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# The positives, the challenges and the impact; an exploration of early career nurses experiences in the Emergency Department

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#### ABSTRACT

Background: The intense working environment of the Emergency Department (ED) is exciting and rewarding; but is renowned for high staff turnover and burnout. The wellbeing and retention of the existing workforce is imperative. The purpose of this study was to explore the experiences of early careers nurses in the ED; identify aspects of ED they enjoyed, the challenges and explore potential coping mechanisms used to mitigate negative situations.

*Methods*: A qualitative design was used. Eleven semi-structured interviews were conducted with adult and paediatric emergency nurses who had worked in the ED for less than three years. Data were transcribed, open coded and analysed using thematic analysis.

Results: Four key themes emerged; (1) Drawn to emergency nursing; (2) Teamwork; (3) Time to care; and (4) Reflections on the impact.

Conclusion: Opportunities for learning and development and being able to provide good levels of patient care were identified important to participants. Challenging aspects of the job included high workloads, exposure to traumatic incidents, violence and aggression. The psychological impact included feelings of burnout, exhaustion, flashbacks, personal growth and perspective. Teamwork, a strong support network and opportunities for formal and informal debrief were identified as helping to mitigate challenging aspects of the job.

#### 1. Introduction

Working in the Emergency Department (ED) has long been recognised as a challenging area of healthcare. High workloads, departmental overcrowding and inadequate physical and human resources have led to staff feeling that patient care is compromised. Alongside this, an incongruence between the expectations of society; organisational management and what staff believe to be reasonable has contributed to a feeling of demoralisation in the ED workforce [1]. At the same time, emergency nursing is attractive to early career nurses. The opportunity for teamwork, followed by diversity of patients, learning skills and development are all reasons why nurses are attracted to working in ED [2].

The intense working environment of the ED is exciting and rewarding; but it is also well recognised to be a leading cause of attrition and premature career burnout [3]. There is an increasing awareness of the negative psychological impact of providing emergency care and exposure to trauma. Research to date has highlighted the prevalence of secondary trauma, burnout and symptoms of post-traumatic stress in

emergency nurses who care for traumatized patients [4–6]; and specifically in nurses with fewer years of nursing and fewer years of trauma experience [7]. That said, not all staff are adversely impacted by being exposed to trauma. Some people who have to contend with significant challenges, moral or traumatic, experience a degree of post-traumatic growth, or a bolstering of psychological resilience [8].

In 2019 prior to the Covid-19 pandemic, there were more than 43,000 nursing vacancies in England alone [9]. Between November 2018 and June 2019, over 15, 600 nurses left the Nursing Midwifery Council register with 'too much pressure (stressful, poor mental health)' the second most cited reason for nurses leaving [10]. It has been acknowledged that too little attention has been given to retaining the existing workforce, and more nurses are now leaving their professional register than joining it [11]. Exacerbated by the Covid-19 pandemic the NHS workforce is in crisis, facing a vicious cycle of shortages and increased pressure on staff [12].

To support and sustain a healthcare workforce the wellbeing of staff must be a priority. By identifying and understanding factors that help

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nurses to enjoy their work; and mitigate the challenging and traumatic elements of emergency nursing, this could help provide an environment that promotes the health and wellbeing of staff and influences staff retention.

The setting for this study was the Emergency Department of a Major Trauma Centre. Major Trauma Centres (MTCs) are responsible for treating the most severely injured patients, whereas Trauma Units (TU's) typically see less severely injured patients and are able to initiate treatment and onward transfer of those identified as requiring MTC level care [13]. Therefore, nurses working within this setting may have greater exposure to events which are felt to be traumatic. It has been hypothesised that over time nurses develop ways to limit the effects of exposure to stress, pain and suffering, or that nurses who are most negatively impacted self- select out of emergency nursing [14,15]. Early careers nurses may be in the formative stages of developing coping strategies, and this warrants an exploration on what they find to be stressful and what coping mechanisms they use.

The objectives of this study were to explore the experiences of early careers nurses working in the ED. We were interested in what drew nurses to a career in the ED, and what made the difference in those early years that could influence the retention of nurses. We wanted to explore what they found to be the positive experiences and what they found stressful and challenging, and potential coping strategies and protective mechanisms they used to mitigate these.

#### 2. Methods

#### 2.1. Setting and sample

The study used a qualitative design to explore in depth the experiences of ED nurses working in both adult and paediatric emergency departments within a Major Trauma Centre in London. Purposive sampling was used to ensure a broad range of expertise and experience would inform the study. In order to capture the experiences of early career nurses, who have had less time to build up coping mechanisms at work, registered nurses who had worked in the ED for less than three years were invited to participate in the study. By recruiting those who have worked in ED for less than 3 years, we aimed to explore experiences of those who are consolidating their emergency nursing skills. The invitation to participate was disseminated via email to nurses by a senior sister, not related to the study within the ED. Interested participants contacted the researchers with an expression of interest. Purposively selected participants were provided with a explanation of the study and a participant information sheet. No eligible male participants expressed interest in participating. No participants refused to participate or dropped out. Eleven female participants (seven adult and four paediatric nurses) with varying levels of experience (from 9 months-3 years) were recruited.

