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# **Covid's Impact on Nurses & Their Labor Market**

By

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An undergraduate honors thesis submitted in partial fulfillment of the

requirements for the degree of

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and

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The Covid pandemic has swept across the globe impacting many different kinds of people in many different ways. Businesses and workers experienced changes in how their respective labor markets operated with new incentives. One group of laborers that experienced quite a significant impact are nurses working through the Covid pandemic. The pandemic created new incentives for nurses that heavily impacted their labor market. Through a literature review of scientific studies examining the impacts of working through a pandemic on nurses, I discovered that this was causing psychological and emotional damage to nurses. Covid spurred on an already occurring nursing shortage by causing new negative psychological and emotional impacts on nurses that incentivized them to leave the market (Lavoie-Tremblay & others 2021, 33-43). With nurses in short supply and the pandemic only making it worse, healthcare groups responded by increasing wages (Merritt Hawkins Team 2021), but this was not entirely effective. Through the literature review of Covid's impact and possible solutions that healthcare management can take, other incentives such as more support from managers and supervisors to help with the increasing workload from both the nursing shortage and the Covid pandemic, as well as psychological support for the harms being generated by working through Covid were revealed (Shahrour 2020, 1686-1695). The trend of employment outcomes ending in quitting and desire to quit persisted through the pandemic leaving nurses who stayed at their healthcare group in a position of increased bargaining power.

#### **Background**

Pandemics litter history as great points of fear and uncertainty, causing people to act or react in uncertain ways. One such event was the H1N1 Influenza variant generally known as the Spanish Flu. Nearly a third of the world's population was infected, and 50 million people died worldwide with 675 thousand deaths occurring in the United States. (CDC 2019). With no

variant in 1957 commonly referred to as the Asian Flu. Although less devastating due to advancements in medicine, H2N2 still caused 1.1 million deaths with 116 thousand in the United States (CDC 2019). The focus at the time of these two major pandemics was how to combat and prevent the disease, not collect data and research the emotional and physical effects on the population. These events often appear without warning, whether it be due to environmental changes, genetic mutations in known diseases, or something completely different, pandemics will continue to occur throughout the course of the Earth. While it may be difficult to predict coming pandemics and the effects they will have on society, it is important to recognize the opportunity that modern pandemics have provided for collecting and analyzing data to better prepare ourselves for future pandemics.

The Covid pandemic, starting in early 2020, has been at the center of the World's focus for the past few years. Covid has flourished and spread causing rippling effects across the globe. All segments of society have been affected, especially in the parts of the world where governments did not have effective policies put into place. These effects had deep impacts on most facest of everyday life from grocery shopping, to transportation, to how our economy operates. A key part of the economy and society affected are nurses and their labor market.

With Covid causing health concerns around the country, state and federal governments, as well as different private business initiatives, enacted policies and regulations to try and protect and support workers/laborers through the pandemic. The federal government focused its policies around general support for the public through both the Trump and continuing into the Biden administration. During the Trump administration, policies such as the Corona Virus Relief Bills were passed and signed into law to provide financial support to US citizens as lockdowns began

(Ballotpedia 2022). Other programs and policies like the Paycheck Protection Program were also put into place to help Americans, as well as safety guidelines overseen by the CDC for individuals and businesses to follow (2022). The Biden administration extended/continued many of the programs put into place by the Trump administration, as well as passing more stimulus bills to put more money in the hands of Americans (2022). Many of the policies and bills passed enabled American workers to focus on their health and look for employment opportunities that better suited their situation. (2022)

While a lot of laborers experienced increased protection and flexibility in their employment situations, a specific group of workers had a very different experience through the pandemic: nurses. Unfortunately for nurses and other healthcare workers, their jobs could not be completed remotely. Every state experienced quickly increasing Covid cases and deaths in 2020. By January 11th, 2021, the original surge of Covid had reached a peak of nearly 230 thousand new cases daily and nearly 4 thousand deaths a day. Societal adaptations and vaccines slowed the virus, but a resurgence of Omicron caused even higher infection rates and case counts at the end of 2021 and the start of 2022. (USA Facts (2) 2022) Oregon, in particular, did better than the average of the country. On January 11 Oregon only had about 1200 new cases daily with a peak 7-day average of 24 deaths a day (USA Facts (1) 2022). Oregon also experienced a spike in cases and deaths at the end of 2021 and the start of 2022. Multnomah County made up a large chunk of Oregon's totals around Jan 11th with roughly 240 new cases a day and 7 deaths a day. (USA Facts (1) 2022). The United States up to April 6th, 2022, has had a total of 78 million cases and 977 thousand deaths with Oregon taking a relatively small chunk of this at 704 thousand cases and 7 thousand deaths. As evident by the case and death counts, Covid swept across the United States infecting a quarter of the population. This continuous Covid wave over the past two years

