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ORIGINAL ARTICLE

Resources to Promote Mental Health and Well-Being During COVID-19 Among Registered Nurses Concurrently Enrolled in Post-Secondary Education Programs: A Qualitative Analysis

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Abstract

Background: Registered nurses have reported experiencing acute mental health symptoms associated with increasing levels of distress during coronavirus disease. In response, strategies have been designed to address these challenges. However, very little to no attention has been given to a particular cohort of registered nurses who are concurrently enrolled in university programs to advance their theoretical and clinical knowledge.

The purpose of this study was to identify this cohort's perceived clinical and academic resources and supports deemed to be useful in maintaining and promoting mental health and well-being.

Method: Qualitative data were collected using open-ended questions.

Results: Findings suggest many nurses received increased mental health supports from their employers but limited resources from post-secondary institutions.

Conclusion: Specific strategies for the creation and implementation of mental health resources within the academic setting are suggested.

Keywords: COVID-19, distress, mental health, post-secondary education, registered nurses

Introduction

The current pandemic is characterized by the rapid transmission of the SARS-CoV-2 virus (COVID-19). The virus is spread through infected droplets and small airborne particles found in respiratory secretions and saliva (Holtmann et al., 2020). Globally, over 500 million individuals have tested positive for COVID-19 since 2019, which has placed a significant strain on many healthcare systems worldwide (World Health Organization, 2022). Nurses have encountered several challenges that affected their health and well-being. Nurses work longer than normal hours, caring for patients with higher acuity of illness. They are at heightened risk for infection due to limited access to personal protective equipment, report increased stress, and are currently experiencing acute mental health symptoms associated with increasing levels of distress (Montemurro, 2020). This level of distress is further exacerbated by current global trends which indicate at least 20% of all healthcare providers, including nurses, internationally have become infected, with at least 115,500 deaths directly attributed to COVID-19 (Hassanian-Moghaddam et al., 2020, World Health Organization, 2022).

This high rate of infection among registered nurses combined with stressful working environments has been recognized by the international community. In response, strategies have been designed and implemented to address these challenges. They include increased funding for personal protective equipment, rapid hiring processes, training of additional front-line nursing staff, opening of satellite clinics to assist with increasing patient volume, and implementing various workshops and counseling to promote nurses' mental health and well-being (Werner et al., 2020). Although these initiatives targeted registered nurses, very little to no attention has been given to a particular cohort of front-line nurses who are concurrently enrolled in university programs to advance their theoretical and clinical knowledge.

Across Canada, over 200 000 nurses, including registered practical nurses (also known as licensed practical nurses

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in other countries) and registered nurses, are enrolled in university programs; these consist of undergraduate competency-based, advanced certification programs, or graduate education programs (https://ubccpd.ca/; https://pg.postmd.utoronto.ca/faculty-staff/accreditation/; https://www.mcgill.ca/pgme/about-us). In addition to experiencing regular stressors associated with working during the pandemic, this cohort is also experiencing stressors from several other sources. Specifically, as employed nurses concurrently enrolled in university-based educational program, this cohort must juggle responsibilities between academic study, practical or clinical work, and family roles (He et al., 2018). First, they are practicing on the front lines: they treat patients diagnosed with COVID-19 while facing challenges related to working longer than normal hours, being on-call to respond to emergent situations, or being redeployed to new units (requiring on-the-spot learning of new health conditions and their management) (Fernández et al., 2021). Second, as mature students, many have additional responsibilities related to caring for their children and/or elderly parents/grandparents. The risk of acquiring the virus and transmitting it to loved ones (Hamadeh Kerbage et al., 2021; Hamadi et al., 2021) and the potential for exhaustion and burnout related to COVID-19 are unique to this cohort. Third, they are expected to attend to academic requirements and maintain good academic standing in the context of changing teaching-learning experiences. As a result of the COVID-19 pandemic, this cohort had to not only rapidly adapt to changing work environments but was also required to hastily adapt to transition in the delivery of their education. Most educational programs moved to online delivery, which forced students to contend with modification of lectures' format from in-person interactions to online delivery, redesign of courses, restructuring of assignments, and the integration of new methods for engagement with online materials and platforms. Challenges related to adapting to a new teaching method, access to digital technology and videoconferencing capabilities, space and privacy for teaching and learning, and the ability to engage remotely have had to be sorted out and addressed in real-time, thereby heightening the cohort's distress (Masha'al et al., 2020).

