

Challenges Faced Nursing Staff While Working in Quarantine during Covid-19 pandemic: A Qualitative Study

Ahmed Abd Alrahman Hassan¹, Faten Salama Abdelaziz²

(1,2) Lecturer of nursing Administration., Faculty of Nursing, Cairo University

Abstract

Background: Pandemic of covid-19 appear to the world on late of 2019, the prevalence of pandemic among all the world countries was very fast. The already overburdened healthcare system faced a new challenge as a result of COVID-19's abrupt appearance. Healthcare workers around the world faced more difficulties as a result. However, many developing nations, like Egypt, lack information on these difficulties. **Methods:** The aim of this study was to explore the challenges faced by staff nurses when caring for covid-19 patients. This study was conducted in two hospitals in Cairo, Egypt that were working as quarantine. A qualitative exploratory research design was employed to explore the experiences of nurses using face to face semi structured in-depth interviews. The sample size was 15 nurses determined by data saturation at the point where no new information is obtained from the participants. **Results:** Data was tape-recorded and transcribed verbatim and analyzed using content analysis., five main themes and nineteen subthemes were emerged from the analysis of this study. The main themes were challenges related to: personal and family (e.g., fear of virus transmission, family refusing, separation & distance, fear towards covid-19, fear of death, doubt in personal abilities). Work place (e.g., Shift hours, work load, Supplies). Nursing care provision challenges (e.g., working in a new place, using protective equipment, providing high quality of care, witnessing patients suffering). Place of residence and basic needs (e.g., eating, sleeping, toileting), and society challenge (e.g., fear of social interaction, social isolation, stigma). **Conclusion:** Hospitals administration should create protocol to overcome the challenge that faced nursing staff in such situation. And consider nursing staff as value persons. Challenges ranged from psychological stress, social challenge, patient care challenge, training challenge's and personal needs challenges.

Keywords: Challenges, Staff Nurses, Quarantine, Covid-19, Pandemic, Qualitative

Introduction

The novel coronavirus strain that is the root of the current pandemic is known as COVID-19. On January 7, 2020, the Chinese government identified this viral strain (World Health Organization 2020a). It began to spread over the globe from nation to nation (World Health Organization 2020b), and the number of cases was increasing daily (Prompetchara et al. 2020). There are no effective vaccines as of June 2020 (Ahmed et al. 2020), and no special treatment is advised. (Sanders et al. 2020).

The World Health Organization (WHO), which received a report of the respiratory ailment in a group of persons in Wuhan City,

Hubei Province, China, on December 31, 2019, determined on January 12 of 2020 that a novel coronavirus was the reason.(Reynolds, Matt 2020).Covid-19 has severe economic, social, political and cultural consequences on human life and these consequences will be experienced well into the future. The emergence of this pandemic has been a massive test for health-care

systems in terms of their capabilities and weaknesses(Chen Q, Liang M, Li Y, et al.2020).

All treatments are symptomatic and carried out based on experience because there is a lack of particular pharmacological and intervention therapies and limited information regarding the risk for severe disease (Guo Y-R, Cao Q-D, Hong Z-S, et al2019). Currently, nurses are leading the way in providing care for COVID-19 patients. To provide treatment for patients going through such a health crisis, nurses need specialized training. Patient care is a complex process (Schoenhofer SO, et al. 2019).

Patients with COVID-19 also need specialized, supportive treatment, including the skills, knowledge, attitude, and abilities of qualified nurses as well as the availability of the required tools and infrastructure (Huh, S 2020). It is quite difficult to provide nursing care for people with COVID-19. When providing care for patients with COVID-19, nurses are at great risk for injury or even death. Problematic factors in the phenomena of care include work-related stress, the daily flow of patients into hospitals, impoverished hospital capacity, and an inadequate nurse-to-patient ratio. (Qiu H, Tong Z, Ma P, et al.2020).

The studies reported that nurses suffered exhaustion psychologically and physically and studies mention challenges that nurses complies were fatigue, stress, insufficient protective equipment's (Galedar, Toulabi, Kamran, Heydari,2020).

A survey of the literature revealed that few researches have used a qualitative method to study the problems faced health care workers during the COVID-19 crisis. In order to learn how health team workers, deal with COVID-19, a qualitative method can be used, which leads to a deeper knowledge of their problems and concerns. (Tremblay, S.,et al, 2021). In Egypt, there is a scarce

qualitative study done to explore the challenges which faced nursing staff during their work in the quarantine hospitals, and the most studies depended only on data collected from the websites, and newspapers which didn't build on a scientific base, and methodological ground to highlight nurses' challenges. So, the aim of this study was to explore the challenges faced by staff nurses during their work in quarantine hospitals during COVID-19 pandemic.

Materials and Methods

Aim of the study

The aim of this study was to explore the challenges faced by staff nurses during their work in quarantine hospitals during COVID-19 pandemic.

Research design

An exploratory qualitative inquiry was utilized to explore detailed comprehensive information about challenges which faced nurses during their work in quarantine hospitals.

Sample

A convenience sample was used, because it simply includes the participants who are most accessible to the researcher. Nurses who were willing and working at quarantine hospitals in Cairo, Egypt during COVID-19 pandemic participated in this study. The sample size was 15 nurses determined by data saturation at the point where no new information from participants.

