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How does a medical team in the Oncology Department react to the Covid-19 pandemic?

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How does a medical team in the Oncology Department react to the Covid-19 pandemic?

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How does a medical team in the Oncology Department react to the Covid-19 pandemic?

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ABSTRACT



The Covid-19 pandemic was and still is a great challenge for the entire world population. People in the first line, among them doctors being a very important category, faced the risk of disease and, in some cases, even became infected. The emotional consequences of this risk are highlighted in this paperwork which tries to stress, with the help of applied questionnaires, the presence of psycho-emotional disorders among the medical staff of the Oncology Department of St. Luke's Hospital, Bucharest, during the pandemic.

The medical staff had a low level of stress, adapting to the evolution of the pandemic "to some extent". The main fear was that of illness and the most common emotional states experienced by the subjects were: worry, nervousness and dissatisfaction. Most of the medical staff showed negative emotions, but there were also people who felt positive emotions of relaxation, calmness or joy. The most common ways of managing the stress caused by the pandemic were: communicating with colleagues, family and friends, watching movies and enjoying various activities with the family at home.

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Introduction

Working in the healthcare system is often both stressful and rewarding. However, during a pandemic, emotional and physical reactions may be overwhelming, thus leading to stress. Worldwide, the public has realized how stressful the COVID-19 pandemic may be for healthcare workers and expressed their gratitude by applauding and (balcony) singing. These spontaneous actions are widely published and broadcasted, followed by statements of policy makers who made promises to take better care of healthcare workers. But what do we precisely know about the stress healthcare workers had to go through?

It may be expected that during the COVID-19 outbreak, many healthcare workers have experienced varying levels of stress and discomfort. Of course, one of the most distressing factors could be to become infected themselves, which was the case in various countries. In several

EU/EEA countries, over 10% of all diagnosed COVID-19 cases were detected among healthcare workers [1].

The medical staff presents the risk of infection more than other professional categories, especially due to the contact with the infected patients. In their case, emotional disorders can be generated by both the fear of contamination and the fear of passing on the virus to other patients, but also to families, friends or those they come in contact with.

This explorative study reports about stress, symptoms and coping mechanisms during the pandemic among healthcare workers, i.e. health care professionals and healthcare supporting workers in an Oncology Department. The questions to be answered are:

- : Do these healthcare workers in the Oncology Department experience stress as a result of the situation generated by the pandemic?
- : What are the main sources of stress?

- : Which psycho-emotional symptoms and which physical reactions do they report?
- : Which coping mechanisms do they use given the situation?

Materials and Methods

The 36 healthcare workers in the Oncology-Palliative Care Department of St. Luke's Hospital for Chronic Diseases, Bucharest, were invited to fill in – anonymously – a questionnaire comprising 5 questions.

The invitees were: 3 physicians, 14 nurses, and 19 paramedical staff members in the Oncology-Palliative Care Department of St. Luke's Hospital for Chronic Diseases, Bucharest. The questionnaire was applied in April.

The questionnaire contains questions about the following concepts: type of work, distress (adaptation to the pandemic), source of distress, emotional/physical symptoms, experienced physical reactions in relation to the pandemic, and coping strategies during the pandemic. Possible answers were presented and respondents could also add other answers. All the invitees filled in the questionnaire.

We combined the answers per concept as follows:

Type of work:

- direct contact with patients; physician/nurse = healthcare professional
- no direct contact with patients = supporting healthcare worker

Stress:

- completely – almost completely adapted = no distress
- not at all – a little bit – kind of adapted = quite distressed

Source of stress:

- fear of disease – lack of medical equipment – fear of death – impossibility in meeting and communicating with other people – impossibility of moving around: the sum of each answer “yes”.

Psychological/ emotional symptoms:

- positive symptoms (joy – optimism – relaxation – calmness – compassion): number of “yes” answers;
- negative symptoms (sadness – despair – discontent – fear – impatience – worry– nervousness – anger – panic); number of “yes” answers.

Physical reactions:

- loss of appetite – weakness – mental exhaustion – palpitations – difficulties in breathing – hyper-action – sleeping issues – memory disorders – difficult concentration - headache: number of “yes” answers.

