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Research Article

An Assessment of the Well-Being of Physicians Working in a Family Physician's Team During the COVID-19 Pandemic in Lithuania

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Abstract

Purpose: Improving the well-being of physicians and the level of trust in their work are key aspects in ensuring their motivation and satisfaction during the anxious and uncertain times of the COVID-19 pandemic. The aim of this study is to investigate the links between different dimensions of the well-being of physicians during the pandemic.

Methods: An anonymous survey of physicians (n=191) working in a family physician's team was carried out from June 21, 2021 to September 17, 2021. The data analysis involved the X^2 homogeneity criterion with Yates correction, the Mann-Whitney criterion, and the Kruskal-Wallis criterion.

Results: The majority of physicians indicated the following issues: concern about the pandemic (91.1%); a decrease in their quality of life as a result of the pandemic (83.3%); professional burnout (75.7%); and dissatisfaction with the management of the pandemic (55%). It was observed that the duration of employment in their current institution is related to the physicians' emotional well-being, quality of life, professional burnout, and satisfaction. Emotional well-being was found to depend on the form of ownership of their current health care institution. Quality of life and professional burnout were found to be dependent on the respondent's number of years of work experience, whilst their assessment of personal well-being was dependent on the respondent's age and gender.

Conclusions: Physicians' assessment of their well-being depends on certain sociodemographic characteristics. In critical situations, intervention measures for improving their well-being should focus on improving emotional well-being and quality of life, reducing the occurrence of professional burnout, and increasing satisfaction.

Keywords: Primary health care; Family medicine; COVID-19 pandemic; Well-being; Lithuania

Introduction

During the COVID-19 pandemic, physicians were concerned about: the impact of the virus on their patients, maintaining adequate provision of services, the lack of defined work functions, the safety of their family and co-workers, vaccination priorities, the supply of personal protective equipment, and communication between institutions in the health care sector [1]. Physicians were unprepared for the spread of the virus, wearing personal protective equipment, and managing information about the pandemic [2]. During the pandemic, physicians felt most overwhelmed by constantly changing legislation, chaotic vaccination priorities, dissatisfied patients, increased workload, technological solutions to service provision, excess bureaucracy, and a lack of clarity and definition in the organization of their work [3]. In the broadest sense, well-being describes the state and quality of a person's life, and is frequently analyzed across six groups of dimensions: mental well-being, social well-being, physical well-being, spiritual well-being, activities and functioning, and personal circumstances [4]. In the context of this study, the dimensions of well-being of physicians include emotional well-being and quality of life. The reasons behind professional burnout in the health care sector often stem from the work itself, and include: increased workload, long hours, administrative duties, poor work-life balance, lack of collaborative behaviour among co-workers, loss of autonomy, and poor leadership [5]. This study approaches the effect of pandemic-related challenges on the well-being of physicians based on their dissatisfaction with the management of the current situation, and the consequent increase in risk of professional burnout. The aim of this study is to investigate the opinion of physicians working in a family physician's team regarding their own well-being during the COVID-19 pandemic.

Methods

Study population

According to the data provided by the Institute of Hygiene, 1,903 family physicians and 238 internal medicine specialists were employed by primary health care institutions (PHCIs) and care homes at the end 2020. Of the physicians working as part of a family physician's team, 15% were male and 85% were female. Most male

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physicians were aged 51-60, and most females were aged 61-70. The largest group of the study population was aged 61-70 (33%), whilst the smallest were 71 years and older (7%).

The criteria for sample selection

Sample size was representative of the age, gender, and distribution of physicians in different counties in Lithuania. The 50/50 principle was applied when selecting respondents to ensure the participation of physicians from both public and private PHCIs.

The pilot study

A pilot study was conducted on 21-30 June 2021, and involved 13 physicians: 3 from public PHCIs, 9 from private PCHIs, and 1 physician who worked in both public and private PHCIs. These findings were used to improve the study questionnaire.

Implementation of the qualitative study

Invitations to participate in the study were distributed among PHCI managers and administrators via email. Having agreed to participate, the respondents were then provided with informed consent forms and the study questionnaires, which were collected 1-8 weeks later and forwarded to the lead researcher.