Ethical Consideration

An official written approval letter was obtained from Ethics Committee of Scientific Research at Faculty of Nursing, Cairo University. The purpose and procedure of the research were explained to the participants through phone calling. This was done to make them understand that they have the free will to decide whether they should participate in the study or not. All participants were informed that they had the right to leave the study at any moment, that

no names would be stated, that the interviews would be recorded digitally, and that each subject's confidentiality would be safeguarded by the assignment of a code number. The participants gave their informed consent after agreeing to participate at the start of the face-to-face interview.

Setting

This study was conducted in two selected hospitals in Cairo, Egypt that were working as quarantine during covid19 pandemic

Data collection Procedures

Face to face semi-structure interviews was conducted during October 2020. Interviews were carried out at a time and date that suitable for the participants. in a pre-determined open place according to the participants agreement to ensure their privacy. During the interview, the COVID-19 guidelines were kept in mind. Interviewers were two faculty members (PhD). According to a Charmaz (2014) guideline, the interviews were divided into three primary sections: the introductory, intermediate, and closing questions. The demographic data of the study participants was gathered in the first phase, For instance, we ask participants about their sex, age, marital status, level of education, number of years of work experience, original department, and number of times they've worked in the COVID-19 departments.

In the intermediate phase general open-end questions were asked to explore the participants inside perspective toward challenges such as; “How did you and your family perceive the news about your working in quarantine hospitals? “What changes in working in your initial department from caring for COVID-19 patients? “what are challenges you interfaced during working in quarantine hospitals? “what about safety and security risks you faced? , “Which part of work was

the hardest during the pandemic? When the participants gave a specific response regarding how they perceived their own challenges., the interviewer was asking them to provide further explanations. The interviewers asked the participants if they had anything else to add before leaving. Digital recordings of the interviews were made, followed by transcription. The interview duration ranged from 35 min. to 45 min. The interviews were promptly followed by the creation of the written transcripts. All interviewees listened to the voice recordings and cross-checked them with the text that had been transcribed. To comprehend each sentence and assign it a code, the transcripts were read from top to bottom.

Rigor (The trustworthiness of the study.)

Credibility, confirmability, dependability, and transferability criteria were applied to determine the data rigor. Utilizing a triangulation approach, data validity was evaluated. The findings were examined by a skilled academic team. In addition to formal interviews, long-term data engagement and interview note-taking were utilized for data validation.. A subsample of participants was given the study's initial findings, codes, and categories in order to get their input and opinions (member checking). Peer checking was done on some of the data by three experts who were not participating in the study. The procedures and process of the research were carefully documented and presented in order to ensure the dependability of the findings. Every step were documented, and a summary of the research process was developed in order to assess the conformability of the data. To ensure transferability, it was made an effort to have the study participants' individual-social characteristics vary as much as possible so that the results could potentially be applied to a larger population.

Data analysis

The data were extracted by transcription and thematic analysis. we utilized Braun and Clark's (Braun & Clarke, 2006) method in this study as follows: Following the interviews, written transcripts of the interviews were made in the first stage. The statements were then read aloud numerous times to familiarize oneself with the topic and the nurses' experiences. Every single interview was checked for correctness. The interviewers listened to the voice recordings and compared them with the text that had been transcribed. In the second phase, the interviewers carefully reviewed the transcripts from beginning to end.

In the second stage, we were given initial codes to the data to characterize the content after carefully reading the text and highlighting crucial passages. In the third stage, researchers translated codes and quotations into English and held a conference with the respondents to discuss the codes. The codes were grouped into themes based on similarities and codes that formed patterns. There was constant categorization, comparison, and re-categorization. Researchers reviewed the themes in the fourth stage using the codes and statements. Next, we identified and gave themes names. Finally, a report detailing challenges that participants encountered when dealing with COVID-19 patients was created.

Results

Study sample consisted of fifteen nurses recruited from two selected quarantine hospitals in Cairo, Egypt in October,2020. The mean of age and work experience of study participants were 28.52 (2.32) and 4.21 (1.28) years, respectively. 3 participants (20%) were male. 12 participants (80 %) were female. Only 2 (13%) participants were acquired COVID-19 before. 8 participants (53.3%) were having bachelor degree, & 7 participants (46.7%) were diploma. 80 % of them (12) were single and 3 of the were (20%) married. All participants were requested to provide care for COVID-19 patients, and they all accepted. They were required to change their practice area during the COVID- 19 pandemic. They all joined COVID-19 ICUs at different points in time. After the 13th interview, theme redundancy was confirmed by interviewing two participants. Interviews lasted between 35 and 45 minutes.

Five main themes emerged from data, namely: personal and family challenges, work place challenges, challenge related to basic needs, challenges during nursing care provision, and challenge related to society.

key themes and their attended sub-themes (Table 1).

No	Themes	Sub-themes
1.	Family & Personal challenges	Family challenges: - Fear of virus transmission Family refusing Separation & distance Personal challenges: - Fear towards COVID-19 Fear of death Doubt in personal abilities
2.	Work place challenges	Work place policy: - Shift hours work load Supplies
3.	Challenges during nursing care provision	Working in a new place Using protective equipment Providing high quality of care Witnessing patients suffering
4.	Challenge related to place of residence and basic needs	Place of residence Eating Sleeping Toileting
5.	Challenge related to society.	Fear of social interaction (neighbours) Social isolation Stigma

Theme 1: Family and Personal Challenges

When we asked about how did the participants and their families received the news of starting work in quarantine hospital, the first answer of all participants was: high level of stress, anxiety, fear, and difficulty to accept the idea itself. The risk of the virus reaching their family was a source of ongoing worry for all of them.