Coping strategies: talking to family, colleagues, hospital therapist, getting information from official sources,

physical activity, listening to music, watching movies, reading, family activities: number of strategies mentioned.

The frequencies of these categorized answers are presented. Additionally, we analyzed, by using Pearson's correlation, whether there is a significant difference in the level of distress, sources of distress, emotional/physical symptoms, physical reactions, and coping strategies between healthcare workers who have a direct contact with patients and healthcare workers who have a supportive administrative, cleaning and technological task.

The approval of the Ethical Committee has been previously obtained.

Results

About half (53%) of the 36 respondents report not to be so stressed, while 47% report to be quite stressed. The Pearson correlation between the type of work and distress shows statistical significance ($r=.443$ $p<.01$), meaning that healthcare professionals are more stressed than supporting medical care workers.

This aspect is explained by the more frequent interactions they have with “potentially infected” patients (consultations, morning visit, discussions, etc.).

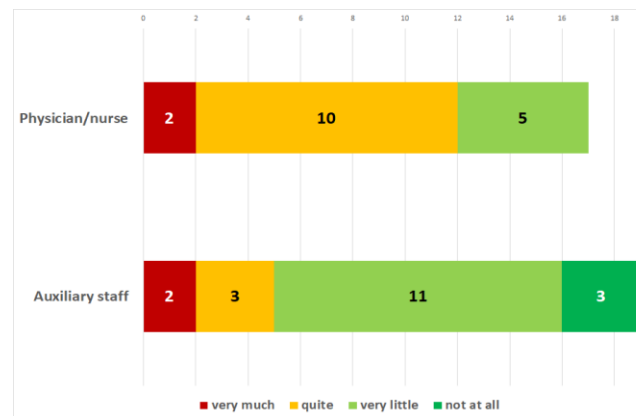


Figure 1. The distribution of the stress level according to the professional category

Seventeen respondents (47%) mention one specific source of stress and 16 respondents (44%) mention 2 sources of stress. The most frequent sources of stress are ‘the impossibility of meeting and communicating with the others’ and ‘the impossibility of moving around’ (each mentioned 18 times), followed by ‘the lack of medical equipment’ (12 times) and ‘fear of disease’ (9 times). Those who mentioned the impossibility of meeting and communicating also frequently mentioned the impossibility of moving around, i.e. 13 respondents (36%) mentioned both. Fear of death was mentioned by none of the respondents. This situation can be explained by the fact that the Oncology Department deals with death on a daily basis. Because of this, the workers seem to be desensitized in front of death.

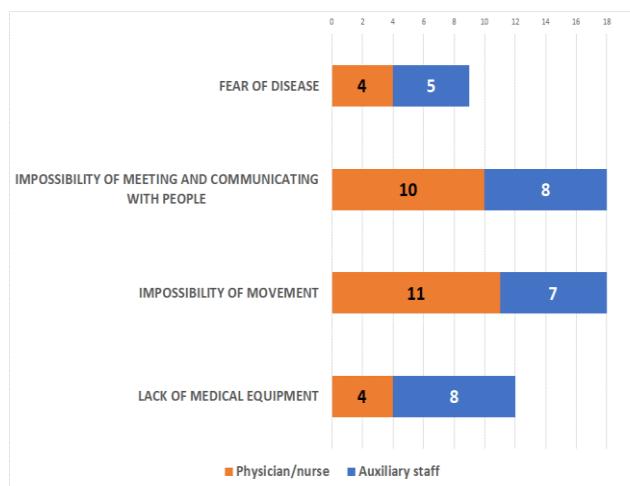


Figure 2. Sources of stress according to the professional category

A number of 64% of the respondents had positive psychological/emotional symptoms, while 86% expressed negative ones. Among the positive emotions, ‘compassion’ is mentioned most frequently: 14 times, i.e. by 40% of the respondents.

Frequently mentioned negative emotions are: worry - 17 times (47%) and nervousness - 13 times (36%).

