

## EVALUATION OF THE QUALITY OF PROFESSIONAL LIFE OF MEDICAL STAFF IN THREE EMERGENCY MEDICINE UNITS FROM ROMANIA

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EVALUATION OF THE QUALITY OF PROFESSIONAL LIFE OF MEDICAL STAFF IN THREE EMERGENCY MEDICINE UNITS FROM ROMANIA (Abstract): Understanding the professional quality of life of medical staff and its determinants is essential for addressing significant issues in this area. A preliminary study is necessary to identify organizational weaknesses and strengths, with the ultimate goal of enhancing healthcare services and their quality. Given its impact on service quality, the professional quality of life of medical staff is a critical concern for healthcare organizations. This study **aimed** to evaluate the professional quality of life of medical staff, presenting and critically assessing the available evidence on the overall professional quality of life of medical personnel in three emergency medical units in Romania. **Materials and methods:** To evaluate the professional quality of life of medical staff in emergency medicine units, a study was conducted from September 1, 2023, to September 30, 2023. The research took place in three emergency units in Romania: “Sf. Spiridon” County Clinical Emergency Hospital from Iasi, “Sf. Ioan cel Nou” County Emergency Hospital from Suceava and the Inspectorates for Emergency Situations (IES) from Iasi and Suceava Counties (IES). **Results:** Three groups of employees representing medical personnel from three emergency medicine units in Romania were analyzed. They are represented by 42 doctors (47.73%), 32 nurses (36.36%) and 14 workers in the Inspectorate for Emergency Situations (IESw) (15.91%). The average age of the study participants was  $36.4 \pm 8.41$  years. The results indicate the mean values of the sub scores for the ProQOL subscales: compassion satisfaction, burnout and secondary traumatic stress. These were compared between the three groups according to profession (physician, nurse, IES workers). Significant differences in their mean ProQOL subscale scores were noted. **Conclusions:** Although physicians, nurses, and IES workers share many professional experiences, significant differences arise from their specific roles, work environments, and the unique stresses they encounter. Recognizing these differences is crucial for addressing their distinct needs and effectively supporting their well-being. **Keywords:** PROQOL, EMERGENCY MEDICINE UNITS, MEDICAL STAFF, BURNOUT, COMPASSION SATISFACTION, SECONDARY TRAUMATIC STRESS.

## **Evaluation of the quality of professional life of medical staff in three emergency medicine units from Romania**

### **INTRODUCTION**

Burnout syndrome, recognized by the WHO as a work-related disease, arises from chronic stress (1). It typically develops in high-pressure environments, with unstable work schedules, shifts, and overnight work (2, 3). This condition negatively impacts the mental and physical health of workers, particularly healthcare professionals (4). Burnout is characterized by three main components: emotional exhaustion, depersonalization, and low personal accomplishment (5).

Job satisfaction, perception of professional life, and professional quality of life collectively define the quality of professional life (6). This quality significantly impacts health services and the overall efficacy of any healthcare process. The professional quality of life of healthcare workers directly influences the quality of care provided and patient satisfaction, making it essential to consider the satisfaction of these workers. Assessing professional quality of life helps identify organizational strengths and weaknesses (7). Research indicates that implementing practices to enhance professional quality of life benefits institutions, healthcare workers, and patients alike (8, 9). Therefore, healthcare organizations must measure and address professional quality of life to improve care quality and patient satisfaction (10).

Professional quality of life is a complex, multidimensional concept shaped by personal feelings and perceptions. Factors determining this quality include management practices, relationships with colleagues, demographic characteristics, workload, job promotion opportunities, salary and rewards, and autonomy (11).

The significance of professional quality of life lies in its impact on health services and care quality (12). The relationship

between professional quality of life and outcomes in professional practice is well established. While this area has been extensively studied among healthcare workers, research on nurses in emergency medicine units remains limited (13). Factors influencing professional quality of life encompass individual, social, environmental, contextual, operational, and administrative elements, as well as external factors like patient demands, healthcare policies, and the labor market (14, 15). Specific factors for emergency medicine staff include salary, workload, and educational satisfaction, and work environment, relationships with colleagues, demographic characteristics, shift work, and management style (16).

The growing shortage of medical staff has increased the responsibilities of nurses and doctors. Despite their critical role in prevention and health promotion, there is limited evidence regarding their professional quality of life (17). Identifying the professional quality of life of medical staff and the associated determinants can address major issues in this area. A preliminary study is necessary to overcome organizational weaknesses and highlight strengths, ultimately aiming to improve healthcare services and their quality (18).

The professional quality of life of medical staff is a crucial issue that healthcare organizations must examine due to its influence on service quality.

