COVID-19 Research Assignment

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The first time I heard about covid-19 was shortly after Christmas on a Facebook video of terrifying clips in Wuhan, China. I shared it to my page, but it was shortly deleted by Facebook with a message stating the video was “false information”. A month later, news broke out that towards the end of 2019, Wuhan experienced an outbreak of a novel coronavirus that killed more than 1,800 and infected over 70,000 individuals within the first fifty days of the epidemic. Currently, the cases in just the US alone is 5,752,653 and a total of 177,759 deaths according to the CDC (2020) and the European Centre for Disease Prevention and Control states there has been a total of 23,928,539 of cases worldwide (Par.1). Additionally, the signs and symptoms of covid-19 started off with a cough, fever, aches, loss of sense of smell and taste, and shortness of breath. Now, the signs and symptom list has grown to include diarrhea, nausea and other things that have nothing to do with the respiratory system. Jatin Machhi et al (2020) states “some symptoms are incredibly severe, while others are so mild that patients appear asymptomatic.” (par. 29). My family and I were one of the lucky ones that only had subtle symptoms and recovered shortly after testing positive.

There have been many fears and concerns that have been affecting everyone. Fear of a second outbreak during flu and RSV season has been mentioned both the medical and nursing communities. I recall a hearing a conversation of a doctor on YouTube about how he thought that the virus would not survive throughout the summer due to the blazing heat waves and now we are almost fall with no ending in sight. As the temperature lowers, elderly and children will be in even more in danger. I have also heard concerns of the virus mutating to something more powerful, but I believe the most concerning fear is that covid-19 is here to stay for a while, and it is very distressing because healthcare workers have been through so much already. As for my hospital, nurses have played an enormous role during this pandemic. As cases grew in Plainview,

the hospital began to pull departments such as laboratory and environmental services to decrease exposure and limit the amount of PPE used, so nurses had to wear many hats for patients. The expectations put on nurses are causing them to burn out and become sick with the virus regardless of the PPE. Out of about 85 of our med-surg workers, there are only less than five that have not gotten the virus.

There have been many challenges in our hospital as well as most hospitals in the country since the virus crossed to our lands. To begin with, when people first heard about the virus, they began to “bulk” buy many supplies including necessary medical supplies that were used to maintain the hospital safe. At one point, PPE dwindled to the bare minimum due to lack of supplies. N-95s that were only meant to be used once before, began to be used until visibly soiled. Therefore, when PPE dwindled, hospital workers began to become sick with the virus which added to the burden of the remaining workers. Another challenge that arose was incentive pay. When my husband got exposed, his job paid for his two weeks of quarantine. Thus, I thought incentive pay for health care workers would be immediately distributed, however, it only became effective late July when the cases within hospital workers spiked. Even then, the incentive pay was only given under strict guidelines and not to any CNAs or nurse technicians which made it very difficult to have shifts adequately covered, so the floor was always short staffed and nurses were forced to work with 5-6 covid patients every shift. Some things I can describe that went well are how the US handled the news of the pandemic. By having an almost complete quarantine, I believe we postponed the spike in cases early on and had a slight chance to prepare in Texas. When New York was horribly hit, nurses from all over the country gathered to help and even now, nurses travel to the most affected areas to relieve the burden of all. Currently in my hospital, the nurses are the voice of the overworked. They attend weekly

meetings and give their opinion and advice to better the workplace. Another thing I think that is going well is allowing schools to remain online or with social distancing. According to Nicholas Davies et al (2020), states “there has been a markedly low of cases among children” (par. 1). I believe it is because parents are keeping their children at home at all times for the fact that children cannot fully grasp the importance of hand hygiene and wearing a mask, so having the option of staying home during the school year would be most beneficial rather than opening schools to full capacity and risking the chance for yet another spike. Lastly, I believe enforcing to wear masks in any public area helped reduce the amount of cases. I cannot imagine how many cases we would have if that rule wasn’t set into place.

