

Research Article

Health professional stress during COVID-19 pandemic

Fatiha Bennaoui^{1,2*}, Nadia Ei Idrissi Slitine^{1,2}, and Fadl Mrabih Rabou Maoulainine^{1,2}

¹Neonatal Intensive Care Department, Mohammed V71 University Hospital and Research, Morocco

²Child Health and Development Research Laboratory, Marrakech School of Medicine, Cadi Ayyad University, Marrakech, Morocco

Abstract

WHO declared the coronavirus disease 2019 (COVID-19) outbreak, caused by SARS-CoV-2, to be a pandemic on March 12, 2020. In Morocco, the first case was reported in March 2nd 2020. The mental health of general population, medical and nursing staff especially has been greatly challenged.

The aim of the present article is to explore the stress status of medical and nursing staff associated with exposure to the COVID-19.

The medical staff was asked to complete a self-reported questionnaire anonymously. In University Hospital Mohamed VI, in Marrakesh, Morocco. During May 2020.

In total, 120 valid questionnaires were collected. Among them, there were 57 residents (47,5%), 30 internes (25%), 22 nurses (19%) and others: medicine students and technical staff. The age was between 23 and 60 years. 15% of professional lived alone, 85% with their family, 74% lived with an old person or with a person having a chronic disease.

In our study: the severity of symptoms in 36% of the asked professional, deaths among health professionals in 15%, death of a family member in 14%, the rapid spread of pandemic in 90%, the lack of knowledge in 83%, and finally contamination risk especially if comorbidity associated in 2%.

Further risk factors: feelings of being inadequately supported by the hospital in 42%, fear of taking home infection to family members or others in 80%, being isolated, feelings of uncertainty and social stigmatization in 43%.

The psychological presentation was the nightmare 19 in %, the insomnia in 48%, the somatization in 18%, the irritability in 22%, the aggressiveness in 14%, the nervousness in 70% and the drowsiness in 5%.

During the vulnerability of the individual's conditions during and after the COVID-19, psychological intervention should be done and a mental health support for the health professional.

Introduction

In December 2019, a novel coronavirus disease (COVID-19) was first reported in Wuhan, the capital city of Hubei Province of China [1]. The disease rapidly spread throughout China and elsewhere, becoming a global health emergency [2]. The COVID-19 pandemic has caused major sanitary crisis worldwide. Half of the world has been placed in quarantine [3].

In Morocco, the first case was reported in March 2nd 2020. The country took the necessary measures to fight against this pandemic: border closures, containment, barrier measures.

The mental health of population in general, medical and nursing staff especially has been greatly challenged during the pandemic. Health professionals mobilized all their resources to provide emergency situation, in a general climate of uncertainty.

The aim of the present article is to explore the stress status of medical and nursing staff and the mental health risks associated with exposure to the COVID-19 pandemic.

This is the first paper on the stress caused by the specific working conditions, and associated to this pandemic of COVID19, conducted in medical and nursing staff in Marrakesh.

More Information

***Address for Correspondence:** Fatiha Bennaoui, Neonatal Intensive Care Department, Mohammed V71 University Hospital and Research, Morocco, Tel: 00212600648411; Email: fatihabennaoui@yahoo.fr

Submitted: 22 June 2019

Approved: 25 July 2020

Published: 27 July 2020

How to cite this article: Bennaoui F, Ei Idrissi Slitine N, Maoulainine FMR. Health professional stress during COVID-19 pandemic. Arch Psychiatr Ment Health. 2020; 4: 070-072.

DOI: 10.29328/journal.apmh.1001023

ORCID: orcid.org/0000-0001-8156-6708

Copyright: © 2020 Bennaoui F, et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.





Materials and methods

This study is a qualitative and descriptive study. It was a cross-sectional survey; that included the medical and nursing staff of the University Hospital Mohamed VI in Marrakesh, Morocco. During May 2020. The professionals were asked to complete a self-reported questionnaire anonymously. The questionnaire evaluated the work stress, it consisted of demographic data, working conditions, questions and the qualitative evaluation of anxiety, of stress and of environment's problems.

The questionnaire was validated par our professors and discussed in a multidisciplinary staff; it was sent by email, it contains open-ended and multiple-choice questions; as well, as comments to add.

In our context, we highlighted most relevant data concerning the personal factors, disease characteristics and the organizational factors contributing to psychological distress and other mental health symptoms.

Results

In total, 120 valid questionnaires were collected, with a response rate of 100%. Among them, there were 57 residents (47,5%), 30 internes (25%), 22 nurses (19%) , and others : medicine students and technical staff (8,5%). The age was between 23 and 60 years, with an old's average: 29 years. In the staff: 37% were male and 63% were female, among the asked population; 40% were single and 60% were married. During the pandemic 15% of professional lived alone, 85% with their family, 74% lives with an old person or with a person having a chronic disease.

A generalized climate of stress and uncertainty, particularly among health staff was provoked by the general characteristics of the COVID-19 pandemic. In our study the answers about the pandemic characteristics were: the severity of symptoms in 36% of our staff, deaths among health professionals in 15%, death of a family member in 14%, the rapid spread of pandemic: in 90%, the lack of knowledge in 83%, and finally contamination risk especially if comorbidity associated in 2%.

