Burnout in the intensive care units in Western Greece

M. LAGADINOU¹, A. NOTI², M. ADAMOPOULOU², M. MARANGOS¹, D. GKENTZI³

¹Department of Internal Medicine, University General Hospital of Patras, Patras, Greece
²Department of Nursing, University of Patras, Patras, Greece
³Department of Paediatrics, University General Hospital of Patras, Patras, Greece

Maria Lagadinou and Aggeliki Noti are co-authors

Abstract. - OBJECTIVE: Prevention of burnout is a national imperative, and blame-free investigations of clinical events are advocated. Reflective inquiry techniques are helpful in processing adverse events while minimizing blame. The purpose of the present study was to investigate the factors inducing occupational exhaustion, staff perceptions through their interdisciplinary collaboration and communication, as well as the possibility of any conflicts in the Intensive Care Units of Western Greece. Moreover, we also aimed at developing an inter-professional peer-review program to process emotions and improve teamwork, which will also lead to the improvement of the care provided to patients.

PATIENTS AND METHODS: Healthcare workers of four Intensive Care Units from three (3) Hospitals in Western Greece participated in the present study. Our manuscript included all items according to STROBE statement.

RESULTS: We found a moderate to high choice in the collaboration scale and showed that one of the major reasons for conflict was the lack of mutual understanding between coworkers. It was also shown that all participants were characterized by moderate to high levels of occupational exhaustion.

CONCLUSIONS: Effective relationships to establish constructive communication, require the development of skills aiming at building mutual understanding. Possible proposals for future directions in this area of research are discussed. Aiming at improving clinical practice it would be helpful the design of staff support services for better management of exhaustion.

Key Words: Intensive care unit, Communication, Conflicts, Cooperation, Burnout.

Introduction

Burnout was first described in 1974 by Freudenberger, thus inspiring the investigation of the characteristics and prevalence of this phenomenon. Maslach et al. described burnout as three distinct aspects: emotional exhaustion, depersonalization, and lack of personal and professional fulfillment. Burnout has been identified in a variety of human-centered occupations, including healthcare workers. To build a "sturdy" health system, it is important to address the exhaustion of healthcare workers which can affect their well-being and the quality of healthcare services provided.

Workload and time pressure have been cited as the main causes of exhaustion, contributing to emotional exhaustion too. Patient-related stress and work-related behaviors have also been identified as factors associated with exhaustion.

Especially for intensive care units, their composition is unique in the area of health services provided. For healthcare professionals, working in the intensive care unit (ICU), differences in work requirements, overload of responsibilities, end-of-life issues and interpersonal conflicts are extremely stressful. For that reason, healthcare workers are particularly susceptible to burnout, something that has been observed at a high rate in our department.

The aim of the present study was to investigate the factors inducing occupational exhaustion, staff perceptions through their interdisciplinary collaboration and communication, as well as the possibility of any conflicts in the Intensive Care Units of Western Greece. Moreover, this project aimed to assist in the development an inter-professional peer-review program to process emotions, improve teamwork and patients’ outcome.

Patients and Methods

This study was conducted between July and September 2019 in the three (3) main hospitals in Western Greece: Adult Intensive Care Unit of University General Hospital of Patras (PGNP-I)
and Pediatric Intensive Care Unit of University General Hospital of Patras (PGNP-2), General Hospital of Patras (GNP) “Agios Andreas” and General Hospital of Pyrgos “Andreas Papandreou” (GHP). The study was approved by each Institutional Ethics Committee of the above-mentioned hospitals.

This study was carried out using a written questionnaire. A total of 100 questionnaires were distributed and 67 were completed and returned by the ICUs staff. Participants were randomly selected. The research was carried out anonymously. The questionnaire was designed based on results of already published studies. It consisted of 25 multiple-choice questions and divided in four parts: the first part consisted of questions related to demographic characteristics of the participants (e.g., gender, age, marital status, level of education, duration of working in ICU, number of nurses per patient), the second part consisted of questions referring to the cooperation-communication of the employees in ICU, the third one was investigating conflicts between employees, while the last part consisted of questions which were related to the burnout of employees in ICU (e.g., do you feel exhausted from your job or have you found a state of burnout).

Statistical analysis of data was performed using the SPSS-25 statistical software (IBS Corp., Armonk, NY, USA). The minimum value of the level of statistical significance (p-value) was set at 0.05. Descriptive statistics were used to define variables.

**Results**

Eighty-six-point six percent (86.6%) of doctors and nurses working in the ICU, answered that they have a satisfactory cooperation. Their total satisfaction regarding cooperation was 46.3%. The feeling of trust between nurses and doctors was reported in 53.7% of cases, while in 15.9% of cases reported bad relationships.

