursing: a systematic review and meta-analysis. *BMC Fam Pract*. 2018;19(1):59. doi:10.1186/s12875-018-0748-z.
- Cojocari-Luchian S. Influența sindromului arderii profesionale asupra motivației dezvoltării profesionale. *Buletinul Științific al Universității de Stat „B.P. Hasdeu” din Cahul. Științe Sociale*. 2018;2(8):67-81. Available at: [https://ibn.idsi.md/sites/default/files/imag\\_file/67-81.pdf](https://ibn.idsi.md/sites/default/files/imag_file/67-81.pdf) [Accessed on 2024-04-28].
- Losii E, Chirev L. Fenomenul arderii profesionale la lucrătorii medicali. *Psihologie. Pedagogie Specială. Asistență Socială*. 2013;33:82-103. Available at: [https://ibn.idsi.md/sites/default/files/imag\\_file/Fenomenul%20arderii%20profesionale%20la%20lucratorii%20medicali.pdf](https://ibn.idsi.md/sites/default/files/imag_file/Fenomenul%20arderii%20profesionale%20la%20lucratorii%20medicali.pdf) [Accessed on 2024-04-28].
- Soler JK, Yaman H, Esteva M, et al. Burnout in European family doctors: The EGPRN study. *Fam Pract*. 2008;25(4):245-265. doi:10.1093/fampra/cmn038.
- Merces MCD, Coelho JMF, Lua I, et al. Prevalence and Factors Associated with Burnout Syndrome among Primary Health Care Nursing Professionals: A Cross-Sectional Study. *Int J Environ Res Public Health*. 2020;17(2):474. doi:10.3390/ijerph17020474.
- Štěpánek L, Patel MS, Horáková D, Juričková L, Býma S. High prevalence of burnout syndrome in Czech general practitioners: A cross-sectional survey. *Prev Med Rep*. 2023;36:102502. doi:10.1016/j.pmedr.2023.102502.
- Russu-Deleu R, Buta G, Groza I. Evaluarea stresului profesional în rândul medicilor de familie. *Sănătate Publică, Economie și Management în Medicină*. 2019;4(82):161-168. Available at: [https://ibn.idsi.md/sites/default/files/imag\\_file/161-168\\_2.pdf](https://ibn.idsi.md/sites/default/files/imag_file/161-168_2.pdf) [Accessed on 2024-04-11].
- Podoroghina M, Paladi A. Aspects regarding Burnout syndrome in healthcare workers with secondary education in the Republic of Moldova, during the pandemic period. *One Health and Risk Management*. 2024;5(1):20-26. doi: org/10.38045/ohrm.2024.1.03.
- Marcelino G, Cerveira JM, Carvalho I, et al. Burnout levels among Portuguese family doctors: a nationwide survey. *BMJ Open*. 2012;2(3):e001050. doi:10.1136/bmjopen-2012-001050.
- Mayne RS, Biddle GJH, Edwardson CL, Hart ND, Daley AJ, Heron N. The relationship between general practitioner movement behaviours with burnout and fatigue. *BMC Prim Care*. 2024;25(1):60. doi:10.1186/s12875-024-02289-5.
- De Alvarenga Moreira H, De Souza KN, Yamaguchi UM. Síndrome de Burnout em médicos: uma revisão sistemática. *Rev Bras Saúde Ocup*. 2018;43:1-11. doi: org/10.1590/2317-6369000013316.

Date of receipt of the manuscript: 04.05.2024

Date of acceptance for publication: 23.05.2025