Challenges related to family

Many participants were concerned about the spread of the infection to their families, separation & distance from their families during the time of work in quarantine, especially those who came from families with elderly or chronically ill members. Also, families refusing the participation in quarantine due to: fear to get infected, transmitted the infection to rest of family, fear of unknown. Few numbers of family's

members give support and reassurance to nurses to decrease anxiety level and push them toward. group of nurses were hesitating to tell their family about sharing in quarantine.

"I am very terrified after all these suffering that I transfer the infection to my family especially for my old age parent" (P1).

"I wasn't able to tell my parents about my work in quarantine, they will worry about me. My mum was very scared and refuse my work in quarantine" (P4).

"My family members may get infected with Covid-19 when I am in quarantine, who will take care for them?" (P5).

"I avoid to communicate with my family through video calls because I didn't want them seeing me very tired and pale especially when my voice is very weak from tiredness" (P8).

This the first time to be separated from my family for a long period (p2).

My family completely refused to participated in quarantine and it take time to persuade them (p7).

My mother was refused but my father supports me and tell me this my job and I have role in this pandemic and this my duty to my community. (p 13)

Personal challenges

Participants explained that they were have some personal challenges that they try hardly to overcome, these challenges were mainly related to fear of death, fear of the experience itself, fear of unknown and doubt about their ability to work under stress for long time. Group of them feel scared from the experience itself. The participants who get infected before participation in quarantine was motivated and confident to share.

“This disease is dangerous because it is a new infectious disease and there is no specific antivirus at present. I was thinking that working as a nurse is very hard, but now returning to my normal work and life is a dream for me” (p5).

“I was scared to take on this responsibility. I feel not prepared well for caring for patients with this Covid19, but I told myself that coming to work and doing my job as I can is enough in this uncontrolled situation”(p11).

“All the time I feel that I will catch the infection because I work directly with infected patients” (p5).

“I was getting infected before sharing in quarantine and the experience of infection make me motivated to help other patient and push me toward and courage” p (15)

“The isolation period after coming back from quarantine and waiting the result of swab was very critical period for me. I was afraid of being infected and transfer the infection for my family” p (1).

Staff nurses have reported different challenges involving long shift hours (12hours), high work load, and resources shortage. The shortage of protective supplies such as: N95 masks, safety gear, gloves, shields, and gowns was said by them all.. Participants were highlighted these challenges as following: -

“Working for 12 hours continuously in ICU with Covid patients is very exhausted physically and emotionally. I lose my concentration at the end of the shift which make me at risk for infection” (p11).

“We receive only two protective suits and one Gown during the 12 hours shift. We are forced to reuse them even if it became contaminated because they are not available. Sometimes I wear safety footwear that is not appropriate for me because my size was not available” (p9).

“Sometimes I was not having any time to communicate with patients, explain procedures before conducted, or giving them psychological support. I know this is very important for patients but what can I do I feel tired, exhausted from work load for 12 hours”(p10).

“N95 masks are not available all the time so I have to wear two or three surgical mask which cause difficult and shortness of breathing and make me feel dizzy, nauseated, exhausted and anxious” (p13).

“Physical exhaustion was a major challenge during giving nursing care. the main cause of exhaustion was working 14 days for long shift 12 hours consciously with overload work rate related to staff shortage and high patient rate”(p2).

“There was a number of nurses who were not oriented with or competent in work procedures specially in intensive care units and provide helping to them in a lot of work procedures increased my workload but what can I do we should help each other’s” (p13).

Theme 2: Work place challenges

“I was not able to recognize the right from wrong, every few days we informed with new protocols, prevention and treatment methods, this make me not confident in protection methods we used” (p14).

Theme 3:Challenges During Nursing Care Provision

This theme is considering the largest one because it has many subthemes which reflects the major challenges faced by nurses. All participants felt depressed while caring for COVID-19 patients. Delivering high-quality nursing care & applying infection control measures while wearing PPE for long period 12 hours was very difficult. Working in new specialty in new work place with new machines without enough training was significant challenge and not oriented with the equipment and supply place also make nurses stressed and confused and time waster to ask. Also working in the hot weather in summer wearing PPE without air condition was a challenge. Participants reported:

“In my first shift in quarantine, I receive a patient, he was fully conscious in my 12 hours shift, he told me about his fear of dying alone and told me that he wants to see his family for the last time. I try to provide psychological support for him as I can, and I promise him that he will be ok .in my next shift I know that he died. I was shocked and until now I keep on blaming my- self because I was not capable of fulfilling his will and wishes” p11.

“All the time I have uncertainty toward the protection received from PPE. Prior to donning PPE, I also have to make further things such as eating, getting enough water, and going to toilet. This causes me additional stress and distress.

“I work in a new place that is different completely from my speciality, I take time to know the places of supplies and equipment. I deal with new kind of equipment that I never seen before” p7.

“The major challenge for me is to wear all protective tools in the hot summer weather. I feel soaked in water from excessive sweating, I sometimes have attack of difficulty of breathing & headache, and this make me very exhausted and nervous” p4.

“I feel that I’m restricted in movements during procedural can’t feel the veins to draw blood sample while wearing double gloves, also to transfer patients from bed to trolley very difficult, make bed bath to patients was exhausted for me”(p3).