This study aimed to evaluate the professional quality of life of medical staff. It seeks to present and critically assess the available evidence on the overall professional quality of life of medical personnel in three emergency medical units in Romania.

### **MATERIALS AND METHODS**

In order to evaluate the quality of the

professional life of medical staff in emergency medicine units, a study was carried out between September 1<sup>st</sup>, 2023 and September 30<sup>th</sup>, 2023. The research was carried out in three emergency units in Romania: “Sf. Spiridon” County Clinical Emergency Hospital from Iasi, “Sf. Ioan cel Nou” County Emergency Hospital from Suceava and the Inspectorates for Emergency Situations (IES) from Iasi and Suceava Counties.

The study used the Professional Quality of Life (ProQoL) questionnaire as a data collection tool (19). This questionnaire (ProQOL) comprises 30 items with a 5-point Likert scale (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Very often) and is composed of three subscales: compassion/satisfaction (10 items), burnout (10 items) and secondary traumatic stress (10 items).

Compassion/satisfaction items describe the positive aspects of helping work (“I get satisfaction from being able to help people”), as opposed to burnout (“I feel trapped in my work as a helper”) and secondarily traumatic stress (“I think that the traumatic stress of those I help may have affected me as well”) (19).

Respondents were instructed to indicate how often they had experienced each item in the past 30 days. Questionnaires were scored by summing item responses for each 10-item subscale, with higher scores indicating higher levels of compassion satisfaction, posttraumatic stress, and exhaustion. The scores from each of the subscales can be classified into compassion satisfaction, burnout and secondary traumatic stress: < 22 low; 23–41 medium; > 42 height.

The Romanian version of the ProQOL for the current study has a Cronbach’s alpha coefficient (assessment of the internal consistency of the questionnaire) of

0.82 for compassion satisfaction, 0.78 for secondary traumatic stress and 0.87 for burnout.

The statistical analysis of the data was conducted using the *SPSS version 29.0* software package. Descriptive statistics were calculated for the analyzed variables. Continuous variables were reported as mean values with standard deviation (SD). The Kolmogorov-Smirnov test was used to verify the normal distribution of the variables. Qualitative variables were presented as absolute counts (n) and relative frequencies (%). Group comparisons were performed using the Pearson chi-square test and the Kruskal-Wallis test. A significance level (p-value) of less than 0.05 was considered statistically significant.

## RESULTS

Three groups of employees representing medical personnel from three emergency medicine units in Romania were analyzed. They were represented by 42 doctors (47.73%), 32 nurses (36.36%) and 14 workers in the Inspectorate for Emergency Situations (IESw) (15.91%). The average age of the study participants was  $36.4 \pm 8.41$  years (mean  $\pm$  standard deviation).

Study participants were informed about the purpose and content of the questionnaire. They were told the following: “The ProQOL questionnaire assesses how you deal with various difficult, stressful situations at work. By difficult situations, we mean the following: exposure to a situation whereby a person is faced with an event involving death or the threat of death, serious injury, injury or a threat to physical well-being. So, we are interested in the extent to which interacting with patients with different problems affects your personal life, positively or negatively. Re-

## Evaluation of the quality of professional life of medical staff in three emergency medicine units from Romania

search shows that a human connection is made between the medical setting and the patient, even if the patient is not a well-known person, and this connection can influence your way of being. Please evaluate each statement in the first part by referring to your experiences at work, not your personal life. Also, when thinking about stressful experiences, consider the definition given above, that is, stress caused by dealing with patient difficulties, not by your collegial relationships or other aspects of the workplace.”

The Professional Quality of Life (ProQOL) scale measures the positive and negative aspects of working in helping professions, encompassing compassion satisfaction, burnout, and secondary traumatic stress. The analysis assessed significant differences occurring between physicians, nurses, and Intensive Emergency Services (IES) workers on specific items of the ProQOL questionnaire. Significant differences were noted between the following items 1, 5, 6, 9, 11, 12, 21, 22, 24, 25, 28, 29 and 30 (tab. I).

1. *"I am in a good mood most of the time."*

Physicians often experience high levels of stress due to their extensive responsibilities and the critical nature of their decisions. Their mood may be more variable compared to nurses and IES workers, influenced by the pressure of making life-or-death decisions. Nurses, while also under stress, may have more direct patient interaction, which can provide emotional rewards that boost mood. However, their mood can still be negatively impacted by the emotional labor of care giving.

IES workers often face the most acute stress due to the unpredictable and high-stakes nature of emergency services. Their

mood might fluctuate significantly, often swaying between the adrenaline rush of successful interventions and the lows of witnessing trauma.

