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The experiences of student nurses in a pandemic: A qualitative study

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ABSTRACT

Aim/objective: To record and learn from the experiences of students working on clinical placement in a pandemic.
Background: In March of 2020, final and second year student nurses in England were given the option to join the Covid-19 pandemic work-force, paid as high-level health care assistants.
Methods/design: Using qualitative methods and rapid analysis techniques, this study gathered the unique experiences of 16 final year students, from all fields of nursing at a University in the East of England, who chose to complete their final extended placement in a diverse range of clinical placements at the height of the first wave of the pandemic. Data was collected between July and September 2020.
Results: Five key themes were identified across our data: rationale for undertaking the extended placement, role tensions, caring for patients and their families, the impact on teaching and learning, and personal health and wellbeing.
Conclusions: While our participants reported largely positive experiences including a perceived heightened preparedness for qualification, their experiences provide important insights for nurse educators for the education and support of future students going into similar situations, in particular relating to welfare and support, preparation for placement, resilience, e-learning and learning on the front line.

1. Introduction

An important early component of the UK government's efforts to mobilise an effective workforce to manage the Covid-19 pandemic was to ask second and final year student nurses to join clinical practice (May et al., 2020). The role of nursing students during the first wave of the pandemic has been recognised and tribute paid to nurses who died as a result of COVID-19 (Jackson et al., 2020), with deaths in service equivalent to those recorded in World War 1 (Mitchell, 2020). As we have witnessed further waves of Covid-19 across the world, we need to learn from the experiences of student nurses who put themselves at risk to protect and support the next generation of nurses. This paper reports on the findings of a qualitative study conducted at a University in the East of England who recorded the experiences of 16 final year student nurses across all four fields of nursing (adult, child, mental health and learning disability) who chose to go into clinical placement between March and September 2020 under the UK's Nursing and Midwifery Council (2020a) emergency standards. (See Table 1 for further information). Their experiences were largely positive and using rapid analysis techniques (Watkins, 2017; Gale et al., 2019), the following key themes were identified from the interview data:

1. Rationale for undertaking the extended placement
2. Role tensions
3. Caring for patients and their families
4. The impact on teaching and learning
5. Personal health and wellbeing

2. Background

Much of the literature that emerged over the course of the pandemic comprised of editorials, analysis and commentary expressing concern for the wellbeing of health care workers, including calls to consider the emotional burden on nurses working in ethically challenging environments (Lake, 2020) and to promote the mental health of colleagues and trainees (Shaw, 2020). For example, guidelines for health workers having to make difficult moral decisions (Greenberg et al., 2020) and solutions for addressing mental health issues arising from fear, panic and discrimination (Usher et al., 2020). UK studies of health care staff working on clinical frontlines vindicated concerns about personal safety

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Table 1
The pre-registration nursing programme.

The standard UK pre-registration BSc (Hons) Nursing programme is full-time and offers four fields (adult, children's learning disability and mental health). Students are required to complete both theoretical and practice components, 50% of time is spent in each element. Practice placements are arranged in partnership with local NHS Trust providers, alongside the private, voluntary and independent sectors, meeting the NMC educational standards. The pre-registration MSc programme follows the same NMC requirements but is two years in duration and is only open to graduates.

As a direct result of the Covid-19 pandemic, in March 2020, the Nursing and Midwifery Council (2020a) introduced temporary emergency educational standards. These allowed students in their second and final years of their programme to undertake an extended clinical placement that did not require them to have a supernumerary status in practice and enabled them to support the health and social care workforce - in other words, students had a dual role insomuch that they were working in practice and earning a salary for the duration of the extended placement, but also remained as students. The NMC withdrew the emergency education standards in September 2020, but whilst they were in place, students were able to decide whether or not to participate in the extended placement or whether to remain on their standard programme. Those who chose to undertake it moved to an 80% split in practice and 20% in theory (instead of the previous 50%:50%). In addition, they were salaried on a high-level nursing care assistant pay scale (Swift et al., 2020). These temporary measures were aimed at providing a flexible, responsive workforce while ensuring the learning and academic needs of students (Nursing and Midwifery Council, 2020a).

and wellbeing, which included inadequate provision of PPE, support systems and training (Iqbal and Chaudhuri, 2020), particularly for those working or redeployed to critical care (Greenberg et al., 2021; Montgomery et al., 2021).