To my surprise, when I began read articles, I realized that this is not the first appearance coronavirus has made to humans. A recent article by Muhammad Shereen et al (2020), reveals “coronaviruses belongs to the Coronaviridae family in the Nidovirales order. Other viruses such as severe acute respiratory syndrome coronavirus, H5N1 influenza A, H1N1 2009 and Middle East respiratory syndrome coronavirus are part of this family. These viruses caused acute lung injury and acute respiratory distress syndrome which led to pulmonary failure and resulted in many fatalities. They were thought to infect only animals until the world witnessed a severe acute respiratory syndrome outbreak caused by SARS-CoV, in Guangdong, China in 2002. A decade later, the Middle East respiratory syndrome coronavirus caused an endemic in Middle Eastern countries” (par. 2). Muhammad believes the transmission rate of SARS-CoV-2 is higher than SRAS-CoV and the reason could be genetic recombination event at S protein in the RBD region of SARS-CoV-2 may have enhanced its transmission ability. Initially, it was suggested that the patients infected with Wuhan coronavirus induced pneumonia in China may have visited the Hunan seafood market where live animals were sold or may have used infected animals or

birds as a source of food. However, further investigations revealed that some individuals contracted the infection even with no record of visiting the seafood market. These observations indicated a human to the human spreading capability of this virus, therefore proving Muhammad's theory correct.

Up until now, I am ashamed to say that I have never really paid much attention to how this virus affected both patients and medical professional's mental health. Since I started working, my main priority has been their survival by managing their symptoms. I thought I was being dramatic by being afraid of going to work, but according to the Issue Brief (2020), a recent American Nurses Association survey found that 87 percent of nurses surveyed reported that they were afraid to go to work, while more than half report their workplace was short of personal protection equipment to keep them safe from coronavirus (par. 2). I believe having low PPE enhances the anxiety of going to work as well. Carmen Moreno et al (2020), states "health-care workers especially those working on the frontline, have reported negative consequences as a result of stress exposure and fear of infecting themselves or their loved ones. In a cross-sectional study 65 of 1257 health-care workers in 34 hospitals in China, 634 (50%) reported symptoms of depression, 560 (45%) reported anxiety, 427 (34%) reported insomnia, and 899 (72%) reported distress" (par. 10) Moreover, I consider myself to be a mentally healthy person but when I got the virus, my mental health was tested to its limits. I was in quarantine for 17 days and although I had my husband and mother in quarantine with me, I felt awfully lonely and sad. What was more upsetting was that absolutely no one from the Plainview Hospital contacted me to see if I was doing well. The only time I was contacted was when my quarantine was finally over, and my manager wanted to know how soon I was able to come back and how many days I was willing to work. Carmen Moreno et al (2020), states "people with mental disorders are at increased risk of

infections in general and thereby potentially at increased risk of covid-19. They are more likely to develop severe organ dysfunction and to die in ICUs than people without mental disorders. Covid might also cause dysregulation of the stress system, which could contribute to the development or exacerbation of psychiatric disorders especially in the elderly" (par. 8) People with pre-existing mental health disorders have reported increased symptoms and poorer access to services and supports since the onset of the COVID-19 pandemic. Early discharge from psychiatric units and disruption of face-to-face psychiatric care have become common, the negative consequences of which could include relapse, suicidal behavior, lack of access to medical care, and social isolation. Therefore, we as nurses and healthcare providers should be more observant of our patients who are in quarantine because a patient's mental health can deteriorate and cause further complications.

Another aspect we should worry about is the mental health of children. It seems as if this pandemic has not affected them by quarantining, but children need socialization, friends, and in school learning. Not every child comes from a happy home and may endure all types of abuse and neglect. This pandemic has impacted our children just as much as anyone else. They are young and don't understand why things have changed. I praise the schools for still providing lunch to those in need and doing everything in their power to teach our children while at home. As found in a study by Nazish Imran et al (2020) "Interventions need COVID-19 journaling assignments to focus on nurturing resilience in children and adolescents by better communication to address their fears and concerns, encouraging routines and physical activities, and taking measures to alleviate loneliness" (par. 43). Parents need to look after their own mental health, coping strategies, and model positive psychological attitude in order to support children and adolescents to get through this difficult time.

