Study regarding professional stress of medical staff in a Pharmacy Company from Constanta, Romania

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Abstract: - Since burn-out is the second most common occupational disease after back pain in the European Union, this study aims to analyze this multidimensional reaction that negatively influences the work of health professionals worldwide. Scientific studies show that occupational burnout manifests itself much more dramatically in the medical profession than in other professions, thus reflecting the phenomenon in all its complexity.
In specialized literature, studies related to the evaluation of the degree of stress among medical personnel are quite rare. This is one of the reasons for carrying out this study. The second reason is the need to highlight the degree of stress in this professional category. The assessment, made on medical staff from common pharmacies in Constanța County, Romania, consists of formulating a questionnaire that includes questions related to stress factors that occur during professional activity. The answers received are interpreted and evaluated statistically.

Keywords: - burnout, exhaustion, diseases, pharmacies, stress, questionnaire

Received: July 11, 2022. Revised: October 18, 2023. Accepted: November 22, 2023. Published: December 11, 2023.

1 Introduction

Professional activity contributes to the improvement of an individual's physical and mental health as well as the general attitude towards life. The presence of heightened tension in work environments, which is often the result of high psychological demand and limited discretion in decision-making, can have deleterious effects on health outcomes [1]. However, many people face stressful factors at work and sometimes these are more intense than the benefits brought by work [2]. Burnout has detrimental consequences for health care organizations, clinicians and the quality of care that patients receive [3]. In the 21st century, in most developed countries, the human force is subject to a wide variety of changes and demands, through which the psyche is assaulted by different agents in multiple ways. However, Burnout Syndrome has become a concern of specialists in recent years, when the number of antidepressant users has also increased by up to 50%. Stress can influence the general state and

lead to the installation of non-specific defence mechanisms. The first signs are headaches, insomnia, dizziness, irritability, concentration disorders, etc. [4]. As far as Romania's concern with work-related stress, things are still at a shy beginning.

2 Methods

In a chain of community pharmacies in the county of Constanța, Romania, the behaviour of health professionals was studied according to the degree of stress they are subjected to in their professional environment. Thus, a total of 102 volunteers working in this pharmacy chain answered some questions related to the correlation between the degree of stress and professional activity. The received answers were statistically assessed.

The tailored questionnaire was delivered to 102 professionals from the medical field who work at the same company, under the same professional environment. The analysed community pharmacy company is located in Constanta County, Romania, an urban, congested area, where the population is varied and consists of both local residents and many people who are in transit. This questionnaire includes the following questions and the corresponding possible answers:

Q1. What gender are you? i) female ii) male

Q2. In which area do you live? i) rural ii) urban

Q3. What age category do you belong to? i) 20-25 years old ii) 26-30 years old iii) 31-35 years old iv) 36-40 years old v) 41-50 years old vi) over 50 years old

Q4. What is the last completed level of education? i) High school ii) Post secondary school iii) College, bachelor's level iv) Faculty, master's level v) PHD

Q5. Which category of medical professional are you part of? i) Practical student ii) Pharmacy assistant iii) Pharmacist iv) Beauty advisor

Q6. How long have you worked in the medical field? i) under 5 years ii) 5-10 years iii) 10-15 years iv) 15-20 years v) 20-25 years vi) more than 25 years

Q7. What is the shift category you perform in the pharmacy? i) day shifts of 6-8 hours ii) night shifts iii) weekend/legal holiday shits

Q8. What are the main stress factors that negatively influence your professional activity? i) the duration of the working hours ii) reduced number of free days iii) the diversity of the activities carried out in the pharmacy iv) the short deadlines for the achievement of the objectives v) the feeling that work is not fairly rewarded vi) interpersonal relationships (conflicts and competition between colleagues) vii) other

Q9. How do stress factors influence professional activity? i) to a very large extent ii) to a great extent iii) sufficient iv) to a small extent v) not at all

Q10. What are the consequences of the stress you feel at work? i) irritability and nervousness ii) demotivation iii) physical tiredness iv) poor self-confidence v) concentration difficulties vi) other

Q11. What are the elements that could reduce the stress factors? i) the possibility of expressing the opinion regarding the activities at the workplace ii) avoiding tasks that seems unlogic iii) establishing a flexible work schedule iv) creating a work-rest balance in the workplace v) the improvement of performance criteria vi) other

3 Results and discussion

The results of the questionnaire were quantified. Most of the respondents are female and live in the urban area, as shown in Figure 1.