While nurses working on the frontline during the pandemic have demonstrated resilience and effective coping mechanisms, many experienced stress caring for so many critically ill patients at one time (Robinson and Stinson, 2021). Studies have confirmed the potential detrimental mental health effects on nurses, including raised prevalence of anxiety, depression and peritraumatic dissociation, with the pandemic being a significant contributor to burnout (Azoulay et al., 2020; Bostan et al., 2020; García and Calvo, 2020). Taken together, this evidence indicates that nurses working on the frontline were particularly vulnerable to adverse mental health effects.

Specific concerns were raised about the wisdom of placing student nurses into frontline care. Hayter and Jackson (2020) questioned whether initiatives to employ student nurses were "a valuable intervention by universities to fighting the epidemic or a reckless placing of nursing students in harm's way with little evidence to support the necessity to do so" (p. 3116). They urged caution in employing student nurses as part of the pandemic workforce, highlighting the moral and legal obligations on Universities to safeguard their welfare. International research has found that the pandemic has increased stress levels in student nurses across different countries and all fields of nursing. A survey of 662 students in Turkey found that stress levels were elevated by watching news and worrying about the risk of infection, highlighting younger students as particularly vulnerable (Aslan and Pekince, 2020). In China, Huang et al. (2020) found that factors such as gender, urban/rural location, and social distancing contributed to anxiety and fear of both nurses and nursing students. These concerns reflect those raised in previous pandemics by student nurses dealing with H1N1 and SARS (Kang et al., 2012; Kam et al., 2020).

Nurse educators have been called on to monitor the impact on student nurses working in the pandemic, particularly any negative effects on their personal and professional development, and to use evidence based strategies for students in ongoing or future pandemics (Monforte-Royo and Fuster, 2020; Lake, 2020). Important international perspectives first emerged from countries initially hit by the pandemic; China (Huang et al., 2020; Sun et al., 2020), South Korea (Dos Santos, 2020a) and Japan (Dos Santos, 2020b) - all of these studies highlight the psychological impact on student nurses who were on placement. At the height of the first wave, key issues identified by student nurses on the frontline in England were professional identity, a rare opportunity to learn, frustration when the opportunity is not available for some, fear, and a desire to protect oneself and others (Swift et al., 2020). The literature is united in recommending nurse educators equip students with the necessary coping skills training, psychological support and optimise the safety and welfare of working environments. Our study aim was to understand the experience of our students and provide a firm evidence base for informing our approaches to student experience moving into the next wave and beyond.

3. Methodology

This study used a qualitative, rapid appraisal approach comprising of interviews with 16 students in the final stages of their pre-registration nursing programme (B.Sc. Hons or M.Sc.) undertaking an extended clinical placement. (For further information on the pre-registration nursing programme, extended placement and the NMC emergency standards, see Table 1). Rapid research design can achieve cost-effective and timely insights into fluctuating circumstances in areas in which little is known (Beebe, 2001, 1995; Johnson and Vindrola-Padros, 2017), providing rapid answers for timely dissemination to communities who most need them (Watkins, 2017). Data collection methods associated with a rapid approach align with qualitative and ethnographic research (Beebe, 2001) including interviews, and findings generated from rapid approaches are comparable with in-depth techniques (Gale et al., 2019). Because the Covid-19 pandemic necessitated timely dissemination of findings and has been successfully used by others (for example, Sobo et al., 2002; McMullen et al., 2011), a rapid approach was identified as the most appropriate method for this study.

3.1. Recruitment

To generate interest, student nurses were informed of the study during tutorial sessions and information was posted on relevant module sites. We recruited the first 16 students who expressed an interest and our participants were from across the four fields of nursing, with the spread proportionate to the numbers enroled in each field (adult N8, child N4, mental health N2, learning disability N2). We had just one male participant, but this reflects the overall gender balance of the student cohort. The clinical environments in which the students were working ranged from neonatal intensive care, adult intensive care, adult and paediatric general medical, surgical, orthopaedic, stroke care wards,

Table 2
Participants demographic profile.