“Watching patients suffering was very painful for me. I was shocked and sometimes I have panic attack from the frequently unexpected rapid deterioration of patients, high mortality rates and an increase in the number of severe cases. Was having internal thoughts about being in the place of my patients. I was having a sense of powerlessness” (p9).

“Patients’ needs to communicates their feeling and fear also they need to get health teaching about their illness and prognosis and majority of patients was depressed and suffer ICU psychosis. Wearing more than one mask make difficult in communication with patients and health team my voice also was weak from tiredness. Sometimes I feel that I need support and encouragement from any one to continue, all of us was in a need psychological support” p3.

“Giving direct nursing care and perform procedures with patients was very difficult. I feel that my movement was restricted

during drawing blood sample, CPR, bed bath, or changing patients' position" (p13).

Theme 4: Challenge related to place of residence and basic needs

75 % of study sample reported that they face sleep disturbance related to change in place of residence. Differences in working shift for staff resident in the same room with different break time make the room very noisy most of the time, plus more than three persons in one room increase the risk of infection transmission. Take shower and wash clothes was difficult, 80% of the participants face challenge related to eating and toileting habits. Participants mentioned that they were not feeling comfortable in the hospital residence place and saying that it was not prepared well, due to many causes which clarified as following: -

"In the first week I can't get enough sleep, changing of my room and my bed causes sleep disturbance for me" (p7).

"I can't sleep well because the noise in my room from my college in their break time and cleaning services also make lights and distribute my sleeping" (p1).

"During break and sleeping in the hospital residence place, I cannot communicate with my family through video calling because wi-fi is not available. This is very important for me and for my family to see each other" (p2).

"The weather is very hot and the residence rooms are not having good ventilation, the window in my room is not opened, no air fans available and air-condition using is not allowable" (p5).

"I worried to catch the infection from our room in hospital because I am not sure if my residence colleagues follow the principals of infection control or not, so it is very important for me to ensure the cleanness the

room, but it is very difficult due to shortage of bed sheets, pillows, and the disinfectants. Rooms are not cleaned daily by the workers, so we sometimes clean it by our self" (p8).

"After 12 hours of working wearing complete PPE, I need to take a shower to relax, but the toilet is not suitable, there is no shower" (p14).

"Changing of eating habits and meals types make me feeling sick. We were not having a variety of food menu in quarantine. I was eating a little quantity of food, the takeaway delivery was not allowed, this make me loss about 4kg of my weight" (P8).

"I avoid drinking water 2 or 3 hours before my shift to prevent voiding during shift. For me toileting was one of most significant challenge in presence of wearing PPE, with difficult way to wearing and removing PPE following infection control measures with limited daily number of PPE" (p9).

Theme 5: Challenge related to society

Being a nurse during the Covid 19 epidemic means contracting the disease. As a result, some nurses are treated in an unacceptable manner. Even though nurses did not interact with the general public during this time, some of them experienced stigma. A societal stigma has also been present when nurses and their families have been separated. The participants reported:

"I see the fear in my parent's eyes, not only on me but also from me. they fear from transmit infection to them and to my sister, they told me that I shouldn't come back before the swab result, I feel rejected and outcaste from others" (p4).

"After 14 days in quarantine, I was in a need to kiss and hug my mum but I can't do this. I feel as a prisoner in isolation period after

back home, I was separated totally from my family” (p6).

“My biggest fear was to get infected and die alone without seeing my family, even in dying I will be isolated” (p5).

“All the time I was thinking about dying and burial without religious rites or funeral prayer. all people become afraid from nurses, working as a nurse become a stigma” (p10).

“We have a good relationship with our neighbours, but after the Corona pandemic they are totally changed. I can't believe, they avoid communicating with me or with any member of my family after knowing that I was working in quarantine. This making me sit in my room alone even after knowing that I am negative, I Feel that I have restrictions on my freedom” (p15).

Discussion

The aim of this study was to explore the challenges faced by staff nurses during their work in quarantine hospitals during COVID-19 pandemic. The results of the present study revealed that nurses have faced with a wide variety of challenges. Five main themes emerged from data, namely: personal and family challenges, work place challenges, challenge related to basic needs, challenges during nursing care provision, and challenge related to society. In addition to worrying about their own health, nurses concerned that they were putting their friends and family at increased risk of infection due to the unstable work environment and new disease danger (Shih et al., 2007, Lam and Hung, 2013). Nurses were particularly worried about infecting elderly, immunocompromised, and small children as well as other vulnerable family members (Lam and Hung, 2013, Koh et al., 2012). Some nurses chose to isolate

Themselves as a form of self-protection because they believed that protecting family members came first (Lam and Hung, 2013). Regarding the personal and family challenges the majority of the participants stated that their families were having a high level of stress, anxiety and fear, and not accepted the idea of working with Covid patients at the first. Participants were concerned about the virus transmission to their families, they also feel separate from their families during their working in quarantine. Concerns about spreading COVID-19 are supported by Sun's research team (2020), which discovered that caregivers of youngsters and elderly family members experienced considerable negative psychological effects while they cared for patients during the COVID-19 pandemic. The results are also consistent with previous qualitative systematic review by Joo and Liu (2021), summarize the challenges faced nurses in five themes, incomplete knowledge related to covid-19, challenge related to unpredictable care practices, insufficient support, challenge related family, finally psychological and emotional stressors. Similar to our findings, all surgery residents in a US study indicated anxieties about their family's health as well as worries about spreading COVID-19 to their loved ones and patients.(He K, Stolarski A, Whang E, Kristo G.2020).