triggered an increase in demands for all kinds of labor, but a more centered increase on nursing positions to meet the increase from the pandemic.

Increased Covid case counts have led to new work strain that has been having increased physical and emotional effects on nurses. This constant direct contact with Covid patients as well as increased safety measures and total workload have combined to create new stresses and incentives for nurses. While this new combination is occurring, healthcare groups and providers are also experiencing an increase in patients and stress on their clinics causing an increase in demand for nurses shifting the labor market to a labor shortage where nurses have had increased wages and bargaining power. This change in incentives both negative and positive has created a unique situation for nurses to navigate.

### **Emotional and Mental Impacts**

Covid has had tremendous effects on the emotional and mental health of nurses. An increase in workload mixed with a new disease that threatens the health of you and your family has caused an increase in stress. A study aimed to establish the prevalence of stress and psychological distress among Jordanian nurses during the pandemic (Shahrour 2020, 1686-1695). They found that "The majority of nurses (64%) are experiencing ASD (Acute Stress Disorder) due to the COVID-19 pandemic..." and that "More than one-third of nurses (41%) are also suffering significant psychological distress" (2020, 1686-1695). 64% of nurses were experiencing ASD which has symptoms ranging from standard anxiety symptoms like irritability and restlessness, as well as dissociative symptoms such as depersonalization and detachment (The Free Dictionary 2022). Nurses are experiencing ASD as well as 41% experiencing "significant psychological distress" which is a mixture that is taking a heavy mental and emotional toll and clearly negatively impacting the nursing experience.

Psychological distress in nurses is causing negative side effects like anxiety, which in turn may affect the outcome of nursing employment. The pandemic triggering new distress is affecting nurses at a variety of different levels. A study conducted across the United States on the anxiety levels incurred from the Covid Pandemic revealed similar results. "A third of participants (34%) had scores reflecting mild anxiety, a quarter (24%) had scores reflecting moderate anxiety, and 9% scored in the range reflecting severe anxiety on the GAD-7."(Stimpfel 2021, 47-48)) Two thirds (67%) or 421 of the 629 nurse sample in this study displayed more anxiety due to the Covid pandemic and the new pressures placed on their positions with 33% experiencing mild anxiety or worse (2021, 47-48). This result is very similar to the study previously mentioned where they found that 64% of nurses in their sample were experiencing ASD. Two-thirds of nurses are experiencing both ASD and anxiety, which from a non-medically trained eye makes logical sense as stress and anxiety are typically found together.

Another study titled "Levels of resilience, anxiety and depression in nurses working in respiratory clinical areas during the COVID pandemic" by NJ Roberts and others (2021, 106219-106219) focused primarily on mild to severe anxiety in nurses working during the Covid pandemic found similar results. 21% of the nurses involved in the 255 sample survey are experiencing moderate to severe levels of anxiety, with 17.2% showing symptoms of depression (2021, 106219-106219). Compared to the previously mentioned study that had 33% of nurses experiencing moderate to severe anxiety symptoms, this is quite a bit less but still concerning levels. This could be due to this study being conducted in November 2020 and the previous study in September of 2021, but this is merely a stipulation. Either way, both studies found an increase in anxiety associated with working as a nurse during the Covid Pandemic.