Of most concern is the exorbitant amount of stress, anxiety, and fatigue experienced by this cohort of students who are concurrently practicing during the pandemic. Increased levels of stress and anxiety (associated with dual academic and clinical responsibilities) have been shown to result in decreased energy, feelings of being overwhelmed, difficulty in concentrating, inability to make decisions, irritability, and burnout (Demir, 2018; Pabst et al., 2013; Savage et al., 2015). The high levels of stress make this cohort at risk of dropout from academia and/or practice, or even their respective profession, which can negatively impact the healthcare workforce and its readiness for future crisis situations. This is of importance as findings from Woo et al.'s (2017) systematic review demonstrated the positive impact of advanced practice nurses, who collaborate with all nursing staff, on reducing the length of hospital stays within emergency rooms and critical care settings, time to consu ltation/treatment, mortality, patient satisfaction, and cost savings outcomes. Therefore, it is critical to support them in maintaining and promoting their mental health and well-being. To provide effective support, an understanding of this cohort's perceived mental health needs is necessary.

Main Points

- Majority of nurses who worked during the first two waves of the pandemic were not provided with any resources or supports
- Many nurses would like to have received more physical and mental health supports from their employers
- Principle of shared intentions within academia should be used to guide the creation and implementation of resources for nurses enrolled in academic institutions

Study Purpose

The purpose of this study was to identify the perceived clinical and academic resources and supports deemed to be useful in maintaining and promoting mental health and well-being, as reported by nurses concurrently enrolled in university education programs.

Methods

Design

This study is part of a large mixed-methods research project aimed to examine the mental health and well-being of nurses currently enrolled in university education programs and to explore resources and supports they perceived as useful during the pandemic. Qualitative methodology using content analysis to identify the study participants' perceived needs for resources and supports to promote their mental health and well-being from both the healthcare and academic settings were collected using open-ended questions. The focus on this study is on the qualitative findings addressing the second aim of this mixed-methods study.

Research ethics board approval was obtained from the academic institution involved in the study. All participating nurses provided consent.

Sample

Nurses enrolled in a nursing education program at a university located in a large metropolitan city were recruited. Due to pandemic restrictions, recruitment was conducted online; a message informing them of the study and providing the link to complete the survey was sent via students' personal email, through student organization's listserves, and other social media platforms monitored by the school. Totally 91 nurses were recruited, with 81 (89.0%) completing the online questionnaires.

Participants' completion of the questions online (using google forms) implied consent.

Data Collection

Interested participants were invited to access a link to respond to the following open-ended questions related to the resources and supports needed: What types of supports

or resources if any have been provided to you from the university and were they helpful? What additional if any types of supports or resources would you have liked to receive from the university? What types of supports or resources if any have been provided to you from your place of employment and were they helpful? and What additional if any types of support or resources would you have liked to receive from your place of employment?

Study participants are asked to reflect on their experience in relation to a specific event. Study participants were provided with the following statements prior to engaging in the qualitative data collection: *Thinking about your current experience in relation to COVID-19, please respond to the following questions…* Content data analysis techniques were used as a mechanism to examine trends among themes. Repeated themes were compressed into larger content categories (Stemler, 2015).

Demographic data (e.g., age, gender, marital status, type of educational program currently enrolled in, occupation, and setting currently working in) were also collected using a validated tool (Hunsaker et al., 2015). Educational programs included the undergraduate and the graduate nursing programs, with the latter programs offering three streams focusing on: (1) research with completion of a thesis project, (2) advanced practice with no thesis requirement, and (3) nurse practitioner training.

Data Analysis

Demographic data were analyzed descriptively (frequency distribution and measures of central tendency and dispersion). Qualitative data were collected and transcribed using a content analysis approach that included reading the raw data, creating coding categories based on repeated themes, determining the validity and reliability of the themes, and presenting the results. Assessment of intercoder reliability (ICR) was performed by having two of the study investigators engage in coding all the data separately. No divergence of themes was identified. If divergence was identified, a group discussion among the members of the research team was planned. Validity was determined by comparing the themes identified to other relevant data from similar COVID-19 studies (Erich, 2020; Fredericks et al., 2020). Finally, researcher bias was minimized using two individuals to code the data, verifying the data using data from similar COVID-19 studies, and reviewing the findings with the members of the research team.

Results

Description of the Sample

On average, participants were young adults with a mean age of 31.0 years (±7.7; range: 22–57). As shown in Table 1, the majority of participants were women who reported being either single or married. Most were enrolled in the undergraduate nursing program or the graduate program (non-thesis stream). About half (49.4%) of the participants were employed as registered nurses and 40.7% as registered practical nurses in an acute care setting (58.0%).