Regarding work place challenges, the participants clarify that they suffer from high workload, long shift hours, and shortage of supplies, these results agreed with qualitative study conducted in Iran in by Vejdani, et al (2020) the study title was Challenges faced by nurses while caring for COVID-19 patients. The results show that challenges were miss-nurses suffered from mental and physical exhaustion, challenges in corona work conditions, and shortage of staff. Result also agreed with study conducted by Razu, (2021), in study conducted in Bangladesh the result mentioned that nurses suffered from shortage in protective equipment's, psychological and physical stress related to workload, also suffered from social isolation

and stigmatization. Results also mentioned work environment on of the major challenge.

Results approved by Mohammadi (2021), in qualitative study conducted in Iran listed challenged that faced nursing team in as lack of medical equipment's and work overload, psychological stress, quality of nursing care and lack of safety protocol or safety standards was also aligned with our study results . In USA ,Ness, Saylor, Fusco and Evan, (2021) conducted qualitative study to assess the challenge facing health team members during pandemic, the main themes of the study were: challenge related to isolation, anxiety and fear; physical exhaustion related to patient needs; working in different environments, challenge related to work place safety all of these results are aligned with our study results .

A Meta-analysis studies conducted by Houghton, et al (2020) about barriers of health care worker adherence to infection and prevention control guide lines 20 study of 38 qualitative studies, four from Africa, four from Central and North America, Ten of these studies were from Asia and two from Australia. Results declare that lack of training how to use PPE, lack of PPE, equipment that was of poor-quality materials, inadequate shower facilities, fast-tracking infected patients, A lack of isolation rooms, Healthcare workers also found masks and other equipment uncomfortable to use. In Korean Kang and Shin(2020) listed the challenge during pandemic covid19 in their study that Korean nurses suffering from workload, severe shortage in staff and sever shortage in

equipments. In Spain also Pérez et al (2021) conducted study on 11,560 registered nurses in different medical institution they reported, lack of personal protective equipment's one of the major challenges.

Regarding to nursing care provision challenges, all participants felt depressed and stressed while caring for COVID-19 patients due to witnessing patients suffering, they were physically exhausted, and they also concluded that wearing and working with PPE for long period 12 hours was very difficult. Working with PPE was a barrier during care giving. In systematic review conducted by Fernandez, et al (2020), mentioned that thirteen qualitative studies had found the quality of provided care was a main theme for challenges met nursing team during work in quarantine ,this finding also is aligned with our study results .This results are also aligned with the study of China Liu, et al.(2020), who concluded that the main themes of challenges were facing massive new danger, fear of infections transmission , physical exhaustion, heavy workload and incomplete training.

The findings of the present study are in line with those of studies by Lichtenthal et al. (2020) and Selman et al. (2020), which stated that the COVID-19 patients have longer average length of stay in the hospital, along with the fact that families were not permitted to be with their dying relative during the final stages of their lives, resulting in the medical staff to speak with and comfort the surviving family members, may have further added to the psychological burden on health care workers.

Regarding the challenges related to place of residence and basic needs, the results shows that participants were not feeling comfortable in the hospital residence place, they were having difficult in sleeping,

eating, and toileting. This result is congruent with the study conducted in Spain by Pérez et al (2021) on 11,560 registered nurses in different medical institution they reported that the majority of nurses suffers from psychological pressure, lack of planning and organization related to personal daily needs as bathing, feeding, sleeping, work schedule.

The results of the current study revealed that the participants were suffer from hot weather in the residence rooms and not having good ventilation which cause stress& disturbance in their sleeping. The study of Huang and Rong Liu, 2020 also conclude that Nurses who remain in clinical practice during Covid pandemic have been experienced stress, sleep deprivation. Participants were worried about catching the infection from their rooms in hospital, they were not sure if their residence colleagues follow the principals of infection control or not. Participants also says that they were fear from catching infection from their colleges in their rooms. These results are aligned with the study of Koh et al., 2012, who concluded that Nurses feared not only being exposed to infected patients, but were scared that infection could be spread through nursing colleagues sharing resources.

People in the communities stigmatized and avoided those who worked in hospitals where COVID-19 was present due to the concern that the infection would be spread by healthcare personnel. (Taylor S,etal.2020). The results of present study showed that staff nurses meet three challenges related to society one of the them was fear of interaction, they says that their neighbors perceived them as a source of infection and usually avoided communication with them and their families. This result is congruent with Fontanini et al (2020) qualitative study about nurse's experience

pandemic in covid19, the results reported that nurses facing physical and psychological stressors and felt that they not appreciated from their community and recognized as professional persons and felt devalue.

The participants in the current study also perceive their separation from their family for 14 days as a very difficult challenge, they feel like a prisoner in isolation period after back home, this result is consistent with the study of Gao and Tan (2021) who found that feeling shocked and isolated were the main challenges faced by quarantine nurses. The degree of stigma connected to having been exposed to COVID-19 is known as the pandemic-related stigma. For instance, it is known that some pandemic involvement traits have led to the labeling, avoidance, and discrimination of healthcare personnel. (Schubert M, et al.2021).

