



The Establishment of The Burnout Syndrome Among Healthcare Professionals During The COVID-19 Pandemic

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Abstract

The main purpose of this study is to investigate to what extent the burnout syndrome has been established among healthcare professionals involved in treating and managing COVID-19 patients. Several categories of medical personnel were analyzed, namely physicians, nurses, carers and stretcher-bearers and also administrative to find out which category of medical staff is most affected by the burnout syndrome. A quantitative research method was performed utilizing the survey method. One of the best-known models were used, respectively the one elaborated by Maslach & Jackson. The questionnaire was applied to a convenience sample of 195 healthcare workers involved in treating and managing COVID-19 patients from one of the main COVID-19 hospitals in Bucharest, Romania. Findings indicate that varying levels of burnout syndrome established in all categories of healthcare workers involved in treating and managing COVID-19 patients, however, the incidence is considerably higher in physicians in a proportion of 42%, followed by nurses with 22%, administrative staff with 17%, and carers and stretcher-bearers with only 13%. The data obtained were analyzed and the results were compared for each category of healthcare workers.

Keywords: burnout syndrome, COVID-19, healthcare, relationship marketing

Introduction

On March 11, 2020, World Health Organization characterized COVID-19 as a pandemic, which generated numerous economic and social implications, reaching to be considered a global health crisis (WHO, 2020). The COVID-19 pandemic has affected several areas considerably, leading to major changes in people's day-to-day activities. This led to major and immediate

changes in their lifestyle, such as the way people interact with others, considering the introduction of physical and social distancing, and also the way people work, commute and spend their free time. According to some studies, due to the COVID-19 pandemic, high levels of stress and depression have been identified in the general population (Ornell *et al*, 2020), people being worried about the current situation generated by the pandemic

and also the long-term consequences it may have on their lives.

Society has faced several other epidemics and pandemics in the past, but not of such magnitude, this establishing a lot of pressure on key areas of activity. One of the areas most affected by the pandemic is healthcare, given the pressure on the entire medical system and the fact that since the beginning of the pandemic, healthcare workers have been constantly working in difficult and stressful conditions, which lead to the need of implementing accessible counseling services for medical staff, designed to maintain both their mental well-being and their physical health (Ehrlich et al, 2020).

With the rapid spread of the pandemic, healthcare professionals feel enormous pressure taking into account the fact that they have to make critical decisions regarding their patients' lives and their own lives on a daily basis. Factors like the way they equally allocate limited resources to needy patients and try to maintain a physical and mental balance are just some of the issues that healthcare professionals are facing nowadays worldwide (Greenberg 2020).

Literature Review

The concept of burnout syndrome, introduced by Freudenberg more than five decades ago, describes a "feeling of exhaustion and fatigue, frequent headaches and gastrointestinal disturbances, sleeplessness and shortness of breath" (Freudenberg, 1974), leading to emotional exhaustion of a person. Also, burnout is perceived as a three-dimensional construct characterized by emotional exhaustion, depersonalization and feelings of reduced personal accomplishment (Enzmann, et al, 1998). Several risk factors have been identified that may lead to the onset of burnout syndrome, and these can be separated into four sections: individual characteristics, organizational factors, quality of working relationships and exposure to end-of-life issues (Poncet et al., 2007).

There is a close connection between burnout syndrome and depression, however, depression is defined as a clinical syndrome, while burnout represents a crisis in one's work relationship (Maslach, 1996). In some instances, depression and burnout syndrome share several similarities, but even if some overlapping

symptoms may occur, they don't have the same meaning. A major difference is given by the fact that burnout syndrome is linked to job-related circumstances, while depression is regularly correlated with generic ones (Bianchi, 2015). Also, it was shown that people encountering burnout syndrome rarely face losing weight or report suicidal thoughts and retain the capacity to appreciate stuff in their personal lives (Brenninkmeyer 2001). Also, the World Health Organization provides a definition of the burnout syndrome by describing it as a syndrome emerging from chronic work-related stress, manifesting itself through sensations of mental exhaustion, increased mental distance from work or feelings of negativity regarding work activity, which lead to reduced professional efficacy (WHO, 2019).