With large percentages of nurses experiencing mental/psychological issues due to working through the Covid Pandemic, it is important to recognize what specifically is causing these issues from nurses' perspectives. Studies that quantify the prevalence of psychological distress are great for enumerating the problems, but identifying what is causing these problems from nurses will be beneficial when trying to develop solutions. The study "Hospital nurses' experiences of and perspectives on the impact COVID-19 had on their professional and everyday life—A qualitative interview study" conducted by Lars Thrysoee and others (2022, 189-198) did just that by conducting a series of interviews with nurses involved in Covid patient-care. In these interviews they found some positive impacts from Covid such as nurses finding newly "...formed quite a different solidarity..." and one nurse said that they were "grateful to COVID-19 for giving me (them) a new chance to do things differently and better" (2022, 189-198), but in general Covid was seen as largely negative. Nurses working in Covid-focused departments generally felt outcast from everyday life, and even within their own clinics. The idea that they were the ones fighting against the pandemic, but then turned around to see that many of their loved ones and family did not want to be with them due to their close proximity with Covid took a psychological toll on many of the interviewed nurses (2022, 189-198). In some cases, some of the nurses felt that even their department heads and colleagues failed them stating "I lost confidence in my department head; the ones close to us should have supported us and visited us in the COVID-19 department" (2022, 189-198). On top of all of these feelings of exclusion and abandonment, the interviewed nurses were also feeling scared and concerned about having to be the frontline of a pandemic and of contracting the disease. With all of these factors weighing on these nurses, they were feeling "that they developed stress and symptoms of depression over

time...", which is exactly what was happening as a result reflected by the quantitative studies (2022, 189-198).

### **Impact on Employment Outcomes**

Nurses have been experiencing increased amounts of stress, anxiety, depression, and many other psychological symptoms that have been impacting their lives in very negative ways. This increase due to the Covid pandemic has created a new powerful incentive for nurses that may influence how their employment as nurses may change. A study examining this new incentive and its impacts on job outcomes had "...results showing that nursing staff who cared for COVID-19 patients perceived less transformational leadership from their superior and had higher chronic fatigue, lower work satisfaction, lower perceived quality of care and greater intention to leave their current position." (Lavoie-Tremblay & others 2021, 33-43). Why stay in a position that is worsening due to a pandemic and is causing psychological distress which is affecting not only your quality of work and satisfaction but is also seeping into your personal life and hurting your relationships? For some nurses, this was the thought process exactly.

With the adverse psychological side effects and a lot of nursing staff feeling they were not adequately prepared to deal with the Covid surge, nurses found that this was incentive enough to quit their current positions. An article by Gaby Gavin: "Nearly 1 in 5 Health Care Workers Have Quit Their Jobs During the Pandemic" (2021), was spot on with its title. Based on a poll of 1000 healthcare workers, 18% of them have decided to quit their jobs while another 12% of them were laid off. The survey suggested that this was "driven largely by the pandemic, insufficient pay or opportunities and burnout..." (2021), indicating that while the negatives of working as a nurse were increasing, the rewards for doing so were not enough and something needed to be done. The study conducted across the United States on the psychological impact on

nurses from working through Covid found a similar result. "Over one in four (28%) nurses reported being unsure or planned to leave their employer in the next year." (Stimpfel & Others 2021, 47-48), due to the trauma associated with working through the pandemic. Nurses in general no longer find current employment benefits and pay worth the mental barrage that comes with the job, especially during a global pandemic.

Prior to the pandemic, there was already a globally recognized nursing shortage in most parts of the world. The International Council of Nurses (ICN) released a policy brief recently stating "In 2020, the first State of the World's Nursing (SOWN)2 report, published by the World Health Organization (WHO), revealed the global nursing workforce was at 27.9 million and estimated there was a global shortfall of 5.9 million nurses." (ICN, 2021) With a nursing shortage already occurring prior to the pandemic, and the pandemic now causing nurses to want to quit at higher rates and other nurses even being fired (Gavin 2021), this puts a heavy strain on the nursing supply during the pandemic. The ICN stated in the same report that "The pandemic has magnified and exacerbated the global nursing shortage issues and obviously increased risks to the health workforce, including occupational infections, stress, and burnout from months of caring for COVID-19 patients" (2021). Going into a pandemic with a recognized global nursing shortage made it incredibly difficult for nurses to combat the pandemic effectively and safely causing this burnout and fear of infection and death. As stated in the **Emotional Impact** section, nurses are experiencing terrible emotional and psychological repercussions incentivizing them to leave the workforce and "...exacerbate(d) the global nursing shortage..." (2021) because of it. Being short-staffed and not having the proper means to effectively deal with the pandemic is a combination that has led to even more shortages.