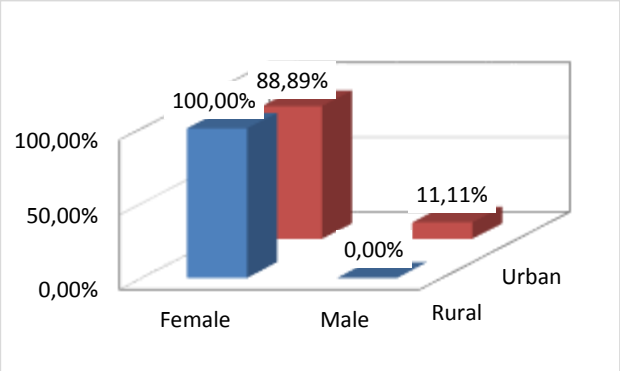

Figure 1 The results in percentage of each gender and rural/urban area

The percent score for each question (Q3 to Q11) reported by the type of gender and the area where the respondent lives, is presented in Tables 1 - 9. Chi-square test performed and p-values less than 0.05 were statistically significant.

Table 1 The percent score for question Q3 reported on the type of gender

Q3	female	male	p
i	0.00%	0.00%	0.483
ii	3.03%	0.00%	
iii	15.15%	0.00%	
iv	30.30%	0.00%	
v	36.36%	75.00%	
vi	15.15%	25.00%	

Table 2 The percent score for question Q4 reported on the type of gender

Q4	female	male	p
i	0.00%	0.00%	0.251
ii	15.15%	0.00%	
iii	51.52%	25.00%	
iv	33.33%	75.00%	
v	0.00%	0.00%	

Table 3 The percent score for question Q5 reported on the type of gender

Q5	female	male	p
i	0.00%	0.00%	0.647
ii	18.18%	0.00%	
iii	81.82%	100.00%	
iv	0.00%	0.00%	

Table 4 The percent score for question Q6 reported on the type of gender

Q5	female	male	p
i	3.03%	25.00%	0.261
ii	21.21%	0.00%	
iii	24.24%	0.00%	
iv	33.33%	50.00%	
v	9.09%	25.00%	
vi	9.09%	0.00%	

Table 5 The percent score for question Q7 reported on the type of gender

Q7	female	male	p
i	90.91%	75.00%	0.406
ii	6.06%	25.00%	
iii	3.03%	0.00%	

Table 6 The percent score for question Q8 reported on the type of gender

Q8	female	male	p
i	0.00%	0.00%	0.737
ii	15.15%	0.00%	
iii	18.18%	25.00%	
iv	6.06%	0.00%	
v	48.48%	50.00%	
vi	6.06%	25.00%	
vii	6.06%	0.00%	

Table 7 The percent score for question Q9 reported on the type of gender

Q9	female	male	p
i	33.33%	50.00%	0.715
ii	51.52%	25.00%	
iii	12.12%	25.00%	
iv	3.03%	0.00%	
v	0.00%	0.00%	

Table 8 The percent score for question Q10 reported on the type of gender

Q10	female	male	p
i	24.24%	25.00%	0.003
ii	54.55%	25.00%	
iii	18.18%	0.00%	
iv	3.03%	0.00%	
v	0.00%	50.00%	
vi	0.00%	0.00%	

Table 9 The percent score for question Q11 reported on the type of gender

Q11	female	male	p
i	27.27%	25.00%	0.464
ii	24.24%	25.00%	
iii	3.03%	25.00%	
iv	15.15%	25.00%	
v	15.15%	0.00%	
vi	0.00%	0.00%	

From the total number of answers obtained, a robot portrait of the health specialist working professionally in a pharmacy in the city of Constanta was created. It is characterized as follows: it is a female person who lives in an urban area, with an age between 40-50 years old, with a higher education degree, specialization pharmacist and with a working experience of around 20 years, who has a work shift of 6-8 hours per day.