Gender	Ethnicity (as identified by the participant)	Field of nursing	Clinical area
Female	Chinese	Adult	Orthopaedic Ward
Female	White British	Adult	Medical Ward
Female	White British	Adult	Respiratory Ward
Female	Black African	Adult	General Ward
Female	Chinese	Adult	General Ward
Male	White British	Adult	Intensive Therapy Unit
Female	Black African	Adult	Stroke Unit
Female	White British	Adult	Critical Care Unit
Female	White British	Children's	General Children's Ward
Female	Black African	Children's	General Children's Ward
Female	Asian	Children's	Neonatal Intensive Care Unit
Female	Black British African	Children's	Neonatal Intensive Care Unit
Female	Black African	Learning Disability	Learning Disability Safeguarding Team
Female	White British	Learning Disability	Community
Female	Black African	Mental Health	Mother and Baby Unit
Female	British Bangladeshi	Mental Health	Mental Health elderly care Unit

to hospital based safeguarding teams, community care, mental health elderly care, and a mother and baby unit. (See Table 2 for Participants Demographic Profile).

3.2. Data collection

Interviews are frequently used qualitative data collection methods (Di Cicco-Bloom and Crabtree, 2006); the semi-structured approach enabled the use of a core set of questions while providing the opportunity for the students to speak freely about their experiences. Due to pandemic restrictions, all interviews were conducted via Zoom™, a videoconferencing platform. Students could choose to join via video or audio; all interviews were audio-digitally recorded and transcribed verbatim by a professional transcriber. To capture the immediacy of the experiences, we interviewed our participants during or close to the end of their placements. The key interview question was 'Please could you give me an overview of your experiences of working in clinical practice (on your extended placement) during the Coronavirus pandemic?' Other areas for discussion included the impact on both their academic and clinical learning, issues of concern, student wellbeing and support, and any other aspects of their placement including positive experiences (see Table 3).

3.3. Ethics

Ethics approval was gained from the University's research ethics committee (protocol number. HSK/SF/UH/04184). All the research team were experienced nurse academics and qualitative researchers. Two were involved in the assessment and teaching of some of the students. To avoid any conflict of interest, other members of the team undertook the recruitment, consent and interviews of those students. We obtained audio-recorded verbal consent from our participants and because of the potential for distress, participants were assured they did not have to answer any questions they were uncomfortable with and they could stop the interview at any time. Participants were directed to the University's student well-being services if they needed further support.

3.4. Analysis

It has been suggested that the analysis of qualitative data is "a complex, iterative process" (Froggatt, 2001, p.433). The in-depth analysis of qualitative transcripts can be time consuming resulting in delays in the implementation of findings (Gale et al., 2019). Rapid appraisal of data allows the analysis to be undertaken within a short time span; Taylor et al. (2018) found this approach can save time while producing valid findings. The research team undertook rapid data analysis between September-October 2020 adopting the approach used by Gale et al. (2019):

Stage 1: The research team read all the data from which a summary template was developed and agreed. This template included brief participant demographic data as well as 10 categories, each identifying key areas that were based on the research aim, the interview questions, the key areas emerging from the transcripts and reflexive notes kept by all researchers during the data analysis phase (see Table 3). The summary template was independently assessed by the whole research team who all piloted it with the same transcript; once agreed that no further modifications were required, one template was completed for each transcript, including relevant participant quotes.

Stage 2: One researcher collated the data from the 10 categories in each of the templates. The categories were scrutinised in order to identify similarities and overarching areas of commonality; further consideration facilitated the identification of five key themes which were re-examined to check they were a true reflection of the data. A summary of the findings, including the detailing of the final five themes, was written (see Table 4). The process was then independently reviewed by another member of the team.

In order to enhance trustworthiness and credibility of research, it is important to have a clear audit trail (Noble and Smith, 2015). Each stage of the study was documented and the whole team met regularly to reflect on each aspect of the research including the data analysis. Participant demographics are reported to facilitate transferability to other settings (see Table 2).

3.5. Findings

The following section presents the five themes identified from data analysis: *Rationale for undertaking the extended placement*; *Role tensions*; *Caring for patients and their families; The impact on teaching and learning, Personal health and wellbeing.*

3.6. Theme 1

The students had all elected to undertake an extended placement, driven by a desire to help, the wish to complete their nursing programme and the financial recompense. Students felt committed to supporting the National Health Service [NHS] at a time of need; none regretted their decision.

