

Lessons Learned from Student Nurses Perception of Training during the Height of the COVID-19 Pandemic

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Abstract

Spring of 2020 was challenging for student nurses and nursing programs as the country struggled to reduce healthcare workers' concern during the COVID-19 pandemic. While fears were high for many frontline workers, student nurses were perplexed with the need for training in a hospital setting and their safety. This paper describes student nurse's fears when working in a hospital or simulation setting at the height of the pandemic and lessons learned.

Methods: One hundred and thirty-five student nurses completed a modified Generalized Anxiety Disorder 5-item survey with 14 questions related to performing basic nursing skills in a hospital or simulation setting. Scores were compared to determine which environment students reported more anxiety.

Results: A significant difference ($p < 0.001$) was observed between 12 of the 14 questions, and overall students perceived more anxiety while working in a hospital setting. Forty student nurses reported feeling more anxious performing basic nursing skills in a hospital setting which were significantly ($p < 0.001$) different than 19 students report during simulation.

Conclusion: While the risk of contracting COVID-19 was increased at the height of the pandemic, students feared the consequences of limited hospital training in their future career.

Keywords: Anxiety; Simulation; Clinical training; Safety

Introduction

An unexpectedly high mortality rate (440,044) among healthcare workers during the COVID-19 pandemic highlighted the risks associated with the profession [1, 2]. The pandemic underscored the physical risks faced by healthcare workers as many professionals succumbed to the disease [3,4]. Any potential exposure to infectious diseases and the risk of personal illness or even death had a profound impact on those entering the field. A valid concern for new nurses was witnessed by a roller coaster of emotional strain related to patient suffering, working in a high-stress environment, and making good clinical decisions [5]. The surge in patient numbers during the pandemic led to increased workloads and nurse burnout among experienced nurses [6]. Nursing students worried about facing similar challenges and the long-term sustainability of their careers.

The COVID-19 pandemic provided valuable lessons that could shape the future of training and practice in nursing, although it posed significant challenges for nursing education. Student experiences during this time offer important insights into how educational programs can better support and prepare future healthcare professionals [7]. This pandemic presented unprecedented challenges to healthcare systems worldwide, including student nurses undergoing training [8]. These challenges revealed both strengths and weaknesses of healthcare systems and provided insights into student nurses' perception of training during this period. Lessons learned include the importance of flexibility and adaptability in training, the provision for mental health support, and early recognition of a contingency plan for preparedness and training [9, 10].

During the height of the pandemic, students had increased fears due to the uncertainty about their education and future careers [11]. They also expressed that balancing online learning with reduced clinical rotations and hours were a major challenge [12, 13]. Although most students liked the new enhanced learning through technology, many felt that the virtual simulations couldn't fully replicate the experience of direct patient care. A strong sense of purpose among nursing students was fostered during this global crisis, and it reinforced their commitment to the nursing profession [14]. However, student nurses had some reservations for training in a hospital setting and feared consequences of limited experience in future employment. The purpose of this study was to assess student nurses' perception of anxiety when training in a hospital or simulation setting during the height of the pandemic, and lessons learned. A Qualtrics survey was used to answer the research question, "do student nurses perceive greater fear when training in a hospital versus a simulation environment during the pandemic?" This descriptive study used a mixed-method design to assess a student's anxiety when performing basic nursing skills in a hospital or simulation setting.

Methods

Approval was granted from the University's Review Board. One hundred and thirty-five First semester students completed the survey voluntarily. The first semester consisted of completing four courses in either 14 weeks during the spring or 12-weeks in summer. Students also completed face-to-face simulation encounters and nursing skills as part of the fundamental and health assessment courses. In most cases, students were required to return-demonstrate many basic nursing skills in the lab or simulation environment. Twenty-eight questions related to various activities from the fundamentals clinical or simulation encounters were given as part of the survey (Table 1). These questions were developed from a standard skills checklist for fundamentals of nursing [15].

Table 1: Twenty-eight survey questions related to students' performance of various basic nursing skills to assess anxiety between two environments (hospital versus simulation) during covid-19 using a 5-item scale.