Most of the respondents blame insufficient remuneration (44%) as the main stress factor, followed by the multitude of activities that have to be carried out in short intervals (20.6%), the low number of free days (14.7%) or conflicts with colleagues (8.8%) (Figure 2).

The majority say that their work is influenced by these stressors to a large extent (50%), only 2.9% of respondents are influenced to a small extent by stressors. None of the respondents consider stressors to be unimportant for their professional activity. The presence of stressors in the professional environment leads to demotivation of staff (50%), but also to irritation and nervousness (26.5%) or physical exhaustion (14.7%) (Figure 3). The elements that could reduce stressors in the professional environment are in approximately equal proportions the assignment of realistic tasks and the possibility to express one's opinion at work (53%) or the creation of a work-rest balance and the improvement of performance criteria (30%).

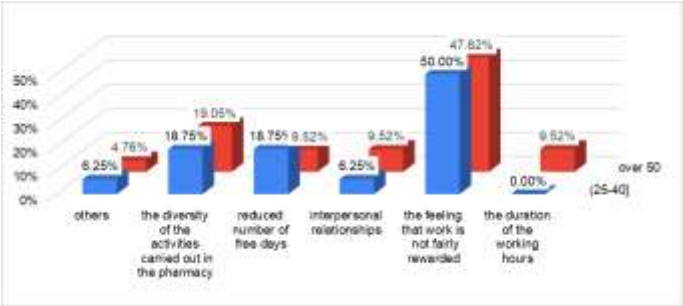

Figure 2 Main stress factors that negatively influence the professional activity depending on age

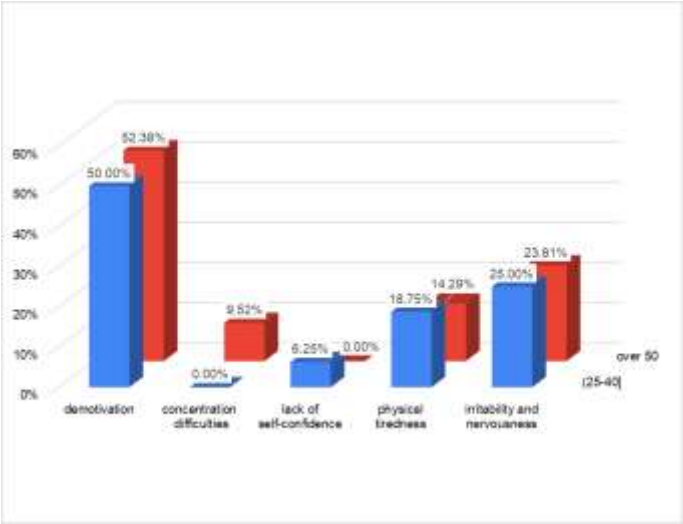

Figure 3 Consequences of the stress depending on age

Correspondence analysis (CA) was performed to visualize the relationships between years worked in the medical field, level of education and professional stress of medical staff.

The main stress factor for respondents over 25 years of work is the reduced number of days off and for those with less than 5 years of work the main stress factor is the diversity of activities carried out in the pharmacy. For those with less than 15 years of experience, the stress factor felt by most respondents is the feeling that work is not sufficiently rewarded.

Most respondents consider demotivation as the main consequence of stress.