> *"The positives of the Covid would be knowing that I've actually helped the NHS during the pandemic, which also makes me feel proud of myself."* [14MH]

Despite this, the pandemic was personally challenging, and they had to weigh a number of factors into their decision:

> *"There was complications at home with family disagreeing with me going into practice….Saying it won't be safe because my mother… I wouldn't want anything to happen to Mum….So I had to move out, which I did…."* [14MH]

To qualify as a nurse, the students were very aware of the hours of practice that they needed to complete; failure to do so would inevitably delay their registration with potential consequences:

> *"I want to be a nurse. I'm in the mind frame that I don't want anything stopping me from that."* [11AN]

The students were honest about the salary they received, admitting this was a key driver having not previously received any payment:

> *"If I'm honest, my reasons were probably financial."* [10LD]

> *"Even though it's not about the money, but it does help because normally when we're on placement, we have to get jobs to be able to support ourselves."* [16CN]

3.7. Theme 2

The students felt their experiences had been very positive. However, a core issue that emerged was the tension between being a paid member of staff and being a pre-registration nursing student:

> *"There's a bit of confusion for me, because I am working as a Health Care Assistant, therefore employed by the Trust, but at the same time I am being told I am a student as well."* [12MH]

> *"It's also been quite hard going to placement because we've gone in a different role, we're not just students, we're going in as Band 4s[Health Care Assistant]"* [2AN]

The new role took a while to adjust to. Some of the adult nursing students went to intensive care and felt there was limited understanding of why they had been allocated to such a critical environment:

Table 3
Demonstrating the relationship between the 10 categories of the summary template, the interview questions, emergent themes and reflexive notes.

The 10 categories of the summary template and relevant interview questions	Data analysis (See Table 4)	Resulting 5 themes and illustrative quote
[1] CHANGES IN PLACEMENT (EXTENDED/NOT ON PLACEMENT) Were you able to go to the placement area of your choice? **[2] PERCEIVED CHANGES TO EDUCATION** What knowledge and skills have you needed to develop as a direct result of going into practice during the Coronavirus pandemic? How have you developed these knowledge/skills?	→	**Theme 4: The impact on teaching and learning** *"I do a 30 h week and every Wednesday we get protected learning time provided by the University, I think that protected learning time has definitely helped me in times where maybe I might feel a bit overwhelmed." [7LD]*
[3] STATUS (HOW PERCEIVED/TREATED) Did you feel appropriately prepared to go into your extended placement? **[3] ORGANISATIONAL FACTORS** Was the organisation of your extended placement easily arranged? Were there any problems in this respect?	→	**Theme 2: Role tensions** *"It's also been quite hard going to placement because we've gone in a different role, we're not just students, we're going in as Band 4s…. So that fine line between being a student and learning and being a Band 4." [2AN]*
[4] PROVIDING CARE FOR PATIENTS Please could you give me an overview of your experiences of working in clinical practice (on your extended placement) during the Coronavirus pandemic? **[5] INTERACTION WITH FAMILIES** Please could you give me an overview of your experiences of working in clinical practice (on your extended placement) during the Coronavirus pandemic?	→	**Theme 3: Caring for patients and their families** *"If you see a parent crying you couldn't go there and….give them a hug… the nursing care we would [normally] provide and having to think of how to protect the patient, how to protect myself, having to protect the parents… having to go against everything we've been taught over the three years about providing care." [16CN]*
[6] LEARNING & TRAINING What educational experiences have you had during your extended placement? Are you able to study and access tutorial support? Do you expect to qualify in September as previously planned, prior to the Coronavirus pandemic? Did you have timetabled theory sessions? Where are they being held? What is the focus of these? Who facilitates them? What is the frequency?	→	**Theme 4: The impact on teaching and learning** *"So it was really, really good just to be able to just drop into some of those lectures and talks that were delivered online locally and offered out to local Trusts rather than taking a day out of my diary to go and attend somewhere in person." [10LD]*
[7] PERSONAL WELLBEING & SUPPORT What support mechanisms do you/have you drawn on? What support does your practice area provide? What support does the University offer you?	→	**Theme 5: Personal health and wellbeing** *"Because it can be quite consuming, really, and overwhelming. Yeah, so just get help if you need help." [16CN]*
[8] POSITIVES/MOTIVATION What influenced your initial decision to go into practice on an extended placement? What are the positive factors associated with your extended placement? **[9] SUGGESTED IMPROVEMENTS** If you could tell a colleague something that was important/really useful (in terms of working in practice during the Coronavirus pandemic), what would that be? **[10] OTHER OBSERVATIONS** Is there anything else you'd like to tell us about your placement?	→	**Theme 1: Rationale for undertaking the extended placement.** *"Even deciding at the very beginning whether to opt in or opt out. That was a really tough decision….but once I'd made that decision, I thought we've got to do this…. when you become a nurse, you have to just get on with it." [2AN]*
Example of Reflexive notes of the research team I felt the fear and the pride at being involved in the situation- that it had help them grow/ develop. The focus was on how the LD student nurse managed to fit into an acute settings and how she could translate her skills from the LD community setting to a different environment.		