Survey Questions	Very Confident	Moderately Confident	Neutral	Slightly Anxious	Very Anxious
Performing skills in the clinical environment contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Performing skills in the simulation environment contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working with medical equipment in the clinical environment contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working with medical equipment in the simulation environment contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distinguishing what is important in the clinical should be reported (ex. Abnormal vital signs or glucose levels) contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distinguishing between what is important in the simulation should be reported (ex. Abnormal vital signs or glucose levels) contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Caring for a patient with my team in the clinical setting contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Caring for a patient with my team in the simulation setting contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When administering medication in the clinical setting contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When preparing medication in the simulation setting contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When performing in front of my peers in the clinical setting contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When performing in front of my peers in the clinical setting contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When performing in front of my faculty in the clinical setting contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When performing in front of my peers in the simulation setting contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When deciding about the patient in the clinical setting contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When deciding about the patient in the simulation setting contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The possibility of making a mistake in the clinical setting contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The possibility of making a mistake in the simulation setting contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

When observing other students in the clinical setting contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When observing other students in the simulation setting contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I receive feedback from students in the clinical setting contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I receive feedback from students in the simulation setting, it contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I receive feedback from faculty in the clinical setting, it contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I receive feedback from faculty in the simulation setting contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My general feeling during the entire clinical experience is:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My general feeling during the entire simulation experience is:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Going to the clinical setting at the height of the Covid pandemic contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Going to the simulation setting at the height of the Covid pandemic contributes to my feeling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Please describe anything else about the clinical setting that has helped you feel confident working in this environment.	-----				
Please describe anything else about the simulation setting that has helped you feel confident working in this environment.	-----				
Please describe anything else about the clinical setting that caused anxiety for you	-----				
Please describe anything else about the simulation setting that caused anxiety for you	-----				

The control-value theory of achievement emotions by Reinhard Pekrun was used as a framework to guide this study [16]. This theory suggests that students routinely assess accomplishments, and their perception of the control they have over their achievement of success. Hence, the emotions are called, “achievement emotions” because they are the students’ perception of their performance being evaluated [16].

Setting

Students attended several days of simulation and practiced various basic nursing skills in the university’s simulation hospital. The simulation encounters were full-eight-hour days and consisted of students performing various nursing skills (i.e. donning and doffing personal protective equipment (PPE), medication preparation and administration, assessing vital signs both manually and with an automatic device, and performing medical and/or surgical asepsis techniques). During simulation encounters, students were challenged with making clinical decisions, using critical thinking skills, and practicing therapeutic communication. As part of their course grade, students were evaluated on performance in completing the various tasks listed above, howev-

er, there were no specific scores, or grades assigned to each task. Students were assigned either pass or fail scores and failures received remediation until they satisfactorily performed the skills or tasks correctly.

Additionally, students were required to attend one full clinical day each week at the local hospital with their clinical instructor on a non-COVID designated unit. However, during the pandemic, students spent only four hours each clinical day in the hospital to reduce the group size and provide dedensification in the hospital setting. A group of eight students were divided with a portion of the group training in the hospital from 7-11:00am and the remaining students were in the hospital from 1:00-4:00pm without breaks. These students were evaluated daily on their performance of various basic nursing skills, critical thinking skills, clinical decision making and therapeutic communication. The medical facility provided all personal protective equipment (gloves, masks, & shields) for students and hand sanitizers were readily available in all patient care areas. All students were required to be vaccinated for COVID prior to attending any training within the hospital setting. As part of the University's contingency plan, COVID related resources and updates were available. All CDC recommendations for COVID prevention and quarantine guidelines were followed on campus. Students had access to free COVID testing daily. A 24-hour COVID hotline was established to provide additional information for resources and mental support.

Procedure

One hundred and thirty-five undergraduate prelicensure nursing students completed an online anxiety survey after their first clinical semester. An online survey link was provided within the learning management system and participation was voluntary. Students who perceived anxiety were assessed using a five-item scale (very confident-VC, moderately confident-MC, neutral-N, slightly anxious-SA, or very anxious-VA) with 28 questions related to procedures performed in both training environments (14 in hospital setting and 14 in simulation setting).

A score of zero, one, two, three, or four was assigned to each item on the five-item scale (very confident=0, moderately confident=1, Neutral=2, slightly anxious=3, and very anxious=4). Only scores for slightly anxious (SA) and very anxious (VA) items were used to compare students' perceived anxiety when performing tasks in the hospital versus the simulation setting. Three additional questions were included in the survey related to COVID exposure and tests to obtain information about perceived or actual positive cases among participants. The survey also included one open-ended question to allow students to add any information about the hospital or simulation setting.

Data Management

All data was collected electronically using Qualtrics® survey software and the same questions were asked about both environments. SPSS-26 statistical package (IBM©) was used for statistical analyses, and a significance level was set at 0.05. For each statistical test, categorical data were analyzed using frequency distributions and Chi-square analysis to compare anxious (A) or very anxious (VA) scores. Additional data were analyzed using a qualitative content analysis approach [17] with NVivo qualitative data analysis software. Open-ended question responses related to the contribution of anxiety in a hospital or simulation setting were read and reread multiple times. Categories, condensed meanings, and codes were created. The data analysis was reviewed by researchers until the agreement was reached.