Multiple organizational factors cause the stress; in our staff, many problems were revealed. The depletion of personal protection equipment in 54% of the workers, the deployment to a new area in 30%. Lack of access to information about rapidly changing information in 52% of the staff, lack of intensive care unit beds necessary to care for the surge of critically ill patients, specific drugs and the shortage of ventilators in 31%. Significant change in their daily social and family life 87%, lack of training in 2% and many phone calls from family and patients in 2%.

Further risk factors have been identified, including feelings of being inadequately supported by the hospital in 42%, fear

of taking home infection to family members or others in 80%, being isolated, feelings of uncertainty and social stigmatization in 43%, and finally death anxiety in 14%.

Additionally, the personals were a high levels of anxiety, we evaluated qualitatively that by psychological presentation: Nightmare 19 in %, insomnia in 48%, somatization in 18%, irritability in 22%, aggressiveness in 14%, nervousness in 70% and drowsiness in 5%.

Discussion

Coronavirus disease 2019 (Covid-19) is caused by SARS-CoV-2, a virus belonging to the coronavirus family, no having any specific vaccine or any treatment. Since the end of December 2019, cases of COVID-19 have successively occurred in Wuhan in Hubei Province and other regions in China [4]. Control of the epidemic was challenging and the coronavirus has continued to progress in all of the world; since its discovery.

In general population, COVID-19 is a global public health emergency. The mental health was affected by this new situation in the world .There are psychological symptoms: anxiety, depression, distress, sleep disturbances, and suicidality [5]. Anxiety with a high level of death provoked by the alarming news, with an overwhelming number of new cases and fatalities, quarantine and lockdowns, social distancing, joblessness, the schools are closed and consequently the change in lives for the population.

Distress and anxiety are normal reactions to a situation as threatening and unpredictable as the coronavirus pandemic. This uncertainty makes it difficult to plan and thus generates additional psychosocial stress. Possible stress-related reactions in response to the coronavirus pandemic may include changes in concentration, irritability, anxiety, insomnia, reduced productivity, and interpersonal conflicts [6].

Healthcare workers are on the front lines of the coronavirus outbreak, they are exposed to severe infectious disease, contagion fears, to working more, the separation from family, unusual situations, and feelings of failure in the face of poor prognoses and insufficient technical means to assist patients.

The effects clearly vary in terms of organizational unit, working hour model and status and position occupied. The psychological symptoms in front-line medical staff who participate in the fight against COVID-19, and they affect each other. The mental distress with their loss/separation from family, the self-injury, helplessness and posttraumatic stress. Also: Symptoms of addiction or substance use, medical mistrust and inclination towards conspiracies, panic attacks, depression, loneliness, suicidal ideation, mood problems, sleep problems, worry, denial, boredom, ambivalence, uncertainty, frustration, anger, fear, stigmatization, marginalization, xenophobia, mass hysteria, and other mental Health [7] .



During the pandemic, the psychological crisis intervention for affected, suspected, susceptible, and at-risk patients, families, staff, and the public, is urgently needed for timely prevention of inestimable hazards from secondary mental health crisis [8]. The interviews showed that humanistic community concern for health professional is mandatory, especially in the extraordinary circumstances.

Our hospital improved emergency management measures; strengthen psychological counseling for clinical front-line medical staff.

Conclusion

The severe COVID-19 would be expected to influence the mental health and psychological stress of local medical and nursing staff. The management of this new pandemic revealed important mental health disturbances and improve their physical health perceptions, factors and psychological assistance were identified.

Declaration of interests: I declare no competing interests.

Acknowledgment

The authors would like to thank the nurses who participated in the interview and express high respect for nurses' hard work during the outbreak of COVID-19.

References

1. Zhou F, Yu T, Du R, Fan G, Liu Y, et al. Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. *Lancet*. 2020.
PubMed: <https://pubmed.ncbi.nlm.nih.gov/32171076/>
2. WHO. 2020. <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19>
3. Mediouni M, Madiouni R, ElzbietaKaczor-Urbanowicz K. COVID-19: How the quarantine could lead to the depreobesity. *Obes Med*. 2020; 19: 100255.
PubMed: <https://pubmed.ncbi.nlm.nih.gov/32427138>
4. World Health Organization. Novel coronavirus-China. 2020. <http://www.who.int/csr/don/12-january-2020-novel-coronaviruschina/en/>
5. Lai J, Ma S, Wang Y, Cai Z, Hu J, et al. Factors associated with mental health outcomes among health care workers exposed to Coronavirus Disease 2019. *JAMA Netw Open*. 2020; 3: e203976.
PubMed: <https://pubmed.ncbi.nlm.nih.gov/32202646/>
6. Vinkers CH, van Amelsvoort T, Bisson JI, Branchi I, Cryan JF, et al. Stress resilience during the coronavirus pandemic. *European Neuropsychopharmacology*. 2020; 35: 12–16
PubMed: <https://pubmed.ncbi.nlm.nih.gov/32446705/>
7. Brooks SK, Webster RK, Smith LE, Branchi I, Cryan JF, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*. 395, 10227.
8. Mukhtar S. Mental Health and Psychosocial Aspects of Coronavirus Outbreak in Pakistan: Psychological Intervention for Public Mental Health Crisis. *Asian J Psychiat*. 2020; 51: 102069.
PubMed: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7161472/>