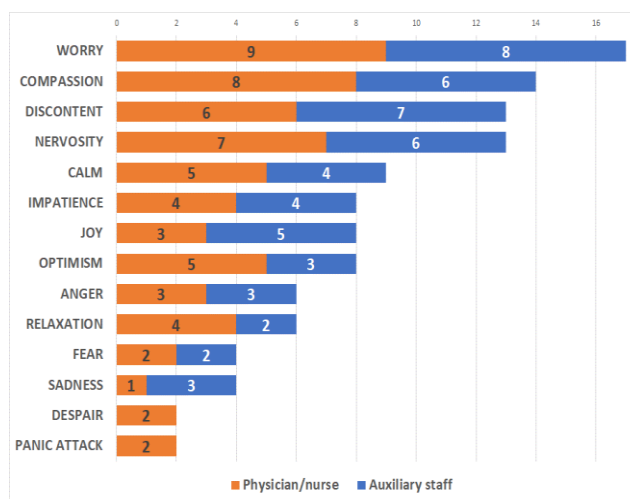


Figure 3. The distribution of the emotional states according to the professional category

No physical reactions were reported by 8 respondents (22%), 16 respondents expressed one physical reaction and 12 respondents - two or more reactions. The most frequently mentioned reaction was ‘mental exhaustion’ 16 times (44%), followed by ‘weakness’ 10 times (28%) and ‘headache’ 8 times (22%).

These aspects can be explained by the fact that both the medical and the auxiliary staff in the Oncology Department have been present every day in the first line from the very first moments of the pandemic outbreak.

Most respondents (94%) mention the use of one or more coping strategies to deal with the stressful situation. Six mention the use of 5 strategies or more. Frequently

mentioned coping strategies are ‘talking to family and friends’ (19 times) and ‘talking to colleagues’ (18 times), followed by ‘activities with family at home’ and ‘watching movies’ each 12 times. Medical care professionals mention talking to colleagues more frequently than talking to supportive healthcare workers.

Those who mention more coping strategies also report more sources of stress (Pearson’s $r = .469$ $p = .004$) and more mental/emotional symptoms (Pearson’s $r = .444$ $p = .007$).

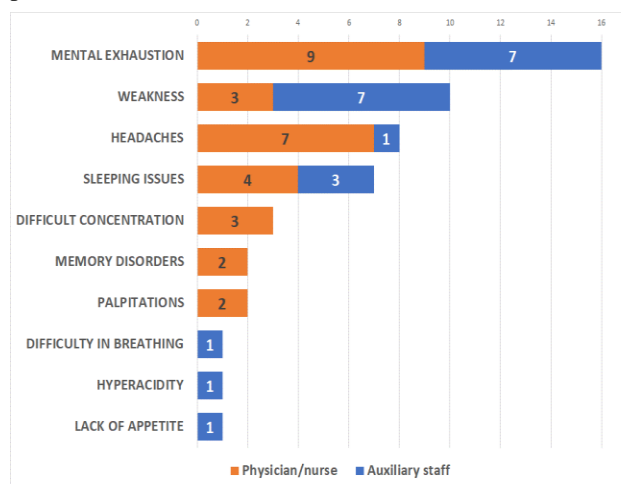


Figure 4. The distribution of symptoms according to the professional category

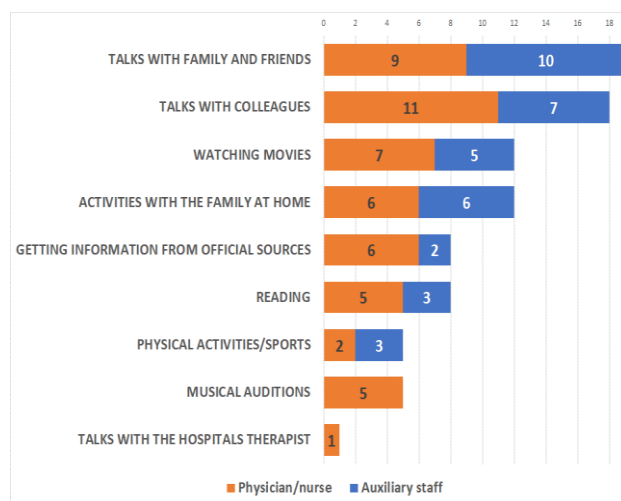


Figure 5. Ways of managing stress according to the professional category

Discussions

The COVID-19 pandemic deeply affected the social and the economic life worldwide, and caused the most severe sanitary crisis since the Spanish flu, more than 100 years ago. SARS-CoV-2, the etiologic agent, is an RNA virus in the Coronavirus family, with structural similarities with the causative agents of Middle East respiratory syndrome (MERS) in 2012 and severe acute respiratory syndrome (SARS) during 2002–2003 outbreaks [2]. The