"They don't know what to do with us. They're kind of worried about our safety, they're worried about how they're going to support us." [13AN]

For those in less intense areas, there were still feelings of uncertainty, often with little opportunity for preparation and induction, meaning that initially students felt:

"A bit left out….thrown into the deep end quite quickly." [6CN].

However, once the students had been in placement for several weeks, they felt they became a valuable asset. It was not unusual for them to be asked to undertake tasks outside their role (particularly in relation to medication management) and the student could be placed in the difficult position of saying 'no':

"We were getting asked to do certain things that we wouldn't normally get asked to do….And I'm like, 'I can't do them. I can't do the drug.'" [13AN]

"The guiltiness of saying no, as well, in such a hard time, that had a big impact on me." [14MH]

Nevertheless, the length of the placement and assuming different responsibilities, led to increased self-confidence:

"I was sent out just to do the work. So it's been really a boost for my confidence to be on placement at this time." [10LD]

Another challenge for students was the completion of their Practice Assessment Document [PAD], a requirement for their NMC registration. As the students were part of the paid workforce, there was an expectation they were fully involved in undertaking patient care; this meant their shift of duty was busy with little opportunity to meet with their Practice Assessor/Supervisor and complete their PAD:

"I would barely see anyone to, like, even sign my hours let alone go through my document which could be quite jarring." [6CN]

"People need to understand clearly that I'm still a student, yes I'm counted in the numbers, but I've still got these clinical skills that I need to complete." [11AN]

These challenges were compounded by staff shortages which meant that students were commonly working with people re-deployed from other areas of the organisation:

Table 4
Demonstrating the stages of data analysis: from summary template to final themes.

Stage 1: Analysing individual transcripts using the categories of the summary template	Stage 2: Looking across transcripts and consolidating the categories of the summary template into 5 themes	Resulting 5 themes and illustrative quote
[1] CHANGES IN PLACEMENT (EXTENDED/NOT ON PLACEMENT) Chose to go into critical care (and got placement of choice) Colleague chose not to return to ICU after trying it Still studying full-time Can't put on hold indefinitely Financial implications Conversations with self over choice, anxious **[2] PERCIEVED CHANGES TO EDUCATION** Self-directed learning – self-initiated, lack of formalised learning/training There was nothing Having to step up and care when nurses went on breaks Working across patients – lack of continuity Beyond competency level - stressful Staff not appreciating these were still students who had to study No space/time out to learn Baptism of fire Couldn't take PAD in – nothing signed off Treating the university completion as a tick box Degree classification doesn't matter Importance and application of self-learning Assignment wasn't even on radar **[7] LEARNING & TRAINING** Rapidity of training/condensed training Nothing formalised Took 3–4 weeks to grasp what they were doing Assigned non-ICU nurses Learnt more, but not necessary good as staff were doing things they normally wouldn't Quality of learning poor Learning simple basics, was overseen Unsure of boundaries of practice No training during COVID	**Education/learning** New Ways of learning • 80/20 split • Disconnect between University and placement • Self directed learning • Increased preparedness for qualification Switch to online learning • University work • Trust based learning opportunities • Mandatory trainings (including induction) Learning on placement: • Bedside teaching from senior staff • Teaching others • Working with MDT and full ward team • Higher acuity patients • Learning about care of dying patients • New ways of working (online/phone advisory) • Knowledge of caring for patients with covid – 19 • Knowledge of caring in a covid secure way, infection control • Learning on the job with ward staff – all learning new ways of working together • Limited supervision/mentoring • Expanded and unique learning opportunities • Learning to be more flexible • Problems getting PAD signed off	**Theme 4: The impact on teaching and learning** *"I do a 30 h week and every Wednesday we get protected learning time provided by the University, I think that protected learning time has definitely helped me in times where maybe I might feel a bit overwhelmed." [7LD]* *"So it was really, really good just to be able to just drop into some of those lectures and talks that were delivered online locally and offered out to local Trusts rather than taking a day out of my diary to go and attend somewhere in person." [10LD]* *"I've gained skills which I thought I'd never gain before during this pandemic…. thinking fast on the spot. I know with nursing you have to delegate tasks but using your mind, critically thinking quickly and finding out a solution, more effective time management." [14MH]* *"This placement I really showed more leadership skills. I was more autonomous as well. I had more confidence in myself…. I think that it empowered me to keep going and, you know, pick up skills." [5AN]*