Results

All students had a bachelor's degree, and 15 students had master's degree. Seventy-two degrees were in a healthcare related field, 13 in social services, 16 in public speaking and performance, and 34 participants did not list a specialty for their degree. This group had 118 females and 17 male participants. Most students were between the ages of 20-29 (n=110), with a few students between the ages of 30-39 (n=20), and five students were between the ages of 40-49. Overall, students report of feeling

anxious the entire time going to the hospital was significantly different $\chi^2 (16, N=135) = 139.85, P < .001$ when compared to the simulation setting (Table 3). Similar results were reported for students' perception of feeling more anxious $\chi^2 (16, N=135) = 205.161, P < .001$ when going to the hospital at the height of COVID compared to the simulation setting (Table 3). There were no significant differences between anxious feelings for two of the 14 questions, however all other questions showed significant differences between the two environments (Table 3). While 40 students (30%) reported feeling slightly or very anxious performing skills in the hospital, only 19 students (14%) had a similar feeling in the simulation setting (table 2). Twenty-five (33%) students felt slightly or very anxious working with equipment in the hospital compared to $n=13$ (10%) in simulation. When administering medications in the hospital 36 students (27%) had feelings of being slightly or very anxious with only $n=13$ (10%) in simulation. Forty-two (31%) students were slightly or very anxious when making decisions in the hospital compared to $n=16$ (12%) in simulation. Some differences were noted between students who reported feeling slightly or very anxious when receiving feedback in a hospital $n=25$ (19%) or simulation setting $n=13$ (10%).

Table 2: The number and percentage of students that reported feeling slightly (SA) or very anxious (VA) for 14 questions related to performing basic nursing skills in a hospital or simulation setting.

Survey Questions	Hospital Setting# Students (%)N=135		Combined# Students (%)N=135	Simulation # Students (%)N=135		Combined# Students (%)N=135
	SA	VA		SA + VA	SA	
Performing basic skills	27 (20)	13 (10)	40 (30)	15(11)	4 (3)	19 (14)
Working with equipment	24 (18)	9 (7)	33 (25)	10 (8)	3 (2)	13 (10)
Distinguishing what's important	13 (10)	5 (4)	18 (14)	12 (9)	3 (2)	15 (11)
Caring for patient with a team	13 (10)	9 (7)	14 (11)	9 (7)	5 (4)	14 (11)
Administering medication	25 (19)	11 (8)	26 (27)	9 (7)	4 (3)	13 (10)
Performing in front of peers	27 (20)	12 (9)	39 (29)	23 (17)	9 (7)	32 (24)
Performing in front of faculty	30 (22)	20 (15)	39 (29)	27 (20)	12 (9)	39 (29)
Making decisions	24 (18)	17 (13)	42 (31)	12 (9)	4 (3)	16 (12)
Completing tasks with team	13 (10)	9 (7)	23 (17)	7 (5)	4 (3)	11 (8)
Observing other students	12 (9)	3 (2)	15 (11)	12 (9)	1 (1)	13 (10)
Receiving feedback from faculty	21 (16)	4 (3)	25 (19)	11 (8)	3 (2)	13 (10)
Receiving feedback from peers	13 (10)	3 (2)	16 (12)	13 (10)	3 (2)	16 (12)
General feeling during entire training	30 (22)	11 (8)	41 (30)	9 (7)	4 (3)	13 (10)
Going to either setting at the height of Covid	24 (18)	27 (20)	51 (38)	11 (8)	9 (7)	20 (15)

Table 3: Combined students' scores for feeling slightly (SA) and very anxious (VA) in a hospital setting were compared to a simulation setting during the covid-pandemic using Pearson Chi-square analysis with a significance level set at 0.05