COVID -19 pandemic period was marked by a significant decrease in the number of elective hospital admissions, both due to restrictive regulations during the state of emergency, but also due to the patients' fear of disease [3]. Vulnerable groups, such as the elderly, the diabetics and oncological patients were neglected, and even routine surgeries such as cholecystectomies [4], or specific care for diabetic ulcers were postponed until advanced, complicated stages [5,6].

During the pandemic, the oncological patients represent a vulnerable group, both due to their increased vulnerability of their immune system, but also due to the difficulties in accessing early diagnosis and treatment, which is essential in achieving a favorable outcome [7-9], due to the restrictions imposed by the novel regulations due to the pandemic [10-15].

Following the research, we can conclude that the medical and auxiliary staff in the Oncology-Palliative Care Department of St. Luke's Hospital for Chronic Diseases, Bucharest, were affected by the pandemic with the new coronavirus. They said they were "a little stressed" and said they had adapted to some extent. These aspects have been highlighted by further research [16-18].

Only a few studies have been published so far, which investigate the level of stress and related mental-physical symptoms or physical reactions among healthcare workers in relation with the recent Coronavirus pandemic [19,20]. These studies report higher distress levels among healthcare workers, related to the COVID-19 pandemic. Studies on former epidemics also indicate that healthcare workers have higher risks of stress, anxiety and insomnia [21,22]. High levels of stress may be expected because of the shortage of protective equipment and therefore the threat of exposure, work load, and moral dilemmas (such as whom to treat and whom not to treat).

Unlike other studies, the present research showed that the most significant sources of stress were: the inability to meet and communicate with the loved ones (family, friends, etc.) (50%), the inability to travel to places where they had previously enjoyed spending their free time (50%), the lack of adequate medical equipment to provide protection in fighting against the virus (30%), the fear of disease (25%).

Permanent pressure on the medical staff due to the increased workload, lack of time, deficient communication, psychological burnout may increase the risk of medical errors [23]. Follow-up studies are needed to assess the PTS syndrome and moral distress. So far, we believe that clear communication, the provision of rest areas as well as broad access and detailed rules on the use and management of PPE and specialized training on handling COVID-19 patients could reduce anxiety [24-27].

Research shows that about 50% of the medical staff need psychological support [28-30]. Identifying psycho-emotional disorders is important in order to intervene both with medication and by providing psychological support (counseling, psychotherapy) to reduce them [31-35].

Highlights

- ✓ Healthcare institutions should ensure sufficient support, including providing tailored education and training, and ensuring adequate resources.
- ✓ The psychosocial need should be monitored to reduce the levels of anxiety and stress. Family and colleagues may play an important role.

Conclusions

The medical staff in the Oncology Department of St. Luke's Hospital, Bucharest present psycho-emotional disorders as a result of the situation generated by the pandemic with SARS-CoV-2: worry and nervousness.

The medical staff in the Oncology Department of St. Luke's Hospital, Bucharest present physical and mental reactions: mental exhaustion, weakness and headaches.

The medical staff in the Oncology Department of St. Luke's Hospital, Bucharest have found coping mechanisms for the situation created by the pandemic with SARS-CoV-2: talking to family and friends, talking to colleagues, followed by activities with the family at home and also watching movies.

Conflict of interest disclosure

There are no known conflicts of interest in the publication of this article. The manuscript was read and approved by all authors.

Compliance with ethical standards

Any aspect of the work covered in this manuscript has been conducted with the ethical approval of all relevant bodies and that such approvals are acknowledged within the manuscript.

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All authors have equal scientific contribution and share first authorship.

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