"I worked with this nurse, but they weren't an ICU nurse, they'd been pulled in from face surgery, so it was their first time in ICU….So they did say, don't ask me anything because I don't know anything." [9AN]

"When lots of other wards were closed and people were redeployed, you are working with different staff members every day." [4AN]

3.8. Theme 3

Several students, particularly those in the adult nursing field, undertook their extended placement in Covid-19 positive environments. Caring for patients with the virus meant that they were exposed to very challenging situations:

"Patients are coming round….then start to become conscious and they're waking up and I think it's so terrifying because it's like the ET film….when they're all in their spacesuits." [9AN]

"They just got really sick really quickly and then died….a patient was wheeled passed me on his bed, and I caught his eye….he looked at me and he just shook his head…. it was horrible because he just knew he wasn't going to come out of ITU." [4AN]

Many students commented on the use of PPE and its impact on patient care. Masks, for example, were a barrier to communication:

"I kept reminding everyone there's a smile under this mask… my strongest point." [11AN]

Social distancing restrictions meant the use of touch and the physical comforting of patients and/or relatives were not feasible. One participant undertook part of her placement on a neonatal unit and commented on how visiting was restricted to just the baby's Mother:

"If you see a parent crying you couldn't go there and….give them a hug…. it was quite hard to have to like take a step back really from what we normally do…. and having to think of how to protect the patient, how to protect myself, having to protect the parents." [16CN]

In a Mother and baby mental health unit, staff tried to facilitate visiting by creating a clean, safe space for families to visit [12MH]. In most other clinical areas, no visitors were allowed which affected care:

"My role would be to Facetime all the different families pretty much every day….and I would have to Facetime the children… saying like, 'Daddy, wake up' and stuff like that. It's heart-breaking…. that was the kind of worst side of it, I think, emotionally." [13AN]

Finally, the Covid-19 restrictions meant that care could be limited to the essential tasks and activities such as medicine administration, described by one student as being *"robotic"* [7LD].

3.9. Theme 4

The University recognised the need for students to study while in practice, so their week was divided into an 80:20 split, meaning that students had one study day with the rest of the time in placement. This approach was generally felt to be beneficial:

"I think that protected learning time has definitely helped me in times where maybe I might feel a bit overwhelmed." [7LD]

The remaining student lectures were all delivered online. In addition, a weekly session was held to facilitate reflection on clinical experiences; this contact with University staff that was highly valued:

"So, the weekly meeting was great because then you know that you're the same university, same hospital, but somebody else is going through the same thing that you're going through." [11AN]

One of the challenges experienced, particularly by more mature students, was studying at home as this meant there was a need to simultaneously look after children or other family members:

"To study at home has been challenging, because when I walk out that door, I'm able to go to school [University] and forget that I'm a mum and a wife, but here I'm juggling all three hats." [11AN]

Some students preferred more face-to-face engagement and struggled with the virtual approach, especially as the usual University library facilities were closed. The students felt there was an awareness by the University that studying was more difficult and commented on the ease of requesting a date extension for assessments and the 'Safety Net' policy that enabled students to maximise grades awarded. The pandemic was viewed as a valuable opportunity with new skills being learnt. Some of this was formal, with hospitals providing specific skills acquisition training:

"It was every Monday, 9–5. The hospital has an academic centre in the main hospital….and it was like a lecture room, it's a more a typical uni setting and there was different topics….it was really helpful." [7LD]

More usually, training was less formal and more generic:

"I've gained skills which I thought I'd never gain before during this pandemic….thinking fast on the spot…. using your mind, critically thinking quickly and finding out a solution, more effective time management." [14MH]