Social stigma was another challenge for the study participants ,they were not fear from death itself but their biggest fear was burial without funeral prayer, they think that working as a nurse become stigma and all people fear from them. This result is consistent with the study of Mostafa A, Sabry W, Mostafa NS,2020, who concluded that In the early stages of the COVID-19 pandemic, high stigma perception from job-related COVID-19 exposure was found among Egyptian healthcare personnel. The WHO also states that during a pandemic, stigma, social exclusion, and discrimination present challenges for front-line healthcare providers in their employment environments and social environments.

Conclusion:

Based on the results we can concluded that nurses experienced many challenges during their work in Covid-19 quarantine hospitals, these challenges are, family and personal

challenges, work place, challenges during nursing care provision, challenge related to place of residence and basic needs, challenge related to society. All of this may result in a decline in the standard of patient treatment.

Therefore, identifying the difficulties can aid in developing a road map and strategies for enhancing the readiness and administration of quarantine hospitals.

Recommendation:

To face the future challenges the hospital administrators should consider the following recommendation :

First, nurses who being selected for working in quarantine should have appropriate experience and training to be able to care for COVID-19 patients appropriately. Improve quarantine hospitals and promote the safety infrastructure ,so that nurses can concentrate totally on providing high quality care for Covid patients. Hospital leaders and nursing directors play a crucial part in creating a pleasant work atmosphere for nurses. and other health team members , they should create appropriate and updated policies & guidelines related to COVID-19 care, maintain adequate supplies and equipment , assess training needs, conduct training programmes, maintain comfortable shift methods, provide motivation and incentives for nurses. Administrators of hospitals have to keep trying to take the necessary safeguards to guarantee that nurses pose the lowest possible danger of infecting their families when they return home. Furthermore, the health team members as well as patients with COVID- 19 and their families should have psychological support by by assembling teams for palliative care that include psychologistsand religious experts.Strengthening nurses support network including family ,friends ,peers neighbours is very important to increase

nurses morale and motivation. Finally Increase the community awareness-about important role of nurses in the pandemic situation through developing strategies for nurses stigmatizing.

References

- Botchway S, Fazel S. Remaining vigilant about COVID-19 and suicide. Lancet Psychiatry. (2021) 8:552–3. doi: 10.1016/S2215-0366(21)00117-6**
- Chang D., Xu H., Rebaza. A, Sharma L, Dela Cruz CS., (2020),** Protecting healthcare workers from clinical coronavirus infection. *Lancet Respir Med* 2020; 8: e13.
- Charmaz K., (2014),** Constructing Grounded Theory SAGE Publications.
- Chen Q, Liang M, Li Y.,(2020),**Mental health care for medical staff in China during the COVID-19 outbreak. *Lancet Psychiatry.* 2020;7(4):e15-e16.
- Chen, Long, Jing,X., Lei B., and Yuan S., (2020),** Convalescent plasm as a potential therapy for COVID-19. *Lancet Infectious Diseases* 20 (4): 398–400. [https://doi.org/10.1016/S1473-3099\(20\)30141-1](https://doi.org/10.1016/S1473-3099(20)30141-1).
- Dhaka-Tribune,(2020).** Bangladesh sees 100th death of doctors from Covid-19. Kazi Anis Ahmed. Dhaka: Bangladish ,(2020).
- Fernandez, R., Lord, H., Halcomb, E., Moxham L, Middleton R, Alanazeh I, Ellwood L.(2020)** Implications for COVID-19: A systematic review of nurses' experience of working in acute care hospital settings during a respiratory disease pandemic. *Int J Nurs Stud.*
- Fontanini R, Visintini E, Rossetini G, Caruzzo D, Longhini J, Palese A.** (2021)Italiano Nurses' experience during the COVID--19 pandemic: a qualitative analysis of

internet post. *Int Nurs Rev.* 2021 Jun;68(2):238-247..

2021 Jan 8. PMID: 33420749; PMCID: PMC8013562.

Galehdar N, Toulabi T, Kamran A, Heydari H. (2020), Exploring nurses' perception of taking care of patients with coronavirus disease (COVID-19): A qualitative study. *Nurs Open.* 2020 Sep 11;8(1):171-179. doi: 10.1002/nop2.616. PMID: 33318825; PMCID: PMC7729793.

Kang Y, Shin KR., (2020), COVID-19: Korean nurses' experiences and ongoing tasks for the pandemic's second wave. *Int Nurs Rev.* 2020 Dec;67(4):445-449. doi: 10.1111/inr.12644. PMID: 33428228; PMCID: PMC8013366.

Gao Z, Tan FPL.(2021), Nurses' experiences in response to COVID-19 in a psychiatric ward in Singapore. *Int Nurs Rev.* 2021 Jun;68(2):196-201. doi: 10.1111/inr.12680. Epub 2021 Apr 24. PMID: 33894062; PMCID: PMC8250929.

Kola L, Kohrt BA, Hanlon C, Naslund JA, Sikander S, Balaji M, et al, (2021). COVID-19 mental health impact and responses in low-income and middle-income countries: reimagining global mental health. *Lancet Psychiat.* (2021). doi: 10.1016/S2215-0366(21)00025-0.

Guo Y-R, Cao Q-D, Hong Z-S, et al.(2020) The origin, transmission and clinical therapies on coronavirus disease 2019 (COVID-19) out- break—an update on the status. *Mil Med Res.* 2020;7(1):1–10. doi:10.1186/s40779-020-00240-0.