Survey Questions	CombinedHospitalM (SD)N=135	CombinedSimulationM (SD)N=135	Value	df	Asymptoticsignificance
	SA + VA	SA + VA			
Performing basic skills	1.52 (1.35)	1.16 (1.04)	143.445	16	<0.001
Working with equipment	1.42 (1.23)	1.04 (0.98)	135.588	16	<0.001
Distinguishing what's important	1.16 (1.09)	1.13 (1.04)	179.541	16	0.100
Caring for patient with a team	1.18 (1.21)	0.89 (0.96)	115.334	16	<0.001
Administering medication	1.46 (1.30)	1.08 (1.02)	149.407	16	<0.001
Performing in front of peers	1.61 (1.27)	1.47 (1.25)	229.699	16	<0.001
Performing in front of faculty	1.84 (1.37)	1.65 (1.25)	226.785	16	<0.001
Making decisions	1.64 (1.36)	1.21 (1.02)	159.283	16	<0.001
Making a mistake	2.50 (1.36)	1.80 (1.10)	156.778	16	<0.001
Observing other students	1.25 (0.99)	1.12 (0.99)	287.953	16	<0.001
Receiving feedback from faculty	1.29 (1.13)	1.13 (0.99)	194.039	16	<0.001
Receiving feedback from peers	1.25 (0.99)	1.22 (1.01)	324.440	16	0.100
General feeling during entire training	1.57 (1.29)	1.15 (0.98)	139.855	16	<0.001
Going to either setting at the height of Covid	1.99 (1.41)	1.42 (1.15)	205.161	16	<0.001

Qualitative Results

Results from the open-ended question provided students' preference or perceived performance in both settings during the pandemic. Several themes related to students' preference of perceived performance in the hospital or simulation setting emerged. The four themes that emerged from this study included: 1) Fear of Contracting COVID in the Hospital Setting, 2) Hospital as a Valuable Learning Experience, 3) Simulation as a Safe Learning Environment and 4) Lack of Preparation for Clinical Practice.

Theme One: Fear of Contracting COVID-19 in the Hospital Setting

Students reported a fear of contracting the corona virus while training in the hospital setting. One student nurse stated "one of

the things that has caused anxiety is COVID which I'm sure everyone can agree on. I'm grateful to have the chance to have hands on experience but there will always be a feeling that I may be getting in contact with someone with COVID as a few of my peers has unfortunately got the virus." Another student expressed "being afraid mostly COVID and the possibility of getting sick and bringing it home, where I have a little kid, and possibility to bring the infection home without knowing about it." Moreover, students reported that "Hearing that patients were suspected to have COVID" also produced feelings of anxiety.

Theme Two: Hospital as a Valuable Learning Experience

Students stated that the hospital setting was a valuable learning experience. One student expressed being "lucky enough to be with relatively receptive nurses, who I must thank for being incredibly patient during the height of a pandemic." Student nurses recognized that training in the hospital setting was necessary since they would one day be frontline workers: "...communicating with the nurses helped me a lot and even if it was limited it gave me a good insight into the workload and responsibilities that nurses have."

Theme Three: Simulation as a Safe Learning Environment

Students reported that simulation was a safe learning environment. This was evident with the following student's statement "it is nice to have exposure to certain things prior to our clinical experience so you are not overwhelmed by all the new things coming your way." This statement was supported by another peer: "I felt that I was better prepared to handle the simulations because there was no possibility of harming anyone."

Theme Four: Lack of Preparation for Clinical Practice

Although there was positive feedback about experiences in simulation and the hospital, some students reported feeling unprepared for clinical practice because of the challenges posed by the pandemic. One student nurse stated: "I did not feel and still do not feel prepared enough to be in the clinical setting. I feel it is imperative to get more hours in the simulation hospital. "This is one of the main reasons I chose to go to this university."

Discussion

From these results, students perceived greater fear in a hospital setting versus a simulation environment during the pandemic. Though efforts were made to protect students in hospitals by reducing clinical hours and de-densifying work areas, students reported increased anxiety in both the hospital and simulation setting. A common concern among nursing students was contracting the disease and extending their time in training. This study corroborated Wang and Zhao findings that suggest nursing students perceived greater risk of infection when working in hospitals regardless of safety measures [17]. Even though students reported less anxiety in the simulated environment, they expressed concerns about future employment.

While simulation technology may not replace clinical and hospital experiences, students continue to gain experience in a safe environment [18]. In our study, there were no differences in students' behaviors when performing basic nursing tasks in the presence of faculty or other peers regardless of the setting. However, students had increased anxiety when administering medication and working with basic equipment in a hospital setting. Jefferies affirm that students feel comfortable and confident in performing a specific skill while working in a non-condemning or shaming environment [18]. Thus, allowing students to gain or build confidence in performing many basic or high-level skills. Nevertheless, students are frightened of making mistakes in a hospital setting due to the consequences these errors pose to patients. Due to the increase in mortality and morbidity rates among HCW's during the COVID pandemic, students were complexed with fears related to personal illness and decreased training opportunities [5]. Therefore, lessons can be learned from this study along with consequences associated with the pan-

demic for student nurses and training programs.