5. *"I flinch or get scared when I hear different unexpected sounds."*

Physicians typically work in more controlled environments where unexpected sounds are less frequent, possibly making them less likely to flinch compared to IES workers. However, the constant beeping of monitors and alarms can still be startling. Nurses are often in bustling environments with frequent alarms and calls, potentially desensitizing them to sudden noises, but prolonged exposure can still lead to heightened startle responses. IES workers are most exposed to unexpected, loud, and often distressing sounds. Their work environment predisposes them to higher startle responses due to the nature of emergencies and the need for rapid, responsive action.

6. *"I feel that I still have energy after a day of working with people I help."*

Physicians may experience significant mental fatigue due to the intensity of their decision-making processes and long working hours, leaving them with little energy at the end of the day. Nurses might have varying levels of energy post-shift. Physical exhaustion is common due to the demanding nature of their tasks, but emotional fulfillment from patient interaction can sometimes counterbalance this fatigue. IES workers are likely to be the most drained, both physically and mentally, after a day of responding to emergencies. The high-stress environment and physical demands of their job often leave them exhausted.

9. *"I think that it is possible to be affected by the stressful situations of the people I work with."*

Physicians are often required to main-

tain a level of detachment to make objective decisions, but the cumulative effect of patient stress and critical cases can significantly impact them over time. Nurses are more likely to develop close emotional bonds with patients, making them more susceptible to being affected by the stressful situations their patients endure. IES workers face the rawest and most acute forms of stress. The intensity and immediacy of emergencies can profoundly affect them, given the life-and-death situations they frequently encounter.

11. *"Because of the nature of my work, I feel that different things annoy me."*

Physicians might experience annoyance stemming from systemic issues, administrative tasks, or the high expectations placed on them. Nurses often face the brunt of operational inefficiencies, staff shortages, and demanding patient care routines, contributing to frequent annoyances. IES workers deal with high-stress situations where any small operational hiccup or miscommunication can lead to significant annoyance due to the potential consequences.

12. *"I like the work I do (the situation of providing specialized support)."*

Physicians generally have high levels of job satisfaction from providing specialized medical care and making significant impacts on patient health. Nurses often derive satisfaction from their direct patient care roles and the ability to provide comfort and support, which is a core aspect of their job. IES workers find gratification in the immediacy and impact of their interventions, though the high-stress nature of their work can sometimes overshadow this satisfaction.

21. *"I feel overwhelmed because the tasks I have seem endless."*

Physicians may feel overwhelmed due

to the combination of patient care, administrative responsibilities, and continuous professional development requirements. Nurses often experience a similar sense of being overwhelmed due to understaffing, high patient-to-nurse ratios, and extensive care giving duties. IES workers face overwhelming situations due to the unpredictable nature of emergencies and the continuous demand for their services without much respite.

22. *"I believe that through my work I am useful to society."*

Physicians typically have a strong sense of societal contribution through their ability to treat and cure illnesses. Nurses also feel highly useful to society, given their essential role in patient care and recovery. IES workers often perceive their work as highly impactful, given their role in saving lives and providing critical emergency care.

24. *"I am proud of what I can do for those around me."*

Physicians have a deep sense of pride in their ability to diagnose and treat complex medical conditions, often reflecting years of specialized training. Nurses take pride in their hands-on care and the personal connections they build with patients, often seeing the direct impact of their work on patient recovery. IES workers have immense pride in their ability to respond effectively in high-pressure situations and make a tangible difference in emergencies.

25. *"As a result of work activities, some times I have thoughts that scare me."*

Physicians might experience distressing thoughts due to the high-stakes nature of their decisions and the potential for adverse patient outcomes. Nurses can be haunted by the emotional burden of patient suffering and loss, leading to distressing thoughts.

**Evaluation of the quality of professional life of medical staff  
in three emergency medicine units from Romania**

IES workers are the most likely to have frightening thoughts due to the traumatic and often life-threatening situations they encounter regularly.

28. *"I can't remember important parts of my professional activity with victims of traumatic events."*

Physicians might struggle with memory issues due to cognitive overload and the vast amount of information they must process daily. Nurses can experience memory lapses due to the high emotional and physical demands of their job, especially when dealing with traumatic patient cases. IES workers are prone to memory issues as a coping mechanism to manage the intense stress and trauma associated with their work.

29. *"I am a caring person."*

Physicians often display care through their dedication to patient outcomes and the

extensive effort they put into their work. Nurses are frequently seen as the epitome of caring in the healthcare system, given their close and continuous interaction with patients. IES workers demonstrate care through their rapid, life-saving actions and commitment to providing emergency assistance.