Koh Y., Hegney D., Drury V. Nurses' perceptions of risk from emerging respiratory infectious diseases: a Singapore study. *International Journal of Nursing Practice.* 2012;18(2):195–204. [PMC free article] [PubMed] [Google Scholar] [Ref list]

He K, Stolarski A, Whang E, KristoG,(2020). Addressing General Surgery Residents' Concerns in the Early Phase of the COVID-19 Pandemic. *Journal of surgical education.* 2020;77(4):735-738.

Lam K.K., Hung S.Y(2013) Perceptions of emergency nurses during the human swine influenza outbreak: a qualitative study. *Int Emerg Nurs.* 2013;21(4):240–246. [PMC free article] [PubMed] [Google Scholar] [Ref list]

Houghton C, Meskell P, Delaney H, Smalle M, Glenton C, Booth A, Chan XHS, Devane D, Biesty LM.,(2020) Barriers and facilitators to healthcare workers' adherence with infection prevention and control (IPC) guidelines for respiratory infectious diseases: a rapid qualitative evidence synthesis. *Cochrane Database Syst Rev.* 2020 Apr 21;4(4):CD013582. doi: 10.1002/14651858.CD013582.

Lee SM, Kang WS, Cho A-R, Kim T, Park JK.,(2018), Psychological impact of the 2015 MERS outbreak on hospital workers and quarantined hemodialysis patients. *Compr Psychiatry* 2018; 87: 123–27.

Joo JY, Liu MF.,(2021), Nurses' barriers to caring for patients with COVID-19: a qualitative systematic review. *Int Nurs Rev.* 2021 Jun;68(2):202-213. doi: 10.1111/inr.12648. Epub

Lewis S. (2015), Qualitative inquiry and research design: choosing among five approaches. *Health Promot Pract.* 2015;16(4):473–5. <https://doi.org/10.1177/1524839915580941>

- Lichtenthal, W. G. , Roberts, K. E. , & Prigerson, H. G. (2020).** Bereavement Care in the Wake of COVID- 19: Offering condolences and referrals. *Annals of Internal Medicine*, 1–4. 10.7326/m20-2526 [PMC free article] [PubMed] [CrossRef] [Google Scholar] [Ref list]
- Liu Q, Luo D, Haase JE, Guo Q, Wang XQ, Liu S, et al.** The experiences of healthcare providers during the COVID-19 crisis in China: a qualitative study. *The Lancet Global health*. (2020) 8:e7908:20ncet Glo1016/S2214-109X(20)30204-7
- Liu Q, Luo D, Haase JE, Guo Q, Wang XQ, Liu S, et al. ,(2020)**The experiences of healthcare providers duringthe COVID-19 crisis in China: a qualitative study. *The Lancet Global Health*. 2020. [https://doi.org/10.1016/S2214-109X\(20\)30204-7](https://doi.org/10.1016/S2214-109X(20)30204-7) PMID: 32573443
- Liu YE, Zhai ZC, Han YH, Liu YL, Liu FP, Hu DY. (2020),**Experiences of front-line nurses combating coronavirus disease-2019 in China: A qualitative analysis. *Public Health Nurs*. 2020 Sep;37(5):757-763. doi: 10.1111/phn.12768. Epub 2020 Jul 17. PMID: 32677072; PMCID: PMC7405388.
- Mohammadi F, Farjam M, Gholampour Y, et al. ,(2021)** Caregivers' perception of the caring challenges in coronavirus crisis (COVID-19): a qualitative study. *BMC Nurs*. 2021;20(102):1–9.
- Mostafa A, Sabry W, Mostafa NS. ,(2020),**COVID-19-related stigmatization among a sample of Egyptian healthcare workers. *PLOS ONE*. 2020;15(12):e0244172. <https://doi.org/10.1371/journal.pone.0244172>.
- Ness MM, Saylor J, Di Fusco LA, Evans K. ,(2021),** Healthcare providers' challenges during the coronavirus disease (COVID-19) pandemic: A qualitative approach. *Nurs Health Sci*. 2021 Jun;23(2):389-397. doi: 10.1111/nhs.12820. Epub 2021 Mar 17. PMID: 33580590; PMCID: PMC8012981.
- Pérez-Raya F, Cobos-Serrano JL, Ayuso-Murillo D, Fernández-Fernández P, Rodríguez-Gómez JA, Almeida Souza A. (2021)** COVID-19 impact on nurses in Spain: a considered opinion survey. *Int Nurs Rev*. 2021 Jun;68(2):248-255. doi: 10.1111/inr.12682. Epub 2021 May 18. PMID: 34004014; PMCID: PMC8207073.
- Prompetchara, Eakachai, ChutitornKetloy, and Tanapat Palaga, (2020),** Immune responses in COVID-19 and potential vaccines: lessons learned from SARS and MERS epidemic. *Asian Pacific Journal of Allergy and Immunology* 38 (1): 1–9. <https://doi.org/10.12932/AP-200220-0772>.
- Razu SR, Yasmin T, Arif TB, Islam MS, Islam SMS, Gesesew HA and Ward P (2021),** Challenges Faced by Healthcare Professionals During the COVID-19 Pandemic: A Qualitative Inquiry From Bangladesh. *Front. Public Health* 9:647315. doi: 10.3389/fpubh.2021.647315
- Reynolds, Matt, (2020),** "What is a coronavirus and how close is it to becoming a pandemic?". *Wired UK*. ISSN 1357-0978. Archived from the original on 5 March 2020. Retrieved 5 March 2020.
- Sanders, James M., Marguerite L. Monogue, Tomasz Z. Jodlowski, and James B. Cutrell., (2020),** Pharmacologic treatments for coronavirus disease (2019) (COVID-19): a review. *JAMA* 323 (18):