3.10. Theme 5

Students experienced physical effects from wearing PPE, including sore, cracked hands and facial marks from constant mask wearing. However, it was evident that the main impact was anxiety, arising directly from the challenging situations:

"I was super-anxious, so I was super-vigilant.when I got home I'd like strip down, wash all my stuff and scrub it. I was really over the top with it….it was quite terrifying." [9AN]

Some students were caring for dying patients as well as bereaved relatives which had an impact on their emotional wellbeing especially during those *"hellish couple of weeks in May"* [4AN] which saw the peak of the first wave in England. The students drew support from a variety of people and accessed a range of resources, including the University facilities and staff, clinical colleagues, friends and family:

"If you needed support, then someone was always there…. whether that's friends, family, people at the university, or staff nurses on the ward, and to have your own mechanisms in place." [3CN]

Nevertheless, the combination of placement experience and outstanding assessments could considerably increase stress levels:

"Then especially us being on the 80:20 contract, which I think personally, I've found quite stressful, because you just want to get your hours done… we had assignments due." [3CN]

Fortunately, students understood the need to care for themselves:

"I was crying my eyes out because of how stressed I was feeling… there's so much expected of me….I found ways to manage my own stress… My nurse in charge also talked to me about the thing called SHED, which is sleep, hydration, exercise and diet." [6CN]

4. Discussion

One of the biggest concerns expressed across the literature was for the wellbeing of students who chose to work on the front line in the pandemic (see for example Hayter and Jackson, 2020 and Galvin et al., 2020). Our participants exhibited a strong, overt commitment and motivation to undertake their extended placement. Dos Santos interviewed nursing students about their experiences of working during the pandemic in both Japan and South Korea. The Japanese students' attitudes were aligned with our participants, feeling that "Japan's national development, the benefits and advantages of their country, were of a greater importance than their own personal development" (Dos Santos, 2020b, p.13). This dedicated attitude was not mirrored in South Korea where participants were found to be mainly influenced by financial considerations and that many "decided to leave the nursing profession due to the COVID-19 pandemic and the consideration between financial factor and personal sacrifice" (Dos Santos, 2020a, p. 1).

While payment and completing their degree were strong motivational factors, our participants embraced the unique learning opportunities which appeared to override initial anxieties about putting themselves and their families at risk. These findings support a study from China which focused on the psychological experiences of nurses caring for COVID-19 patients (Sun et al., 2020). Having interviewed 20 participants at two different time points they found nurses experienced significant negative emotions in the early stages, but these declined over time. Like our participants, they employed several coping and self-care strategies, experienced growth under pressure, and gratitude and support from colleagues, family members and others. Self-efficacy has been closely linked to resilience in early career nurses (Wang et al., 2017) and many of the students in our study felt more prepared for being a qualified nurse as a direct result of their experiences. In addition, our participants described insightful learning about themselves (some kept reflective diaries) and their ability to cope in such a stressful environment. This included increased attunement with their own mental health, getting to know and push their limits, and growing in confidence as they accepted far more responsibility than would normally be expected of a student nurse.

It is worth acknowledging that there were societal pressures for student nurses to participate in an extended placement, although universities sought to mitigate risks to protect student learning and minimise risks of Covid-19 transmission; in some cases, this included delaying students going into practice. These pressures have been articulated in sociological analysis of previous pandemics (Baehr, 2005, 2008), with the concept of communities of fate (e.g. healthcare workers) coming together to deal with a common crisis. Pickersgill (2020) draws

on scholarship of the AIDs epidemic in the 1990s to outline how, in pandemics like Covid-19, fear and moralisation drive action. Importantly, student nurses have not been called on in the second wave (Nursing and Midwifery Council, 2020b), and the implementation of Recovery Standards in September 2020 (Nursing and Midwifery Council, 2020c) suggests a refocus on the priorities in nursing education and an implicit recognition that to continue to pull the workforce from the student nursing body would adversely affect future generations of nurses. However, there has been pushback reported from newer cohorts of students who wished for the same opportunities as the previous cohort, particularly the remuneration (Murray, 2020). The high degree of willingness of student nurses to engage in practice during the pandemic has also been noted in a US study (Lancaster, et al., 2021).