30. *"I am satisfied that I chose this profession."*

Physicians generally feel satisfied with their profession due to the respect, financial rewards, and the intellectual stimulation it provides. Nurses may find satisfaction in the personal fulfillment derived from patient care and the intrinsic rewards of their care giving role. IES workers often feel a profound sense of purpose and satisfaction from the immediate and visible impact of their work, despite the high stress involved.

**TABLE I.  
Comparative evaluation of the ProQOL questionnaire  
according to the profession of study participants**

| Professional Quality of Life Scale Items                              |                     | Physician (n=42)       | Nurse (n=32)                 | IES workers (n=14)             | p-value                        |                |
|---|---------------------|------------------------|------------------------------|--------------------------------|--------------------------------|----------------|
| Age, years, mean (SD)   |                     | 33.1 (7.78)            | 39.8 (9.02)                  | 38.4 (4.48)                    | 0.001                          |                |
| Gender, male / female, n (%)  |                     | 8/34<br>(19.05/80.95)  | 10/22<br>(31.25/68.75)       | 14/0<br>(100/0)                | <0.001                         |                |
|   | <b>Never</b>        | <b>Rarely</b>          | <b>Sometimes</b>             | <b>Often</b>                   | <b>Very often</b>              | <b>p-value</b> |
| <b>1. I am in a good mood most of the time.</b>                       |                     |                        |                              |                                |                                |                |
| Physician / Nurse / IESw  | 0/1/0<br>(0/3.13/0) | 1/0/0<br>(2.38/0/0)    | 15/3/2<br>(35.71/9.38/14.29) | 14/19/3<br>(33.33/59.38/21.43) | 12/9/9<br>(28.57/28.13/64.29)  | 0.0218*        |
| <b>2. I try to help as many people as I can with the time I have.</b> |                     |                        |                              |                                |                                |                |
| Physician / Nurse / IESw  | -                   | 1/0/0<br>(2.38/0/0)    | 4/1/1<br>(9.52/3.13/7.14)    | 16/16/1<br>(38.1/50/7.14)      | 21/15/12<br>(50/46.88/85.71)   | 0.1261         |
| <b>3. I feel fulfilled by the fact that I am able to help people.</b> |                     |                        |                              |                                |                                |                |
| Physician / Nurse / IESw  | -                   | 0/1/0<br>(0/3.13/0)    | 4/0/1<br>(9.52/0/7.14)       | 20/11/3<br>(47.62/34.38/21.43) | 18/20/10<br>(42.86/62.5/71.43) | 0.1754         |
| <b>4. I feel close to the people I interact with.</b>                 |                     |                        |                              |                                |                                |                |
| Physician / Nurse / IESw  | 0/1/0<br>(0/3.13/0) | 5/0/1<br>(11.9/0/7.14) | 15/8/1<br>(35.71/25/7.14)    | 15/17/7<br>(35.71/53.13/50)    | 7/6/5<br>(16.67/18.75/35.71)   | 0.1484         |