The interviewed persons with over 25 years of work believe that creating a work-rest balance in the workplace could reduce the stress factors felt. Those with less than 5 years of experience believe that they do not have the opportunity to express their opinions regarding workplace activities (Figure 4).

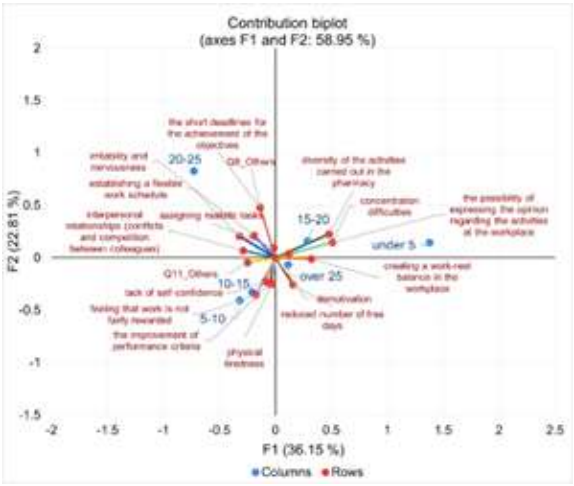

Figure 4 The first two dimensions of correspondence analysis (CA) symmetric plot for years worked in medical field (Q6) and main stress factors (Q8), the consequences of the stress (Q10) and the elements that could reduce the stress factor (Q11)

All respondents with post-secondary education consider that the main stressor is "a not fairly rewarded work". Those with master's degrees consider the main stress factors to be interpersonal relationships (conflicts and competition between colleagues) and short deadlines for meeting objectives.
Regarding demotivation, because of stress, there was no significant difference between levels of education groups.
For those with a bachelor's degree, the main consequences are physical fatigue and poor self-confidence, considering that creating a work-rest balance at work is opportune (Figure 5).

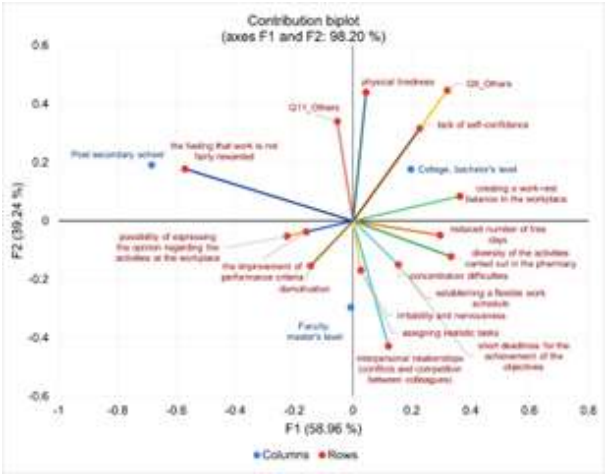

Figure 5 The first two dimensions of correspondence analysis (CA) symmetric plot for level of education (Q4) and main stress factors (Q8), the consequences of the stress (Q10) and the elements that could reduce the stress factor (Q11)

4 Conclusion

Stress factors are defining elements in nowadays society, intervening even in the professional environment, and reducing the concentration capacity and efficiency of professionals. These statistics are important for assessing the level of stress at work and how stress affects employee efficiency and mental-physical health. Workplace support is important in buffering the effect of role stress on burnout [5]. Employees in the medical field have a great professional responsibility and must have the ability to face stressors and perform their tasks correctly.
We found that there are few such analyses in the specialized literature and, therefore, we intend to expand the research, by addressing the questionnaire to other types of workers in the medical field (hospital pharmacies, clinics, dispensaries, hospitals, etc.).

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Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

The authors equally contributed in the present research, at all stages from the formulation of the problem to the final findings and solution.

Sources of Funding for Research Presented in a Scientific Article or Scientific Article Itself

No funding was received for conducting this study.

Conflict of Interest

The authors have no conflicts of interest to declare that are relevant to the content of this article.