In conclusion, I believe mental health should be given priority in both patients and healthcare workers, because we are all seeing death come more often than normal. Hospitals should provide grieving counselors to talk about their day to day basis and assess whether they should continue to work with covid patients or be moved to a different area. For example, I was put to orient in ICU recently, and I feel as if I never want to return since we lost our two covid patients within a few hours of each other. After the shift ended, I cried in my car for a while and I feel terrified to return on Friday for the fear that I may be placed back in ICU again. My co-workers and I learned almost immediately that hospitals won't give us the same attention we give to it. It discourages us to see that our efforts are matched with a "pizza party." Besides with policies changing almost every day, both the nursing and medical communities have become a cold environment to learn from. I believe that the Plainview Hospital could have handled this situation a ton better than how it is right now. To begin with, I felt as if administration acted selfishly by allowing our small hospital fill-up with covid-19 patients instead of sending them off to Lubbock from the beginning where they are better equipped to handle them. I can tell that our entire staff was not ready for when the cases spiked because we are still being hit hard due to our nurses testing positive for the virus. Secondly, the incentive pay should have been available sooner and with less restrictions and available to all frontline staff. By doing this, staffing wouldn't be such an issue and people would feel appreciated. Lastly, I would not have allowed our nurses to wear multiple job hats while having four to six covid patients per nurse. That alone is enough to cause a nurse to burnout or even alter her mental health.

I believe this pandemic has impacted professional practice in many ways. I trust that there have been less corners cut during sanitation process and that face masks and social distancing would somehow be incorporated even after the pandemic ends especially during the

flu/RSV season coming up. Additionally, I believe healthcare will continue to rely heavily on technology and new ways will be developed to replace or revamp current practices. By doing this research project, I realized that the application of nursing care went from caring for mind, body, and soul, to a mentality of survival mode. I believe by doing this, I was desensitizing myself from the patient incase he or she would pass, however, I see now that I should think of the patient's needs before mine. Knowing that mental health plays an important part of healing, I will try my absolute best to never forget to allow myself to show each patient genuine kindness even if it is their last days on earth. This experience also demonstrated that nursing students can adapt and adjust to online/ hybrid schooling with little to no notice, so I would not be surprised if colleges began to offer nursing school lectures online and clinicals in-person to continue the social distancing even after the pandemic ends.

References

(n.d.). American Psychiatric Nurses Association - American Psychiatric Nurses Association. https://www.apna.org/files/public/Resources/Issue_Brief__The_Impact_of_COVID_19_Extreme__Stress_and_Health_Care_Providers%20.pdf

Davies, N.G., Klepac, P., Liu, Y. et al. Age-dependent effects in the transmission and control of COVID-19 epidemics. Nat Med 26, 1205–1211 (2020). https://doi.org/10.1038/s41591-020-0962-9

Imran, N., Zeshan, M., & Pervaiz, Z. (2020). Mental health considerations for children & adolescents in COVID-19 Pandemic. Pakistan Journal of Medical Sciences, 36, S-1-S-6

Machhi J, Herskovitz J, Senan AM, et al. The Natural History, Pathobiology, and Clinical Manifestations of SARS-CoV-2 Infections [published online ahead of print, 2020 Jul 21]. J Neuroimmune Pharmacol. 2020;1-28. doi:10.1007/s11481-020-09944-5

Moreno C, Wykes T, Galderisi S, et al. How mental health care should change as a consequence of the COVID-19 pandemic. Lancet Psychiatry. 2020;7(9):813-824. doi:10.1016/S2215-0366(20)30307-2

National Center for Health Statistics, & Centers for Disease Control and Prevention. (2020). Cases in the U.S. [26 August 2020]. Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html

Shereen MA, Khan S, Kazmi A, Bashir N, Siddique R. COVID-19 infection: Origin, transmission, and characteristics of human coronaviruses. J Adv Res. 2020;24:91-98. Published 2020 Mar 16. doi:10.1016/j.jare.2020.03.005