There is much in the literature about student wellbeing which mirrors our own findings, but little relating to the impact on students' education. While some of our participants found aspects of their ongoing programme difficult, there was a consistent view that their experience and associated learning had been invaluable. Their foremost challenge was in relation to their new role and responsibilities; however, the tensions were not surprising given the rapid decisions that were made in relation to their extended placement, resulting in limited preparatory time for both clinical staff and students. Our students felt that the delivery of nursing care had been challenging and constrained, but when required, adapted to the rapid shift to using alternatives to face-to-face meetings to keep everyone safe. For example, performing health needs assessments with people with Learning Disabilities by telephone and facilitating communication between patients and their loved ones using tablets. In the US, Howard et al. (2021) outlined a model which involved specific non-clinical roles for student nurses as patient service aids which enabled them to develop non-technical skills but in a clinical environment during the pandemic.

Most of our participants adjusted well to the rapid switch to online learning, particularly the provision for core competency training in clinical areas and weekly tutorial support offered by the University. This picture is replicated globally, where nurse educationalists harnessed online technologies to provide safe and effective ongoing education during the pandemic, exploiting the potential of online platforms to deliver best current advice in rapidly changing societal and clinical environments (Atique et al., 2020). Although the pandemic has necessitated this switch to predominantly online learning, not all students are comfortable with it and as nurse educators we must take a considered approach to its permanence and reach. A survey of 14,000 nursing, midwifery and allied health professional students during the first wave of the pandemic found that while they were positive about academic work and contact with academic staff, they were less so about online learning and acquisition of clinical skills (Health Education England, 2020). While evidence tells us that learning clinical skills online is no less effective than traditional methods (McCutcheon et al., 2014), we also know that to create optimal education programmes we must employ methods that facilitate collaborative engagement and shared learning practices that foster engagement and communication between educators and students as well as between students and their peers (Stott and Mozer, 2016).

Although our findings are limited to one geographical area and a self-selecting group of participants, there are broad themes that resonate and reflect previous pandemic literature and topical reports. While all our students managed to complete their learning outcomes and documentation during the extended pandemic placement, our findings highlight how stressful it was to manage clinical responsibilities with learning commitments. As nurse educators, we need to consider the implications of placements which are both practice and experientially rich; support in practice was pedagogically poorer because Practice Assessors/Supervisors were often too busy to devote sufficient time to students' learning needs. Facilitating specific time for practice-based assessment is recommended, along with clear guidelines for assessors on role boundaries for pre-registration students.

The findings of this study have illuminated key areas of support provision for students at our University, for example the weekly tutorials offered to students during their extended placement and the crucial role of personal tutors. Recognising the extraordinary contribution of this unique group of students, follow-up research is planned to revisit how they felt their experiences affected their transition to becoming registrants and any ongoing impact on their mental wellbeing. This might further illuminate how pandemic preparations at a national level affect student learning and experience, and the long-term implications of policy decisions on this generation of student nurses. Follow-up in relation to their health and wellbeing is advised, particularly those who may have been traumatised by their experiences (Fowler and Wholeben, 2020). Further research assessing the student experience of online education is recommended and we support the use of case studies drawn from student's experiences during the pandemic to facilitate education of students going into similar clinical environments in the future (Tracy and McPherson, 2020).

5. Conclusion

During an unprecedented time, our participants chose to place themselves and their families at risk to help in this crisis, to step up as our future nurses even when misgivings were being expressed about putting student nurses into frontline work during the pandemic. While they undoubtedly faced huge emotional and educational challenges, with good support mechanisms including their friends, families, peers, colleagues and the University, and drawing on their own personal strength and resilience, they gained unique experiences and a preparedness for registration which is unlikely to be replicated. Only time will tell what the long-term impact is on them, personally and professionally. For the immediate future, we owe them a debt of gratitude and pride in their contribution, and a promise to learn from their unique experiences.

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CRediT authorship contribution statement

Rosemary Godbold: Conceptualization, Investigation, Formal analysis, Data curation, Writing – original draft, Project administration. **Lisa Whiting:** Conceptualization, Investigation, Formal analysis, Data curation, Writing – original draft. **Claire Adams:** Conceptualization, Investigation, Data curation. **Yogini Naidu:** Conceptualization, Investigation, Review of drafts. **Natalie Pattison:** Conceptualization, Methodology, Formal analysis, Writing – original draft.

Conflicts of interest

None.

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