The characteristics of the sample size

A qualitative study was conducted from 21 June 2021 to 17 September 2021, and a total of 398 questionnaires were sent out. Of these, 191 completed questionnaires were used for analysis and 4 were invalid, resulting in a response rate of 48%. The questionnaires were completed by 9% of the sample population. Of the 39 PHCIs randomly selected for the study, 11 were public and 28 were private. The respondents were distributed as follows: 31% were employed by a private PHCI; 63% were employed by a public PHCI; and 6% were employed by both public and private PHCIs. Of the 191 respondents, 169 (88.5%) were city-based and 22 (11.5%) resided in rural areas; 161 (84.3%) were female and 30 (15.7%) were male.

The study model

The researchers developed a study model encompassing the impact of the challenges of the COVID-19 pandemic on the well-being of physicians (emotional well-being and quality of life) and the impact of the pandemic on physicians' dissatisfaction and professional burnout (Figure 1).

Statistical analysis

IBM SPSS Statistics 27 was used for data analysis. Qualitative variables were analyzed using the χ^2 homogeneity criterion (with Yates correction for binary data). The results were described in terms of frequency and relative frequency (percentage) of variables in the comparison groups. Quantitative variables did not meet the conditions of normal distribution (Shapiro-Wilk criterion, $p<0.05$), and were therefore analyzed using nonparametric Mann-Whitney (when comparing two groups) and Kruskal-Wallis (when comparing three groups) criteria. The observed differences were considered statistically significant if the calculated p-value was lower than the level of significance $\alpha = 0.05$.

Ethics approval

Permission (No. BE-2-63) to conduct the research was issued on 15 June 2021 by the Kaunas Regional Committee of Biomedical Research Ethics (Lithuania).

Results

The well-being of physicians during the COVID-19 pandemic

The study participants had divergent opinions on questions regarding their views on the COVID-19 pandemic. The majority physicians agreed or strongly agreed with the following statements: the pandemic concerns them (n=174, 91.1%); the pandemic negatively affects their quality of life (n=160; 83.8%); and they experienced burnout (n=144; 75.7%). Over half of all respondents were dissatisfied with the national management of the pandemic (n=105; 55%) (Table 1).

The emotional well-being of physicians

Based on the distribution of responses to the statement that the pandemic is concerning, two groups of physicians were compiled for comparison: those who disagreed or somewhat agreed with the statement (n=57; 29.8%) and those who strongly agreed (n=134; 70.2%). A statistically significant difference was observed between the two groups in terms of duration of employment in their current institution (p=0.013) and its form of ownership (p=0.016) (Table 2).

The quality of life of physicians

Based on the distribution of responses to the statement that the pandemic negatively affected their quality of life, three groups of physicians were compiled and then compared: those who agreed with the statement (n=72; 37.7%); those who strongly agreed (n=88; 46.1%); and those who disagreed (n=31; 16.2%). The data analysis demonstrated a statistically significant difference in the duration of employment in their current institution (p=0.005), years of work experience (p=0.002), age (p=0.006), and gender (p=0.045) among the respondents with divergent opinions on the statement (Table 3). The only statistically significant difference in the demographic characteristics revealed by pairwise comparisons was between the disagree and strongly agree groups: the former group contained more young physicians with fewer years of work experience than the latter. There were statistically significantly fewer males and more females in the disagree group compared to the strongly agree group.

Professional burnout among physicians

Based on the responses to the statement regarding the experience

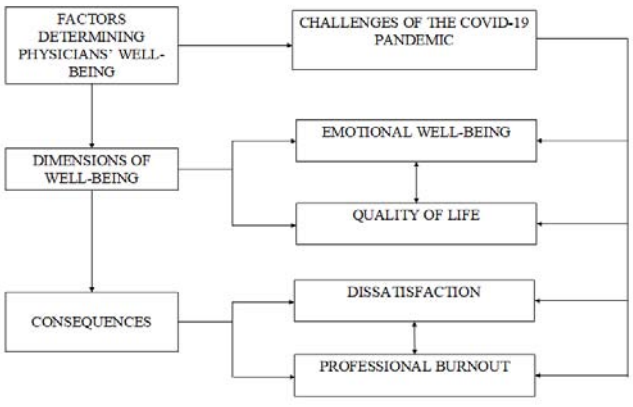

Figure 1: The study model (developed by the authors, 2021–2022).