#### **Demand Increase & Monetary Impacts**

With nurses being incentivized to end their current employment situations due to increased negative psychological impacts and unfavorable work conditions spurring on an already occurring nursing shortage, Healthcare Groups were left in a difficult situation. The pandemic caused a shift in the nursing labor market where there was a supply/labor shortage when demand for nurses was increasing. As reported by Merritt Hawkins that while "...COVID-19 contributed to a 25 percent decline in demand for physicians..., the demand for nurse practitioners increased by 24 percent." (Merritt Hawkins Team 2021). Demand for surgeries and basic medical treatment declined during the pandemic while nurse practitioners experienced an increase due to the "...premium on easy access to care and cost containment." (2021). With supply low and demand increasing, Healthcare Groups had few options to counter the shifting nursing labor market besides adjusting wages.

One group of nurses that experienced this shift in wages were nurse practitioners due to the mentioned jump in demand. Prior to the 2020/2021 year, nurse practitioners' average salaries fluctuated in the \$120,000 range, peaking at \$129,000 in 2017/2018 (2021). However, with the Covid Pandemic on the rise and all the incentives for all nurses to leave their current positions, these wages took a large jump. In 2020/2021 the average salary for a nurse practitioner was \$140,000 (2021). Healthcare groups and other clinics recognized the shortage and increased wages by 12 percent from the previous year's average salary of \$125,000. This number is reflective only of the guaranteed income to nurse practitioners and does not include production bonuses or benefits but considering these are likely to be the same we can assume a difference of difference for the different year's average wages. Prior to this jump, the largest increase in Nurse Practitioners' salaries was from the years 2016/2017 to 2017/2018 where there was about a 5 percent increase from \$123,000 to \$129,000 (2021). This is a clear indicator that Covid's impact

on the nurse practitioner labor market and incentives were severe enough to show the largest increase in wages in recent times.

While physician assistants are not the same thing as a nurse, they often fulfill a lot of the same roles that a registered nurse or nurse practitioner would do. For this reason, their wages and incentives for where they will sell their labor are relevant as they can offer the same "easy access to care and cost containment. Physician assistants saw a similar increase in wages to nursing practitioners. In 2019/2020 before the Covid Pandemic started, the average physician assistant starting salary was \$112,000, however, the average starting salary in 2020/2021 was \$128,000 (2021). Once again, Healthcare groups recognized that while the demand was high for nurse practitioners, physician assistants could fulfill many of the same roles triggering a salary increase of \$16,000 over the years. This was a 14.3 percent increase, 2.3 percent more than even nurse practitioners. Based on the emotional impacts experienced by nurses, physician assistants likely had a similar experience triggering similar incentives for their labor market.

### **Healthcare Group Solutions**

Healthcare groups have been responding to the shifting nursing labor market by increasing wages to try and incentivize nurses back into the workforce and to draw in people from outside the market, but this alone has not been enough to counteract the new Covid Pandemic incentives to leave. Instead of purely trying to increase nurse retention by increasing wages or benefits, healthcare groups need to start focusing on where nurses are actually being impacted the most by the pandemic: their psychological distress and emotions. If the objective is to increase the number of nurses in the workforce and improve their actual quality of care, then "...upstream organizational measures are vital to support the mental health of nursing staff and address their fear of COVID-19 through peer and social support, psychological and mental

support services (e.g. counseling or psychotherapy), provision of training related to COVID-19 and accurate and regular information updates (Lavoie-Tremblay & Others 2021, 33-43).

One method of providing psychological support for nurses is placing a large responsibility of it on the nurse managers. Since the nurse managers are in direct contact with nurses daily, and typically oversee shifts, they are the perfect candidate for support. The study on ASD and psychological distress previously mentioned by Ghada Shahrour states: "Nurse managers can take a leading role in implementing stress-reduction strategies for nurses through providing consecutive rest days, rotating allocations of complex patients, arranging support services, and being accessible to staff."(2020, 1686-1695) Shahrour believes that nurse managers need to be taking active roles in supporting nurses daily by monitoring their employees and having daily briefings as a form of check-in. Through more intensive training for nurse managers rather than training the entirety of the staff, nurse managers can "...act as role models in handling the crisis of COVID-19 in an empowering way." (2020, 1686-1695). Considering many of the comments from nurses dealing directly with Covid was the lack of support and training from managers, these general ideas can serve as a solid foundation for providing support for nurses.