- 1824–1836.
<https://doi.org/10.1001/jama.2020.6019>.
- Schubert M, Ludwig J, Freiberg A, Hahne TM, Romero Starke K, Girbig M, et al. (2021)**, Stigmatization from work-related COVID-19 exposure: a systematic review with meta-analysis. *Int J Environ Res Public Health*. 2021;18(12):6183.
- Schoenhofer SO, van Wynsberghe A, Boykin A. (2019)**, Engaging robots as nursing partners in caring: nursing as caring meets care-centered value-sensitive design. *Int J Hum Caring*. 2019;23(2):157–167. doi:10.20467/1091-5710.23.2.157.
- Selman, L. E. , Chao, D. , Sowden, R. , Marshall, S. , Chamberlain, C. , & Koffman, J. (2020)**. Bereavement Support on the Frontline of COVID-19: Recommendations for Hospital Clinicians. *Journal of Pain and Symptom Management*, 60(2), e81–e86. [10.1016/j.jpainsymman.2020.04.024](https://doi.org/10.1016/j.jpainsymman.2020.04.024) [PM C free article] [PubMed] [CrossRef] [Google Scholar] [Ref list]
- Sengupta, M., Roy, A., Ganguly, A., Baishya, K., Chakrabarti, S. and Indraneel Mukhopadhyay, I., (2021)**, Challenges Encountered by Healthcare Providers in COVID-19 Times: An Exploratory Study, *Journal of Health Management, Journal of Health Management*, [in.sagepub.com/journals-permissions-india](https://www.sagepub.com/journals-permissions-india), DOI: [10.1177/09720634211011695](https://doi.org/10.1177/09720634211011695), journals.sagepub.com/home/jhm.
- Shammi M, Bodrud-Doza M, Islam AR, Rahman, (2020)**, MM. COVID-19 pandemic, socioeconomic crisis and human stress in resource-limited settings: A case from Bangladesh. *Heliyon*. (2020) 6:e04063. doi: [10.1016/j.heliyon.2020.e04063](https://doi.org/10.1016/j.heliyon.2020.e04063).
- Shih F.J., Gau M.L., Kao C.C., Yang C.Y., Lin Y.S., Liao Y.C., Sheu S.J.** Dying and caring on the edge: Taiwan's surviving nurses' reflections on taking care of patients with severe acute respiratory syndrome. *Appl Nurs Res*. 2007;20(4):171–180. [PMC free article] [PubMed] [Google Scholar] [Ref list]
- Sun N, Shi S, Jiao D, Song R, Ma L, Wang H, et al. (2020)**, A Qualitative Study on the Psychological Experience of Caregivers of COVID-19 Patients. *American Journal of Infection Control*. 2020. <https://doi.org/10.1016/j.ajic.2020.03.018> PMID: 32334904
- Sun N, Wei L, Shi S, Jiao D, Song R, Ma L, et al., (2020)**, A qualitative study on the psychological experience of caregivers of COVID-19 patients. *Am J Infect Control*. (2020) 48:592. doi: [10.1016/j.ajic.2020.03.018](https://doi.org/10.1016/j.ajic.2020.03.018).
- Taylor S, Landry CA, Rachor GS, Paluszek MM, Asmundson GJG. (2021)**, Fear and avoidance of healthcare workers: an important, under-recognized form of stigmatization during the COVID-19 pandemic. *J Anxiety Disord*. 2020;75:102289.
- Tremblay, S., Castiglione, S., Audet, L.-A., Desmarais, M., Horace, M., & Peláez, S. (2021)**. Conducting Qualitative Research to Respond to COVID-19 Challenges: Reflections for the Present and Beyond. *International Journal of Qualitative Methods*, 20. <https://doi.org/10.1177/16094069211009679>
- Vejdani, M., Foji, S., Jamili, S., Salehabadi, R., Amin Adel, A., Ebnehoseini, Z., Aval, S., Anjidani, A., Ebrahimipour, H., (2020)**, Challenges faced by nurses while caring for

COVID-19 patients: A qualitative study,
Journal of Education and Health
Promotion | Published by Wolters Kluwer
– Medknow., DOI:
10.4103/jehp.jehp_1550_20

WHO. (2020), Mental health and psychosocial considerations during the COVID-19 outbreak. Switzerland: World Health Institution Geneva (2020).

WHO.(2020), Rolling updates on coronavirus disease (COVID-19). 2020.

WHO,(2020), Social Stigma Associated with COVID-19. 2020, 2020 [cited 2020 13 October]; Available from: <https://www.who.int/docs/default-source/coronavirus/covid19-stigma-guide.pdf>.

World Health Organization (WHO), (2020) a, Coronavirus (COVID-19) events as they happen. Accessed 13 July 2020. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen>.

World Health Organization (WHO), (2020)b. WHO coronavirus disease (COVID-19) dashboard. Accessed 13 July 2020. <https://covid19.who.int/>.