Lessons Learned

While this pandemic exposed the vulnerabilities of global and national healthcare systems, some lessons were learned to reduce anxiety and fears among nursing students and other healthcare professionals [9]. Healthcare facilities and medical communities implemented practices to create more resilient healthcare systems. For example, smart integration with digital technology provided increased access to health systems which allowed improved diagnosis and treatment for patients without increasing their risk to the virus. Widespread use of telemedicine and automated medication dispensing units alleviated face-to-face interactions and provided practitioners with better scheduling flexibility. A similar phenomenon occurred in training healthcare students using virtual platforms such as zoom and virtual simulations.

Additional lessons learned include the importance of adaptability and early recognition of a contingency plan for preparedness and training [19]. The role of technology in training during the pandemic provided a virtual simulation platform for most nursing programs. Some nursing schools already had a contingency plan in place which allowed them to pivot faster reducing downtime during the pandemic. For example, virtual simulation programs were sporadically used as part of the didactic nursing course, and during the pandemic these courses increase usage to supplement student training. However, students worried that this training format was not sufficient to meet expectations post-graduation (passing the certification exam and getting a job). Student fears may be corroborated with Austin's 2023 report of a decrease in first-time passing scores on the national nursing licensure examination (NCLEX) [20]. This report states that the drop in national first time NCLEX pass rates may be linked to no or minimal clinical experience [20]. Additionally, poor clinical performance for new graduate hires after 2021 may also be linked to reduced clinical training or other face-to-face learning modalities including simulation. While computer-based simulation provided valuable experience during the pandemic, these simulation modalities did not sustain the national average first-time NCLEX scores or clinical competencies [20]. The NCLEX rates drastically decreased in 2020, 2021 and 2022 with some improvements in 2023, but still lower than pre-pandemic rates [20]. Although safety was paramount during the pandemic, elimination of face-to-face training for nursing students resulted in additional hospital staff nursing shortages with increased fears among students regarding future careers.

Though our study did not focus on mental health among students, the university provided resources to supplement learning during this high stress period. A 24-hotline was created to allow students to speak with healthcare professionals about their mental concerns. Various departments allowed extra time for exams, hospital exposure was decreased, and students could waive final grades as no credit. In some circumstances, a high-stake exit exam was modified to allow students multiple attempts and reduce anxiety. While there's no one standard operating procedure in a pandemic, lessons can be learned from the compilation of procedures that produced positive results. Additionally, less favorable results can also play a pivotal role in identifying deficiencies and limitations in nursing programs and healthcare delivery systems.

Limitations

One limitation to this study was the small sample size due to a slight decrease in enrollment during covid because of many unforeseen circumstances. This small sample size may have impacted the significance of the study and the findings cannot be generalized to the greater population. This study was completed at one site in a large metropolitan area with an increased number of covid cases, deaths, and barriers related to obtaining appropriate equipment and supplies which may have contributed to increased anxiety. Students in this study could continue training in the hospital within three months after the nation shut down, and this early return to practice might have heightened fears among students. Participants reported that their fears were increased in the hospital setting because the nurses were overwhelmed, and patients were afraid of getting COVID from the hospital staff. Also, baseline anxiety performance was not obtained prior to the pandemic to determine the level of anxiety among

nursing students' pre-pandemic because of the nature and transmission of the virus.

Future Implications

Though there were many limitations that may have impacted the study results, having students report their fears of performing basic nursing skills in two different face-to-face environments during a pandemic could provide some insights into future practices. Also, having a contingency plan during a pandemic is paramount to alleviating fears among students. Providing mental health resources through the organization or university may reduce fears among healthcare workers and students. Safeguarding the public and healthcare workers simultaneously during a pandemic can prove to be a daunting task. Therefore, obtaining valuable information about student fears during a pandemic could provide future strategies for training programs and hospitals.

Conclusion

While COVID cases seem to wax and wane across the U.S. and globally, students are now less afraid of contracting the disease due to the increased availability of vaccines and precautions. Additional safeguards and teaching methodologies are ongoing to ensure that education continues to meet societal needs. Although students may have increased anxiety during their first semester of training, a contingency plan should be in place to help reduce anxiety related to unanticipated circumstances (pandemics or natural disasters). While there's no single approach to leading through a pandemic, however, lessons learned from this pandemic may be applicable in the next situation that stresses vulnerabilities of healthcare systems [8]. Creating a safe environment for students when faced with an unknown event or entity may be beneficial for future training. Also, understanding students' perceived anxiety related to emotional achievement may help educators supplement the learning environments using different teaching modalities to reduce anticipated anxiety and fears.

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