The major role of nurses as a part of the working team was recognized in 52.2% of cases. Nurses’ opinion regarding patients’ therapeutic approach was taken into account by the medical staff in a proportion of 53.7%. In a high proportion (92.5%), patients’ treatment depends on the good cooperation between doctors and nurses. Communication between doctors and nurses regarding therapeutic protocols was also overall high (80.6%). Moreover, 73.1% of respondents agreed that doctors get informed about the patient’s daily condition by the nursing staff. Almost half of the participants (49.3%) answered that mutual respect exists between doctors and nurses.

Good cooperation with superiors was reported at a rate of 97.02%. The belief that in any difficult situation there will be protection and support between colleagues was reported at a rate of 85.1%. Thus, 82.1% of relationships outside the work environment have been formed between the employees in the ICU and the communication with the ICU staff is ranged from good to excellent in 98.1%.

Employees estimate that their work was positively or negatively recognized at a rate of 46.3% and 53.7% respectively. They, themselves estimate that 68.6% do not behave impersonally to their colleagues. Fifty-point seven percent (50.7%) of healthcare workers believe that they have to work harder to cover the incompetence of their colleagues. Surprisingly, 67.2% answered that there are too many conflicts at work. All results are presented in Table I.

**Discussion**

The Intensive Care Unit (ICU) where healthcare professionals collaborate to treat severe ill patients functions as an independent department, with specialized medical staff and advanced types of equipment. Healthcare professionals know that interdisciplinary collaboration is vital for both themselves and patients\(^9\). It seems that in the ICUs in Western Greece, where the research was conducted, there are lower rates of burnout compared to the corresponding surveys conducted in other countries.

Occupational exhaustion has serious socio-economic effects. A significant number of employees are reported to be resigning early due to wear and tear. Burnout is more common in doctors than in nurses where rates are less than a half. The prevalence of health care workers’ exhaustion is among the highest of the professions researched\(^8\) (occupational physicians 11%, psychiatrists 9%, general practitioners 8%, community nurses 8%, and midwives 7%)\(^5\).

An increasing number of doctors are experiencing burnout, with disappointing results. They lose enthusiasm for their work, develop fatigue and depression. This may lead to more frequent medical errors, early retirement, or a career change\(^10\). Forty-one-point seven percent (41.7%) of hospital
doctors suffers from burnout, which is directly related to medical errors, poor performance and unhealthy habits. Surprisingly, the burnout rates are very high in the specialized doctors (49.1%).

The burnout is due either to the difficult working conditions (insufficient psychological condition, incorrect division of labor, insufficient staff, lack of autonomy, etc.) or due to the nature of the work (daily contact with human suffering and death, increased responsibilities, etc.). The emotional burdens that the workers find from time to time and consequently the work stress itself are aggravated by the economic crisis that has characterized the country in recent years. Global research has shown a strong correlation between the financial crisis and work stress11-14.

Even more, in the Intensive Care Unit, there may be conflicts between staff. The most common disagreements usually arise between medical and nursing staff and the majority of cases are related to the type of treatment followed, as the common goal of treatment by doctors and nurses is not often achieved. In addition, disagreements may arise when the patient’s treatment regimen changes (each time the attending physician changes) and the appropriate nurse is not informed of these changes15.

Respect usually is necessary to achieve successful communication and teamwork. Communication improves clinical outcomes and helps reduce costs in human and material resources. In the ICU, the effective cooperation with the common goal of the effectiveness of the treatment is ensured through effective communication. High-quality care is ensured by good communication. Lack of patience, negative answers to questions or repeated invitations from nurses, negative criticism, and negative malicious com-

Table 1. Summarized results. PGNP-1: Intensive Care Unit (ICU) of University General Hospital of Patras, PGNP-2: Pediatric Intensive Care Unit of University General Hospital of Patras, GNP: ICU of General Hospital of Patras "Agios Andreas" and GHP: ICU of General Hospital of Pyrgos "Andreas Papandreou".
ments are behaviors that indicate a lack of respect between doctors and nurses, causing stress and conflicts in the workplace.

The present study has two strong limitations. First the study period was short. As result, few patients were ultimately enrolled, leading to diminished statistical power. This research is planned to be extended to a much larger sample of participants and several ICUs. For this purpose, the questionnaire is developed in a web-based format, however, ensuring the same terms of participation.

Conclusions

We found overall moderate to high levels of occupational exhaustion. Effective relationships to establish constructive communication, require the development of skills aiming to build mutual understanding.

Conflict of Interests

The authors declare that they have no conflict of interest.

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