Table 1: The opinion of physicians regarding their well-being during the COVID-19 pandemic.

Statements	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
The COVID-19 pandemic concerns me	6 (3.1)	4 (2.1)	7 (3.7)	40 (20.9)	134 (70.2)
The COVID-19 pandemic negatively affects my quality of life	4 (2.1)	10 (5.2)	17 (8.9)	72 (37.7)	88 (46.1)
I feel burned out during the COVID-19 pandemic	12 (6.3)	7 (3.7)	28 (14.7)	68 (35.6)	76 (39.8)
I am satisfied with the management of the COVID-19 pandemic in the country	18 (9.4)	29 (15.2)	58 (30.4)	70 (36.6)	16 (8.4)

Table 2: The emotional well-being of physicians during the COVID-19 pandemic.

Demographic characteristics	The COVID-19 pandemic concerns me		*p*-value
	Disagree or somewhat agree	Strongly agree	
Duration of employment (years)*	9 (2–23)	18 (5–33)	0.013
Institution**			
Private	26 (46.4)	33 (26.8)	0.016
Public	30 (53.6)	90 (73.2)	

*The Mann-Whitney criterion. Data: median (Q0.25-Q0.75).
**The χ^2 homogeneity criterion with Yates correction. Data presented as n (%).

Table 3: The quality of life of physicians during the COVID-19 pandemic.

Demographic characteristics	The COVID-19 pandemic negatively affected my quality of life			p-value
	Disagree	Agree	Strongly agree	
Duration of employment (years)*	3 (1-24) [a]	14 (4-27.75)	18 (5-33.75) [a]	0.005 0.003 [a]
Work experience (years)*	12 (4-31) [b]	22.5 (7.25-38.75)	32.5 (16.25-41) [b]	0.002 0.002 [b]
Age (years)*	48 (32-59) [c]	52.50 (36.25-63.75)	58.5 (48.25-67) [c]	0.006 0.006 [c]
Gender**				
Female	44 (93.6) [d]	44 (75.9)	73 (84.9) [d]	0.045 < 0.05 [d,e]
Male	3 (6.4) [e]	14 (21.4)	13 (15.1) [e]	

*The Kruskal-Wallis criterion; [a, b, c, d, e] Pairwise comparison. Data: median (Q0.25-Q0.75);
**The χ^2 homogeneity criterion with Yates correction. Data presented as n (%).

Table 4: Professional burnout of physicians during the COVID-19 pandemic.

Demographic characteristics	I feel burned out during the COVID-19 pandemic			*p*-value
	Disagree	Agree	Strongly agree	
Duration of employment (years)*	8 (1–24) [a]	14 (3.25–22.75)	20 (5.25–35) [a]	0.005 0.004 [a]
Work experience (years)*	15 (4–35) [b]	34.5 (16.75–41.75)	30 (12–40) [b]	0.025 [b]
Age (years)*	51 (34–6) [c]	58.50 (46.75–67.5) [c]	56 (42–67)	0.017 0.021 [c]
Gender**				
Female	41 (87.2)	51 (75) [d]	69 (90.8) [d]	0.028
Male	6 (12.8)	17 (25) [e]	7 (9.2) [e]	< 0.05 [d,e]

*The Kruskal-Wallis criterion; [a, b, c, d, e] Pairwise comparison. Data: median (Q0.25-Q0.75);
**The χ^2 homogeneity criterion with Yates correction. Data presented as n (%).

of professional burnout during the pandemic, three distinct groups of physicians were once again compiled and compared: those who agreed (n=68; 35.6%); those who strongly agreed (n=76; 39.8%); and those who disagreed (n=47; 24.6%). A statistically significant difference was observed in the following aspects: duration of employment in their current institution (p=0.005); years of work experience (p=0.005); age (p=0.017); and gender (p=0.028) (Table 4). Statistically significant differences in duration of employment in their current institution (p=0.004) and years of work experience (p=0.025) were observed in pairwise comparison between those who disagreed and those who strongly agreed, whereas age was statistically significant only among those who agreed and strongly agreed (p=0.021). The agree group contained statistically significantly more males than females compared to the strongly agree group (Table 4).