Burnout syndrome is an increasingly common phenomenon widespread in several areas, greatly affecting healthcare professionals. According to recent data, burnout syndrome may affect critical care medical workers at high levels, such as up to 50% (Moss et al., 2016). The risk of developing psychological distress and other mental health issues develops mainly at healthcare professionals (physicians, nurses, and carers) who are directly involved in the treatment and care of patients infected with SARS-CoV-2 (Lai et al., 2020) in the red zone, where patients with high or medium risk or COVID-19 infection are hospitalized and treated (Chong, 2020). Multiple factors such as the busy schedule, performing long night shifts, and direct interaction with the suffering and illness of patients on a daily basis, bring a major contribution to the establishment of the burnout syndrome among healthcare professionals.

Also, some categories of administrative personnel are exposed to this type of risk, such as mechanics or IT specialists who often must enter the infected areas of the hospitals for various repairs or for ensuring the maintenance of medical or IT equipment.

Considering that the repeated exposure to this type of emotions and experience of distress and anxiety can contribute to establishing high levels of stress among healthcare professionals (Kumar, 2016), treating or keeping the mental health of the medical staff under control is critical, especially taking into account the fact that these emotions can affect the quality of medical care and also the healthcare professional's sense of well-being (Meier, 2001).

Another factor that contributes to the onset of burnout syndrome among physicians is the ever-changing medical environment. Studies have shown that occupational stress is a significant workplace concern in healthcare and it is expected to grow in the future (Pich, 2018), considering the constantly emerging of new treatments and drugs in different therapeutic areas, constraining physicians, in order to be able to continue practicing their profession and to keep up with all the novelties that appear. The novelty that the healthcare system is now facing is the COVID-19 pandemic, so analyzing and treating the mental exhaustion of healthcare professionals, given the potentially traumatizing situations they may be exposed to, is a necessary and important issue (Raudenska et al., 2020).

Methodology

The main objectives of the study focused on the significant aspects related to the investigated problem, consisting in: identifying the extent to which the healthcare workers feel tired, exhausted and emotionally drained at the end of the work schedule, identifying if they feel indifferent to the things they were interested in before and if they are indifferent to what is happening to their subordinates or colleagues, if they feel that they need to isolate themselves for a while from the rest of the people around and to rest, and also identifying if the healthcare workers are at the limit of their powers or if they manage to do many things in life, as they want.

The scope of the research consists in identifying to what degree the burnout syndrome has established among healthcare professionals involved in treating COVID-19 patients and what are the categories of healthcare workers at which burnout syndrome has developed the most.

The applied method is quantitative research, using the survey method. One of the best-known models were used, respectively the one elaborated by Maslach & Jackson. According to them, the model is defined by the following dimensions: Emotional Exhaustion, Depersonalization and Personal Accomplishment (Maslach & Jackson, 1981). The respondents answered a questionnaire consisting of 25 questions, each answer corresponding to a number from 1 to 5 (meaning very rarely, rarely,

sometimes, frequently and very frequently), and each of the 3 dimensions corresponds to specific items. The sum of the points for each dimension is calculated, obtaining a score, which is related to specific values, the questionnaire being finally interpreted as follows:

- 0-25 points: the burnout syndrome does not exist;
- 26-50 points: the burnout syndrome is not yet installed;
- 51-75 points: the burnout syndrome is installed at a medium level;
- 76-125 points: high burnout syndrome (Maslach & Jackson, 1981).

Regarding the structure of the sample, the study was conducted on a convenience sample of 195 healthcare workers involved in treating COVID-19 patients, consisting of 40 physicians, 54 nurses, 53 carers and stretcher-bearers, and 48 administrative staff. They were selected for the present study as they are involved in the front line of the fight against the novel coronavirus. The answers to the questionnaire were collected during two months, respectively between December 2020 and January 2021, approximately 10 months after the onset of the COVID-19 pandemic. The data obtained regarding each category of respondents were analyzed and compared. All respondents work in one of the main COVID-19 hospitals in Bucharest, Romania.

Findings/Results

According to the study, different levels of burnout syndrome established in all categories of healthcare workers involved in treating COVID-19 patients, however, the incidence is considerably higher in physicians. The chart below shows that regarding the four categories of healthcare workers who participated in this study, the burnout syndrome established among physicians, in a proportion of 42%, followed by nurses with 22%, administrative staff with 17%, and carers and stretcher-bearers with only 13%. The data obtained were analyzed and the obtained results

were compared for each category of healthcare workers.