Table 1.
Demographic Characteristics of the Sample

Characteristic	Category	n	%
Gender	Man	11	13.6
	Woman	70	86.4
Marital status	Married or cohabitating	35	43.2
	Single	45	55.6
	Divorced	1	1.2
Program in which nurses'enrolled	Undergraduate	44	54.3
	Graduate—Master's, non-thesis	21	25.9
	Graduate—Master's, thesis	6	7.4
	Graduate—Nurse practitioner	10	12.3
Employment	Registered nurse	40	49.4
	Registered practical nurse	33	40.7
	Personal support worker	2	2.5
	Other	5	6.2
Care setting	Acute care	47	58.0
	Long-term care	8	9.9
	Rehabilitation care	2	2.5
	Home care	4	4.9
	Clinic (outpatient or community)	8	9.9
	Other	11	13.6

Qualitative Results

Several themes emerged for each open-ended question. The following is a summary of the major themes for each open-ended question.

In terms of types of supports or resources that have been provided by the academic institution, many participants stated that they *were not provided with any resources* ($n = 25$; 30.9% of those who responded to the respective open-ended question). The remaining indicated that they were provided resources and supports which included support from individual professors ($n = 14$; 25%); communication from school ($n = 7$; 12.5%); mental health resources ($n = 6$; 10.7%); and financial support ($n = 5$; 8.9%). Support from individual professors entailed flexibility in course assignment (e.g., granting extension). Communication from the school covered explanations regarding access to courses and information technology support. Mental health resources involved dissemination of information related to strategies to manage academic stress or interventions to promote mental health. Financial support entailed bursary, COVID relief packages, and emergency funding from the academic institution and/or the government and were considered useful.

When asked about the types of supports or resources they would have liked to have received from the academic institution, participants identified the following: *modified expectations related to course involvement and assignments* ($n = 18$; 32.1%); financial supports in the form of *increased*

scholarships, tuition reimbursement, fair access to emergency funding; *creation of a fund for students working as nurses* (n=10; 17.9%); increase *communication* (*n*=9; 16.1%) and *transparency* about administrative decisions of relevance to students such as revised timelines for submission of assignments and completion of forms to graduate; and where to access mental health supports (*n*= 7; 12.5%).

In terms of supports or resources that have been provided by their employer, many participants reported increased access to mental health support (*n*=38; 46.9%) in the form of virtual peer support groups, as well as meditation and mindfulness programs; they also identified the creation of a respite area on the unit for staff and employee assistance programs. Additional responses included financial supports (*n*=16; 19.8%) covering pandemic pay; reimbursement for parking, uniforms, and meals while at work; open communication (*n*=10; 17.9%) through *regular open forums* for staff to discuss issues with administration, and *weekly town hall zoom meetings*. Increased physical activity programs (*n*=4; 7.1%) were also identified in the form of yoga breaks and fitness apps.

When asked about supports or resources that participants would like to have received from their employer, participants stated they liked to have different types of support and resources, from different sources within the institution:

1. more physical support on the unit in the form of hiring more staff, increase access to personal protective equipment, and increase time off (*n*=19; 23.4%); as well as free food in the form of coffee and snacks during all shifts (day, evening, and overnight),
2. increase mental health supports (*n*=13; 16.0%) that consist of on-site counseling that is accommodated during one's shift, counseling by a licensed psychologist as opposed to a therapist (as currently offered through employee assistant programs), access to animal (e.g., dog) therapy, allowing time to debrief during clinical shift, creation of a helpline and antibullying initiatives;
3. increase support from management (*n*=8; 9.9%) in the form of routine face-to-face on the unit check-in from management, prompt access to infection control practitioners for support, and the creation of a more supportive environment for registered nurses;
4. increase the frequency of communication (*n* =7; 8.6%) in the form of interdepartmental meetings, managerial updates, debriefing, and daily check-ins;
5. increase support from educational leaders in the form of routine check-ins, informal teaching sessions, and provision of educational materials to support the care of complex patients
6. financial support (*n*=5; 6.2%) which includes seeing *the $4/h increase that they were promised* and *meals to take home* after work.