The satisfaction of physicians

Three groups of physicians were compiled and compared based on their response to the statement that they feel satisfied with the management of the pandemic in the country: those who disagreed (n=47; 24.6%); those who neither agreed nor disagreed, i.e., had no opinion on the statement (n=58; 30.4%); and those who were satisfied or very satisfied with the management of the pandemic (n=86; 45%). A statistically significant difference was observed in the following

Table 5: The satisfaction of physicians with the management of the COVID-19 pandemic in the country.

Demographic characteristics	I am satisfied with the management of the COVID-19 pandemic in the country			*p*-value
	Disagree	Neither agree nor disagree	Agree or strongly agree	
Duration of employment (years)*	9 (2-21) [a]	15 (3-25.5)	18 (5-35) [a]	0.039 0.049 [a]
Age (years)*	47 (34-62) [b]	57.50 (40-64.25)	59 (48.75-68) [b]	0.012 0.009 [b]
Gender**				
Female	44 (93.6) [c]	44 (75.9) [c]	73 (84.9)	0.028
Male	3 (6.4)	14 (24.1) [e]	13 (15.1) [e]	< 0.05 [c,e]

*The Kruskal-Wallis criterion; [a, b, c, e] Pairwise comparison. Data: median (Q0.25-Q0.75);
**The χ^2 homogeneity criterion with Yates correction. Data presented as n (%).

aspects: duration of employment in their current institution (p=0.039); age (p=0.012); and gender distribution (p=0.045). Statistically significant differences in duration of employment in their current institution (p=0.049) and age (p=0.009) were observed in pairwise comparisons of those who disagreed and those who agreed or strongly agreed with the statement. Gender-based distribution of the respondents was statistically significant only among those who disagreed with the statement and had no opinion on it: the first group had statistically significantly more females and fewer males, whereas the opposite was true of the second group (Table 5).

Discussion

Gender-based differences in the performance, satisfaction, and mental health of physicians have been subject to discussion since before the COVID-19 pandemic [6]. Parallels between the emotional well-being of male and female physicians were observed, although female physicians exhibited more psychosomatic symptoms than males [6]. Pandemic-era studies revealed that a person's experience with the pandemic is determined by their age, education, and gender, and that pandemic-related challenges have a significant connection to a person's mental and spiritual well-being [7]. Quality of life among health care specialists transformed during the pandemic due to increased workload and fear of the virus spreading [8; 9]. The satisfaction of physicians can be analyzed through an array of aspects: life satisfaction, work satisfaction, and satisfaction in decision-making and management of the pandemic [10]. Work satisfaction among physicians depends on sociodemographic characteristics (age, gender, and speciality), work hours, income, lifestyle, professional accomplishments, decision-making autonomy, and good patient-physician contact [11]. Poorly-defined tasks and additional administrative workload negatively affect the work and life satisfaction of family physicians, and influence burnout on a personal and professional, patient-related level [12]. Work satisfaction among physicians is determined by age, workload, income, and professional burnout [13]. The stress experienced by family physicians during the pandemic may induce professional burnout and mental illness [10,14]. The main cause of stress in critical situations, such as the COVID-19 pandemic, is the scope and variety of information provided by many different sources [15]. The following factors were associated with professional burnout among physicians: female gender, increased workload and work hours, night shifts, lack of personal protective equipment, and a positive COVID-19 diagnosis [13].

Implications for practice

The main tools to improve the well-being of physicians are to strengthen emotional well-being, to improve the quality of life, to improve work satisfaction, and to reduce professional burnout. Training, meditation, stress management, works in small groups, adherence to working hours are the main tools of increasing the well-being of physicians [16]. The results of this study could be used in the development and implementation of programmes for the management of future medical crises at the national and institutional level.

Study limitations

The researchers would like to underline the study limitation that is low number of surveys. The study encompassed a single country's primary health care system. Future studies would benefit from including other specialists working at the primary health care level, beyond family physicians and internal medicine specialists.

Future research

It is recommended that future research should focus on identifying and assessing the efficacy of measures for improving physicians' well-being and reducing the outcome of pandemic-related challenges.

Conclusion

The study found that physicians with a longer duration of employment in their current institution and physicians from public institutions were more concerned about the COVID-19 pandemic. The pandemic had a negative impact on physicians' quality of life, and those worst affected were: long-term employees; those with more years of experience; older physicians; and females. Satisfaction with the management of the pandemic was determined by age, gender, and duration of employment. Professional burnout was more common among females, older physicians, long-term employees, and those with more years of experience.