During the COVID-19 pandemic, physicians encountered a medium-high level of burnout syndrome (total 64.27 points), with a moderate-to-severe level of emotional exhaustion (28.2 points) and feelings of reduced personal accomplishment (25.75 points), but showed a low level of depersonalization (10.70 points). The study shows that 42% of respondents have a high level of burnout, 28% have a medium-high level, in case of 18% the syndrome did not set yet, and only 12% of the respondents were not affected by the burnout syndrome.

The results are explained by the fact that physicians have a much higher level of responsibility than all other categories of healthcare workers and are more involved in treating COVID-19 patients, given that they are directly accountable for setting the accurate diagnosis in different stages of the disease, the responsibility on the treatment administered to the patients considering that the medications used do not have in the initial documents the word "COVID-19", and this can lead to failure or malpractice interpretations. Also, another factor that may contribute to the high levels of stress is the communication barrier between physicians and patients or their families, most often being a significant difference between the physician's knowledge of the disease and the patient's or their families knowledge of the disease.

The results show considerably lower levels in nurses than in physicians. Regarding nurses in general, the study showed a medium level of burnout syndrome (total 51.03 points), with a moderate level of emotional exhaustion (21.64 points) and feelings of reduced personal accomplishment (21.09), and a low level of depersonalization (8.29 points). The results show that in the case of the nurses, 22% of the respondents have a high level of burnout, 19% have a medium-high level of burnout, in case of 22% the syndrome did not set in yet, and 37% of the respondents were not affected by the burnout syndrome. The results are explained by the fact that nurses have lower responsibilities than physicians, but nevertheless they have other essential duties such as being responsible for the constant care and supervision of patients, the mental and physical preparation of the patients for paraclinical explorations, the obligation to follow the procedures and protocols used by the

hospital, and also being at risk of exposure to COVID-19 in the hospital given the daily interaction with COVID-19 patients.

The third category of healthcare workers most affected by the burnout syndrome is the administrative personnel. The study showed low to moderate levels of burnout in general (47.64 points), with moderate levels of emotional exhaustion (18.58 points) and feelings of reduced personal accomplishments (20.14 points), and a low level of depersonalization (8.91 points).

However, the results show that 17% of the administrative staff have a high level of burnout, 19% have a medium-high level of burnout, in case of 19% the syndrome did not set in yet, and a majority of 46% of the respondents were not affected by the burnout syndrome.

This is due to several factors such as the need and urgency to provide medical equipment as well as assuring the existence of a sufficient stock of medicines to the physicians and also providing the necessary staff for each section of the hospital. Also, working in an environment with constant exposure to contamination can lead to increased levels of stress for the administrative staff, especially since they do not have the same knowledge about the disease as physicians or nurses.

Regarding carers and stretcher-bearers, according to the study, this is the category of healthcare workers that was least affected by the burnout syndrome. The study revealed moderate levels of burnout in general (51.49 points), with moderate levels of emotional exhaustion (21.84 points) and feelings of reduced personal accomplishments (20.92 points), and a low level of depersonalization (8.71 points).

Nevertheless, the results show that 13% of the carers and stretcher-bearers who responded in this study were identified with a high level of burnout, 19% have a medium-high level of burnout, in case of 22% the syndrome did not set in, and a majority of 43% of respondents were not affected by the burnout syndrome.

Other categories of healthcare staff that work in a medical unit, such as carers and stretcher-bearers, have less responsibility compared to other categories of healthcare workers, as they are not involved in making decisions about treating COVID-19 patients or administrative issues. Nevertheless, their jobs are essential in any medical care unit, without which the medical

activity would have difficulties in functioning properly, being responsible for the comfort of physicians, patients and also visitors and other caregivers.

Discussion and Managerial Implications

The research showed that conducting surveys among healthcare workers regarding the establishment of the burnout syndrome and even performing them regularly, especially in difficult periods such as the COVID-19 pandemic, is an important tool that helps hospitals monitor, track and control high levels of burnout that healthcare workers can reach and which can affect the quality of the medical care and also the staff's wellbeing.

The information obtained can be used by hospital managers and chief physicians in several respects, such as: adjusting the work schedule to avoid the establishment of high levels of burnout among their staff, hiring more personnel to limit exposure or purchasing more advanced equipment to assist medical staff, if possible. The information obtained may also be useful for the Ministry of Health or other health institutions, because they can have a more distinct understanding of the physical and mental efforts and also risks to which healthcare professionals are exposed, as well as issues that require to be improved to avoid the establishment of the burnout syndrome among medical workers.

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