| Professional Quality of Life Scale Items  |                                |                                | Physician (n=42)              | Nurse (n=32)                   | IES workers (n=14)              | p-value |
|---|--------------------------------|--------------------------------|-------------------------------|--------------------------------|---------------------------------|---------|
| <b>5. I flinch or get scared when I hear different unexpected sounds.</b>   |                                |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 15/17/7<br>(35.71/53.13/50)    | 9/8/2<br>(21.43/25/14.29)      | 9/4/0<br>(21.43/12.5/0)       | 7/1/5<br>(16.67/3.13/35.71)    | 2/2/0<br>(4.76/6.25/0)          | 0.0401* |
| <b>6. I feel that I still have energy after a day of working with people I help.</b>  |                                |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 5/6/1<br>(11.9/18.75/7.14)     | 14/3/3<br>(33.33/9.38/21.43)   | 12/6/2<br>(28.57/18.75/14.29) | 5/15/4<br>(11.9/46.88/28.57)   | 6/2/4<br>(14.29/6.25/28.57)     | 0.0161* |
| <b>7. I find it difficult to separate my personal life from my professional life.</b>   |                                |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 10/17/6<br>(23.81/53.13/42.86) | 17/6/4<br>(40.48/18.75/28.57)  | 9/7/1<br>(21.43/21.88/7.14)   | 4/1/1<br>(9.52/3.13/7.14)      | 2/1/2<br>(4.76/3.13/14.29)      | 0.1634  |
| <b>8. Sometimes I am not very efficient at work because I am affected by the difficult experiences of the people, I help.</b> |                                |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 11/19/8<br>(26.19/59.38/57.14) | 14/4/2<br>(33.33/12.5/14.29)   | 12/5/0<br>(28.57/15.63/0)     | 4/3/2<br>(9.52/9.38/14.29)     | 1/1/2<br>(2.38/3.13/14.29)      | 0.2176  |
| <b>9. I think that it is possible to be affected by the stressful situations of the people I work with.</b>                   |                                |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 7/6/6<br>(16.67/18.75/42.86)   | 12/16/3<br>(28.57/50/21.43)    | 12/5/0<br>(28.57/15.63/0)     | 6/4/5<br>(14.29/12.5/35.71)    | 5/1/0<br>(11.9/3.13/0)          | 0.0197* |
| <b>10. I am attracted to my job, to the situations where I can be helpful to others.</b>                                      |                                |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 2/1/1<br>(4.76/3.13/7.14)      | 4/0/0<br>(9.52/0/0)            | 10/5/1<br>(23.81/15.63/7.14)  | 14/17/3<br>(33.33/53.13/21.43) | 12/9/9<br>(28.57/28.13/64.29)   | 0.7944  |
| <b>11. Because of the nature of my work, I feel that different things annoy me.</b>   |                                |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 3/12/6<br>(7.14/37.5/42.86)    | 13/14/3<br>(30.95/43.75/21.43) | 9/4/1<br>(21.43/12.5/7.14)    | 11/1/3<br>(26.19/3.13/21.43)   | 6/1/1<br>(14.29/3.13/7.14)      | 0.0063* |
| <b>12. I like the work I do (the situation of providing specialized support).</b>   |                                |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 0/4/0<br>(0/12.5/0)            | 1/0/0<br>(2.38/0/0)            | 6/4/0<br>(14.29/12.5/0)       | 16/11/2<br>(38.1/34.38/14.29)  | 19/13/12<br>(45.24/40.63/85.71) | 0.0396* |
| <b>13. Sometimes I feel depressed because of the difficult experiences of the people I work with.</b>                         |                                |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 13/15/9<br>(30.95/46.88/64.29) | 14/6/1<br>(33.33/18.75/7.14)   | 6/5/0<br>(14.29/15.63/0)      | 4/4/2<br>(9.52/12.5/14.29)     | 5/2/2<br>(11.9/6.25/14.29)      | 0.2769  |
| <b>14. I feel that sometimes I also experience the trauma that the people I help go through.</b>                              |                                |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 12/11/5<br>(28.57/34.38/35.71) | 19/13/6<br>(45.24/40.63/42.86) | 7/4/3<br>(16.67/12.5/21.43)   | 2/4/0<br>(4.76/12.5/0)         | 2/0/0<br>(4.76/0/0)             | 0.6691  |
| <b>15. I have certain principles that help me cope with the situations I face at work.</b>                                    |                                |                                |                               |                                |                                 |         |
| Physician / Nurse / IES   | 1/1/0<br>(2.38/3.13/0)         | 3/4/0<br>(7.14/12.5/0)         | 8/3/1<br>(19.05/9.38/7.14)    | 19/23/4<br>(45.24/71.88/28.57) | 11/1/9<br>(26.19/3.13/64.29)    | 0.0024* |
| <b>16. I am satisfied with the way I manage to apply my knowledge and different techniques in order to provide help.</b>      |                                |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | -                              | -                              | 16/1/3<br>(38.1/3.13/21.43)   | 15/19/2<br>(35.71/59.38/14.29) | 11/12/9<br>(26.19/37.5/64.29)   | 0.0006* |
| <b>17. I can say that I have achieved what I always wanted.</b>   |                                |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | -                              | 2/0/1<br>(4.76/0/7.14)         | 11/3/0<br>(26.19/9.38/0)      | 14/15/6<br>(33.33/46.88/42.86) | 15/14/7<br>(35.71/43.75/50)     | 0.1591  |