Having initial support for nurses and "higher-ups" or nursing management that is actively trying to help them is going to be instrumental in preventing the psychological distress that has been negatively impacting nurses, but also having backup methods to help nurses deal with the emotional impact is extremely important. Deploying support services as Shahrour suggests will enable nurses to more effectively do their nursing duties while having a foundation that will support them through complications, but when that is not enough there needs to also be backup strategies. In a qualitative study focusing on the experience of nurses working during the pandemic, a method for finding nurses who fell through the net was "...regular screening of

nurses involved in the care of patients with COVID-19 to evaluate stress, depression and anxiety combined with a setup consisting of supervisors and leaders who are willing to support and listen to the individual nurse's personal experiences, problems and stress related to the working conditions." (Thrysoee & Others 2022, 189-198) Here the researchers suggest a similar support system from supervisors, but also recommend screenings of nurses that could identify psychological and emotional issues before they manifest into serious problems such as ASD or PTSD. Amy Stimpfel and others (2021, 47-48) suggest that once problems are identified through a screening system previously mentioned then "Evidence-based treatments and development of novel interventions to support this vital healthcare sector are warranted."

Since prescriptions of treatment are outside of the scope of my expertise and many of the studies in reference, stopping at "evidence-based treatments" will be the extent of recommendation for the actual treatment. It is clear that if healthcare groups want to bring in more nurses to increase production and earnings, then they are going to need to start incentivizing nurses in different ways and actually work on nurse retention. By providing better managerial and supervisor effort and strategies to support nurses and then having treatments ready to help nurses recover from any sort of emotional or psychological trauma, healthcare groups can facilitate an environment that nurses actually will want to work in. Raising wages to try and incentivize nurses to work for your group will certainly work but to an extent. If the conditions are so poor that nurses are constantly feeling overwhelmed, overworked, not supported, and like they are developing lasting mental conditions, then a wage increase is only going to do so much in the face of a pandemic. Focusing on what is negatively affecting nurses associated with frontline work and providing solutions that help is what will incentivize nurses to a healthcare group. If there was already a global nursing shortage prior to the pandemic due to

similar reasons, then stacking on more work with less help will only exacerbate the growing problem.

#### **Conclusion**

The Covid pandemic has had a variety of effects on nurses and their labor market. Having to work as a frontline nurse combatting the pandemic is shown to have negative impacts on nurses' psychology and emotions. ASD, anxiety, depression, and other psychological effects were shown to be much more prevalent in nurses working through the pandemic due to concerns about being overworked due to the nursing shortage, not having enough support from supervisors, and general fear of being in close proximity to the disease. These impacts have incentivized nurses to leave their positions causing the nursing shortage to get worse. Due to this major shortage, the labor market transitioned into one where nurses have a lot more bargaining power and control over the pay and benefits they would receive for their labor.

Healthcare groups responded to this labor shortage by increasing wages, which was a step in the right direction to try and provide positive incentives for nurses to come work for them, but this alone was not enough. Qualitative studies that focused on interviewing found that nurses working through the pandemic desired other incentives along with an increase in wages. Many that were interviewed explained that there was a lack of support from nurse managers and supervisors, as well as feelings of being overworked due to a lack of additional nurses. Healthcare groups need to focus on providing additional managerial support as well as psychological and emotional distress treatments for those adversely affected by working in the pandemic.

The Covid pandemic has had clear effects on nurses and their labor market from emotional impacts to shifting market power. For future research into nursing labor markets and

Covid's impact on it, it will be essential to review how healthcare groups respond to the changing market. Currently, there is not enough wage data to complete a full labor market analysis, but in the future when healthcare groups release more wage data and the BLS has created an annual report for this employment category then a review of the total impacts of Covid on the market will be essential for understanding this dynamic.

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