Discussion

The findings suggest that a third of all nurses who worked during the first two waves of the COVID-19 pandemic perceived they were not provided with any resources or supports from their academic institution. Their perception should be further explored as it differs from the report of most (about two-thirds) participants; it is possible that some students were not aware of the types of supports offered to students by academic institutions during the pandemic. Fredericks et al. (2020) reported that even though many academic institutions and healthcare organizations did not create new resources during the initial waves of the pandemic, they had existing virtual psychological resources in the form of education booklets, webinars, counseling, and help centers that were available. The lack of uptake, however, may have been due to student's and staff's lack of knowledge of the existence of these resources and supports; or if they were aware of them, not knowing where or how to access them. Thus, healthcare organizations and academic institutions need to continue to promote through various methods not only the presence of these resources but how, why, and when to access them.

Participants identified the presence of similar resources across both academic and healthcare institutions in the form of communication of information, mental health, and financial supports at the start of the pandemic. However, it appears that the quality of these resources may not have been sufficient to address the immense burden associated with working and going to school during a global viral outbreak. This was reflected in the responses related to types of additional resources and supports that participants would have liked to have received, which focused on mental health resources in the form of active, on-site counseling, use of animal therapy, and more frequent mental health breaks were requested. Additionally, participants requested immediate access to resources during their work shift as many have identified they do not have the time or energy after their shifts to access the resources. As well, an increased need for more extensive financial supports was mentioned; tuition reimbursement and/or forgiveness, creation of bursaries to help with living expenses, and increased hourly wage during a pandemic were cited. Although the government of Canada had implemented Pandemic pay for healthcare providers, participants indicated that at the time of completing the study, they had not yet received the increased pay causing further burden. Finally, even though communication of information was reported as being present, participants identified the need for enhanced communication strategies to be put in place across both academic and health care organizations. Specifically, within the clinical setting, participants indicated a need for increased visibility and presence of managers, leaders, supervisors, and members of the hospital administrative board at ground zero to really get a sense of what healthcare providers were experiencing, as this would have also served to ease anxiety levels among staff working at the bedside.

Informed by the study findings, several recommendations can be put forward to assist front-line nurses concurrently enrolled in university programs. Firstly, academic institution nursing programs should collaborate with local healthcare organizations to create policies that are grounded in the principles of *shared intentions* to address the specific

needs of this cohort. Shared intentions are based on the theoretical underpinning of mutualistic collaboration between two or more organizations/institutions who adjust/adapt their behaviors/actions/policies for all parties to benefit from doing so (Newton, 2017). This will be important as COVID-19 continues to be prevalent, and the likelihood of future pandemics is on the rise (Poudel, 2020). Such policies can address the need for flexibility with submission of assignments in academic institutions and with graduate students' research projects, which can address topics of mutual interest; flexibility in work schedules in healthcare organizations; as well as partial or full tuition forgiveness and/or reimbursement from both academic and health care organizations for the academic year being affected; and clear, consistent messaging promoting the access and use of mental health resources.

Additionally, mental health resources that are instantly accessible within the workplace would be better utilized by nurses. Instant access to resources such as quiet/meditating rooms, pet therapy provided in-person (e.g., pet scheduled to come to the unit) or virtually (e.g., accessed through mobile apps) during shifts (Erich, 2020), and a safe space to be able to openly discuss concerns/issues with fellow colleagues and management (Gurney et al., 2020) would alleviate some of the stressors experienced by nurses on the frontline. Students, nurses, and managers can collaborate to develop creative stress and health management support strategies, exemplified by the wellness program described by Teall and Mazurek Melnyk (2021).

A significant limitation associated with this study relates to the researchers not having institutional access to all clinical/academic internally facing intranet sites. This prevented the research team from being able to fully evaluate all perceived clinical and academic resources and supports deemed to be useful by study participants. As a result, there may have been instances where study participants may not have been aware of specific resources and thus, may have excluded potentially relevant sources of information. As well, we did not have the opportunity to engage in face-to-face dialogue with study participants due to the COVID-19 restrictions, which limited the amount and to a certain extent, the quality of the data we were able to collect.

The current pandemic has led to increased levels of distress among nurses, specifically, those concurrently enrolled in university-based education. This study identified clinical and academic resources and supports which nurses perceived to be useful in maintaining and promoting mental health and well-being. Key findings suggest that many nurses received increased mental health supports from their employers but limited resources from academic institutions. The principle of shared intentions within academia should be used to guide the creation and implementation of resources for nurses enrolled in academic institutions.

Ethics Committee Approval: Ethical committee approval was received from the Ethics Committee of Toronot University (Approval date, May 21, 2020, no: REB 2020-203).

Informed Consent: Written informed consent was obtained from all participants who participated in this study.

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