**Evaluation of the quality of professional life of medical staff  
in three emergency medicine units from Romania**

| Professional Quality of Life Scale Items  |                                 | Physician (n=42)               | Nurse (n=32)                  | IES workers (n=14)             | p-value                         |         |
|---|---------------------------------|--------------------------------|-------------------------------|--------------------------------|---------------------------------|---------|
| <b>18. The work I do gives me a lot of satisfaction.</b>  |                                 |                                |                               |                                |                                 |         |
| Physician / Nurse / IES   | 1/0/0<br>(2.38/0/0)             | 2/0/0<br>(4.76/0/0)            | 13/4/1<br>(30.95/12.5/7.14)   | 15/13/3<br>(35.71/40.63/21.43) | 11/15/10<br>(26.19/46.88/71.43) | 0.0704  |
| <b>19. Sometimes, I feel exhausted as a result of interacting with different people in suffering.</b>                           |                                 |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 3/8/7<br>(7.14/25/50)           | 12/10/2<br>(28.57/31.25/14.29) | 10/7/1<br>(23.81/21.88/7.14)  | 8/3/2<br>(19.05/9.38/14.29)    | 9/4/2<br>(21.43/12.5/14.29)     | 0.0681  |
| <b>20. I have feelings of kindness and understanding for the people I help.</b>   |                                 |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 1/1/0<br>(2.38/3.13/0)          | 1/0/0<br>(2.38/0/0)            | 8/2/1<br>(19.05/6.25/7.14)    | 16/16/2<br>(38.1/50/14.29)     | 16/13/11<br>(38.1/40.63/78.57)  | 0.1727  |
| <b>21. I feel overwhelmed because the tasks I have seem endless.</b>  |                                 |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 2/14/7<br>(4.76/43.75/50)       | 9/9/2<br>(21.43/28.13/14.29)   | 14/2/1<br>(33.33/6.25/7.14)   | 11/4/3<br>(26.19/12.5/21.43)   | 6/3/1<br>(14.29/9.38/7.14)      | 0.0012* |
| <b>22. I believe that through my work I am useful to society.</b>   |                                 |                                |                               |                                |                                 |         |
| Physician / Nurse / IES   | 0/0/2<br>(0/0/50)               | 0/0/10<br>(0/0/14.29)          | 18/5/39<br>(56.25/35.71/7.14) | 14/9/36<br>(43.75/64.29/21.43) | 32/14/88<br>(0/0/7.14)          | 0.0158* |
| <b>23. I avoid certain activities or situations because they remind me of the unfortunate experiences of the people I help.</b> |                                 |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 19/13/10<br>(45.24/40.63/71.43) | 13/10/2<br>(30.95/31.25/14.29) | 5/5/1<br>(11.9/15.63/7.14)    | 3/2/1<br>(7.14/6.25/7.14)      | 2/2/0<br>(4.76/6.25/0)          | 0.7929  |
| <b>24. I am proud of what I can do for those around me.</b>   |                                 |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 0/2/0<br>(0/6.25/0)             | 1/0/1<br>(2.38/0/7.14)         | 10/1/0<br>(23.81/3.13/0)      | 18/9/4<br>(42.86/28.13/28.57)  | 13/20/9<br>(30.95/62.5/64.29)   | 0.0101* |
| <b>25. As a result of work activities, sometimes I have thoughts that scare me.</b>   |                                 |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 14/22/11<br>(33.33/68.75/78.57) | 9/8/1<br>(21.43/25/7.14)       | 12/1/1<br>(28.57/3.13/7.14)   | 6/1/1<br>(14.29/3.13/7.14)     | 1/0/0<br>(2.38/0/0)             | 0.0117* |
| <b>26. I feel "stuck" in the system I have entered.</b>   |                                 |                                |                               |                                |                                 |         |
| Physician / Nurse / IES   | 13/17/9<br>(30.95/53.13/64.29)  | 13/8/2<br>(30.95/25/14.29)     | 5/2/0 (11.9/6.25/0)           | 8/3/2<br>(19.05/9.38/14.29)    | 3/2/1<br>(7.14/6.25/7.14)       | 0.4448  |
| <b>27. I believe I have a successful career.</b>  |                                 |                                |                               |                                |                                 |         |
| Physician / Nurse / IES   | 3/2/1<br>(7.14/6.25/7.14)       | 5/1/0<br>(11.9/3.13/0)         | 15/4/2<br>(35.71/12.5/14.29)  | 13/13/4<br>(30.95/40.63/28.57) | 6/12/7<br>(14.29/37.5/50)       | 0.0636  |
| <b>28. I can't remember important parts of my professional activity with victims of various traumatic events.</b>               |                                 |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 9/14/8<br>(21.43/43.75/57.14)   | 15/10/4<br>(35.71/31.25/28.57) | 16/4/2<br>(38.1/12.5/14.29)   | 2/4/0<br>(4.76/12.5/0)         | -                               | 0.0385* |
| <b>29. I am a caring person.</b>  |                                 |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | -                               | -                              | 9/0/0<br>(21.43/0/0)          | 19/15/5<br>(45.24/46.88/35.71) | 14/17/9<br>(33.33/53.13/64.29)  | 0.0112* |
| <b>30. I am satisfied that I chose this profession.</b>   |                                 |                                |                               |                                |                                 |         |
| Physician / Nurse / IESw  | 2/0/0<br>(4.76/0/0)             | 1/0/0<br>(2.38/0/0)            | 10/0/1<br>(23.81/0/7.14)      | 12/4/2<br>(28.57/12.5/14.29)   | 17/28/11<br>(40.48/87.5/78.57)  | 0.0061* |

Continuous variables were expressed as mean (standard deviation), the variables did have a normal distribution.