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References

1. Copp T, Isautier JMJ, Nickel B, Pickles K, Tracy M, Doust J, et al. COVID-19 challenges faced by general practitioners in Australia: a survey conducted in March 2021. Australian Journal of Primary Health. 2021; 27: 357-363.

2. Siebenhofer A, Huter S, Avian A, Mergenthal K, Schaffler-Schaden D, Spary-Kainz U, et al. COVI-Prim survey: challenges for Austran and German general practitioners during initial phase of COVID-19. PLoS ONE. 2021; 16: e0251736.

3. Budrevičiūtė A, Raila G, Paukštaitienė R, Kalėdienė R, Valius L. Lietuvos gydytojų, dirbančių šeimos gydytojo komandoje, rekomendacijos šeimos medicinos institucijos veiksmingam paslaugų teikimui COVID-19 pandemijos laikotarpiu [The recommendations of physicians working in family physician team in Lithuania for the effective provision of services by family medicine institutions during the COVID-19 pandemic]. Lietuvos Bendrosios Praktikos Gydytojas [Lithuanian General Practitioner]. 2021; 25: 686-698.

4. Linton MJ, Dieppe P, Medina-Lara A. Review of 99 self-report measures for assessing well-being in adults: exploring dimensions of well-being and developments over time. BMJ Open. 2016; 6: e101641.

5. Cordoba EL. Well-being and mental health of healthcare workers before, during, and after COVID-19. Salud Mental. 2021; 44: 211-214.

6. Burke R, Koyuncu M, Fiksenbaum L. Gender differences in work experiences, satisfactions and wellbeing among physicians in Turkey. Gender in Management: an International Journal. 2009; 24: 70-91.

7. Simon R, Ovais D, Kadeer N. Psychological, spiritual and emotional response to COVID-19 pandemic experiences and interventions made. Asia-Pacific Journal of Health Management. 2021; 16: 75-85.

8. Demir AC, Aydin S. Evaluation of healthcare professionals fears and quality of life regarding COVID-19; comparison of the two physicians groups. Annals of Medical Research. 2021; 28: 2201-2206.

9. Kandula UR, Wake AD. Assessment of quality of life among health professionals during COVID-19: review. Journal of Multidisciplinary Healthcare. 2021; 14: 3571-3585.

10. Vilovic T, Bozic J, Furlan SZ, Vilovic M, Kumric M, martinovic D, et al. Mental health well-being and attitudes on mental health disorders among family physicians during COVID-19 pandemic: a connection with resilience and healthy lifestyle. Journal of Clinical Medicine. 2022; 11: 1-17.

11. Abdulrahman KB, Alnosian MY, Alshamrani AA, Alassaf HI, Aldayel AS, Alaskar YA, et al. Job satisfaction among family medicine in Saudi Arabia. Journal of Family Medicine and Primary Care. 2021; 10: 2952-2957.

12. Werdecker L, Esch T. Burnout, satisfaction and happiness among German general practitioners (GPs): a cross-sectional survey on health resources and stressors. PLoS ONE. 2021; 16: e0253447.

13. Alrawashdeh HM, Al-Tammemi AB, Alzawahreh MKh, Al-Tamimi A, Elkholy M, Sarireh FA, et al. Occupational burnout and job satisfaction among physicians in times of COVID-19 crisis: a convergent parallel mixed-method study. BMC Public Health. 2021; 21: 1-18.

14. Kelly EL, Cunningham A, Sifri R, Pando O, Smith K, Arenson Ch. Burnout and commitment to primary care: lessons from the early impacts of COVID-19 on the workplace stress of primary care practice teams. Annals of Family Medicine. 2022; 20: 57-62.

15. Dutour M, Kirchhoff A, Janssen C, Meleze S, Chevalier H, Levy-Amon S, et al. Family medicine practitioners' stress during the COVID-19 pandemic: a cross-sectional survey. BMC Family Practice. 2021; 22: 1-8.

16. Mendelsohn D. Self in medicine: determinants of physician well-being and future directions for improving wellness. Med Educ. 2022; 56: 48-55.