Categorical variables: number (%); IESw – Inspectorate for Emergency Situations workers

† Pearson chi-square test; § Kruskal-Wallis test / \* Marked effects are significant at  $p < 0.05$



The results presented in table II indicate the mean values of the subscores for the ProQOL subscales: compassion satisfaction, burnout and secondary traumatic stress. These were compared between the three groups according to profession (physician, nurse, IES workers). Significant differences in their mean ProQOL subscale

scores were noted.

The subscore for Compassion Satisfaction was significantly higher for nurses and IES workers ( $p = 0.0005$ ), and for the physician the subscores for burnout ( $p = 0.0018$ ) and secondary traumatic stress ( $p = 0.0185$ ) were significantly higher (tab. II, fig. 1).

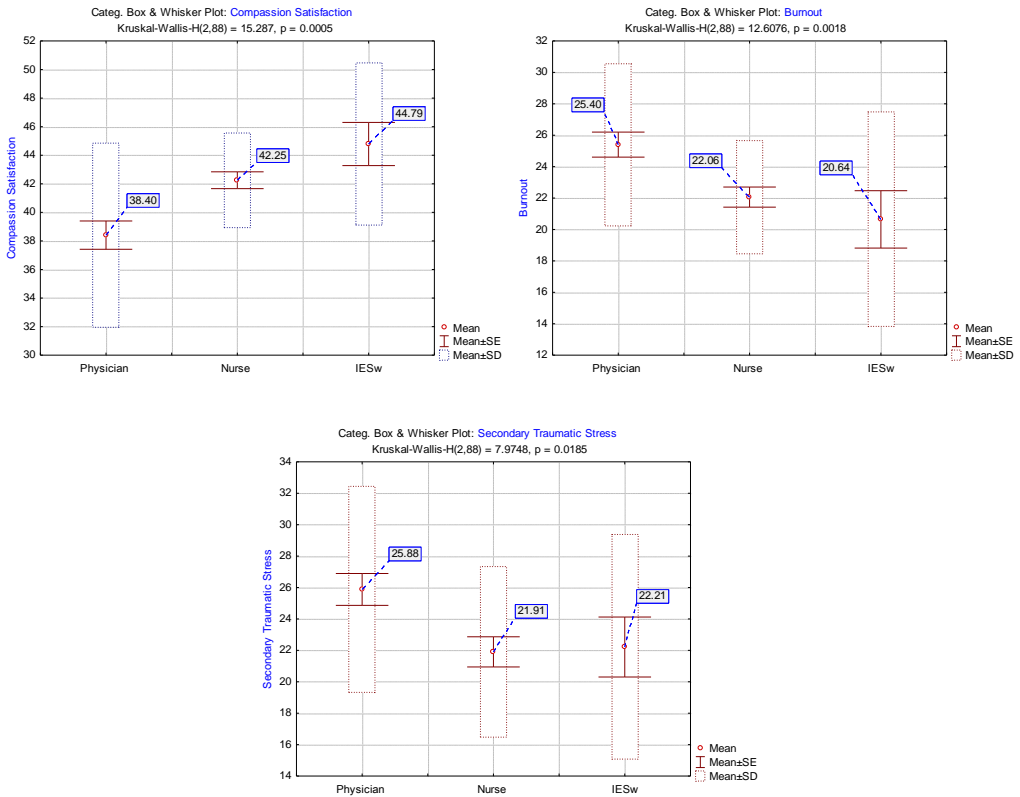
TABLE II.

**Statistical indicators of subscores for the three ProQOL subscales by profession**

| Professional Quality of Life Scale SCORE SUBSCALE | Physician (n=42) | Nurse (n=32) | IES workers (n=14) | p-value <sup>§</sup> |
|---|------------------|--------------|--------------------|----------------------|
| Compassion Satisfaction, mean (SD)                | 38.40 (6.43)     | 42.25 (3.32) | 44.79 (5.66)       | 0.0005*              |
| Burnout   | 25.40 (5.17)     | 22.06 (3.62) | 20.64 (6.83)       | 0.0018*              |
| Secondary Traumatic Stress                        | 25.88 (6.57)     | 21.91 (5.43) | 22.21 (7.15)       | 0.0185*              |

Continuous variables were expressed as mean ± standard deviation (SD); the variables did not have a normal distribution.

\* Marked effects are significant at  $p < 0.05$  / § Kruskal-Wallis test



**Fig. 1.** Box and whisker plot for ProQOL subscores by profession

## Evaluation of the quality of professional life of medical staff in three emergency medicine units from Romania

### DISCUSSION

The Professional Quality of Life (ProQOL) scale assesses the positive and negative aspects of work in helping professions, focusing on compassion satisfaction, burnout, and secondary traumatic stress. This synthesis highlights the significant differences between physicians, nurses, and Intensive Emergency Services (IES) workers regarding specific items on the ProQOL questionnaire (19).

In the case of doctors, was noted a great mood variability, they are often mentally fatigued, less frequent startle response but affected by patient stress, they were also annoyed by systemic issues, high satisfaction from specialized care (20), overwhelmed by extensive responsibilities, with a strong sense of societal contribution, and pride in treating complex conditions, distressing thoughts from high-stakes decisions and memory issues from cognitive overload. Dedication to patient outcomes was generally satisfied with profession (21).

The nurses' mood was stimulated by the interaction with the patient despite the stress, there are mentioned a frequent physical exhaustion, some desensitization to sudden noises, but close bonds increase stress susceptibility. They were annoyed by operational inefficiencies, satisfaction from direct care, overwhelmed by high patient ratios, but felt highly useful, and proud of patient recovery. In this case emotional burden led to distressing thoughts and memory lapses (22).

Medical staff is often seen as the epitome of caring, finding deep fulfillment in their care giving roles. Their close and continuous interaction with patients allows them to provide comfort and support, which not only benefits the patients but also enhances the nurses' sense of professional satisfaction and personal accomplishment (23).

In the case of IES workers, significant

mood changes were observed, being the most physically and mentally exhausted, highest startle response, profoundly impacted by acute stress. IES workers were annoyed by operational hiccups and gratification from impactful interventions. Overwhelmed by constant demand, they perceive work as highly impactful and immense pride in emergency response. IES workers often experience frequent frightening thoughts and may develop memory issues as a coping mechanism. Despite these challenges, they demonstrate their care through life-saving actions and maintain a profound sense of purpose, even under high stress (12, 24).

While all three groups-physicians, nurses, and IES workers-experience stress and derive satisfaction from their roles, the nature of their specific duties leads to significant differences in how they experience mood, energy, stress, job satisfaction, and professional pride. Understanding these differences is essential for providing tailored support to enhance their well-being and effectiveness in their respective roles (25, 26).

Hospital policies can be revised to address the root causes of physicians, nurses, and IES workers burnout syndrome. By allocating resources appropriately and conducting further research on effective prevention methods, hospitals can reduce the incidence of burnout among physicians, nurses, and IES workers. These measures will enhance the quality of workers from emergency medical units and lower turnover rates, which are essential for providing high-quality nursing care.

Workers from emergency medical units face significant challenges due to adverse working conditions. Factors such as workload overload, rotating shifts, low salaries, lack of autonomy, workplace violence, and bullying can lead to high emotional exhaustion, low accomplishment, and high deper-

sonalization (27). Additionally, lacking a partner can also contribute to these issues by depriving nurses of the security and support partners provide (17). These challenges can result in severe emotional problems, including insomnia, irritability, and stress (19). High burnout rates among nurses are associated with increased medication errors, higher infection rates, more patient falls, and lower quality of care (9, 16). Implementing spiritual interventions in the workplace may help mitigate these adverse outcomes (18). Variations in study results across countries may be due to differences in nurse-patient ratios and national medical systems' workloads (11). Furthermore, the imbalance between low salaries and high workloads significantly contributes to burnout (21). Increasing wages and reducing workloads could effectively address this issue. Differences in assessment tools also lead to varying results, as each scale has different criteria. Many nurses in the United States have considered leaving their jobs due to burnout (28). Despite these challenges, workers from emergency medical units are vital for achieving health-related goals, such as patient safety, managing non-communicable diseases, providing people-centered care, and ensuring universal health coverage (1).

The prevalence of nursing burnout has been gradually increasing over the past decade, necessitating urgent attention.

## CONCLUSIONS

In conclusion, while physicians, nurses, and IES workers share many similarities in their professional experiences, significant differences arise due to the nature of their specific roles, the environments they work in, and the unique stresses they face. Understanding these differences is crucial for addressing their distinct needs and supporting their well-being effectively.

While all three groups—physicians, nurses, and IES workers—experience stress and derive satisfaction from their roles, the nature of their specific duties leads to significant differences in how they experience mood, energy, stress, job satisfaction, and professional pride. Understanding these differences is essential for providing tailored support to enhance their well-being and effectiveness in their respective roles.

## CONFLICT OF INTEREST AND FUNDING

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## Evaluation of the quality of professional life of medical staff in three emergency medicine units from Romania

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