#### 2.2. Data collection

The interviews were conducted by IS and HP,who are female research nurses, with experience of emergency nursing and training in qualitative research methods. Interviews were audio-recorded and transcribed verbatim by the researchers. An interview schedule (box 1) was adapted for emergency nurses based on previous research [16]. Two pilot interviews were undertaken by the two interviewers (IS and HP), to ensure the interview schedule and process was effective. The interviews were semi-structured to ensure key questions were answered in relation to the research aim whilst allowing participants to elaborate on issues they felt important. Follow up questions were used to clarify thought, feelings and experiences if this did not appear in the narrated story. Interviews were conducted face to face with participants on site, at a time and place agreed between the researcher and participant. Field notes were made during the data collection process. Interviews were conducted between January 2020 and August 2020. During the period

Box 1: Interview schedule

- 1. What made you become an emergency nurse?
- 2. What made you choose a trauma centre?
- 3. Can you describe a typical shift in the ED?
- 4. Do you find some shifts are worse than others?
- a. What do you think makes them worse? Trauma? Staffing? Volume of

attendances?

- 5. What do you find most stressful about working in the emergency department?
- 6. Who do you talk to about what you have seen/done in a shift?
- 7. Can you describe a departmental debrief?
- 8. If you experience an event which bothered you for a while after it was over, would

you be able to tell us what is was about it that bothers you?

9. What do you find to be the most positive experiences? Experiences which have

impacted on you?

10. What do you think being involved in emergency care brings to you as a person

of recruitment, the Coronavirus pandemic occurred and so the prompts used in the interviews were amended to reflect the changing situation. As the researchers conducting the study were redeployed between March 2020 to May 2020; no interviews were conducted over this period.

#### 2.3. Data analysis

Data were analysed using thematic analysis as outlined by Braun and Clarke [17]. Thematic analysis involves discovering, interpreting, and reporting patterns and clusters of meaning within the data. The researchers constantly move backwards and forwards between the entire data set, to code the data, categorise the codes, analytical reflect and construction of themes [17]. The data were transcribed and open coded. The codes were then discussed and agreed on between the researchers. Once the data was coded, it was then categorised to identify key themes and patterns. During the whole process discussions between all three authors led to a refinement of the codes and categories to strengthen the credibility of the final thematic structure.

# 2.4. Ethical considerations

The study was approved by the Health Research Authority (HRA) REC Reference 19/HRA/5357. Written informed consent was obtained from all participants.

Key ethical issues addressed in relation to the conduct of this study were related to attaining informed consent prior to the interviews, discussing a sensitive topic, and maintaining confidentiality of the participants. A pseudonym was used to store the recordings. The impact of discussing sensitive topics was considered in the formulation of the topic guide and ethics. Participants were reassured that they could stop at any time and could be signposted to the appropriate sources of support. Some of these ethical consideration are influenced by the interviewers roles as insider researchers. Data collection and analysis were conducted primarily by IS & HP who are experienced emergency nurses and (previously) worked within the department. IS & HP were not involved in the line management of any ED nurses and ensured interviews were conducted in a place suitable and convenient for the interviewee.

Advantages of conducting insider research include a deeper understanding, greater access and rapport. Disadvantages include a lack of critical distance, role conflict, subjectivity and bias. Recognition of the complexity of what it means to be an insider and continuing to reflect on matters throughout the research can help researchers make consistent, ethical decisions [18].

#### 2.5. Rigour

We followed the reporting guidelines for qualitative studies to limit risk of errors and to ensure credibility [19].

Researching one's peers may mean that the researchers impose a framework which is based on their assumption of shared perceptions, and this does not allow participants to develop their own ideas [20]. Researchers took time to practice reflexivity regularly during the research process. Reflexivity means taking a step back, reflecting, and considering one's position in relation to the people being researched [21]. The researchers transcribed each others interviews and discussed for reflexivity between interviews. Using this team based reflexive approach, between all the authors who have a different clinical/research lens (EM who is an experienced qualitative researcher; and health psychologist) enhanced the validity of the theme identification and reduced the impact of subjectivity on data collection, analysis and interpretation.

#### 3. Results

The participants were all female and aged between 25 and 30 years old. They had been working as registered nurses for between 2 and 7 years, and in ED for between 9 months to 3 years. The interviews lasted between 15 and 71 min.

The four main themes that emerged are: (1) Drawn to emergency nursing"; (2) 'Teamwork'; (3)'Time to care' and (4) 'Reflections on the impact''.

# 3.1. Theme 1 "Drawn to emergency nursing"

### 3.1.1. Attraction to emergency nursing

When asked about what why they had chosen emergency nursing, all of our participants discussed how opportunities for learning; variety and diversity of patients had drawn them to the ED. They enjoyed the lack of routine and unpredictable nature, but this could also be a source of stress.

"I love the emergency aspect of nursing being at the frontline in hospital and not knowing what can happen". 02A

"The challenge, the variety, the learning... I've been here three years now. Every day is a different day" 04A.

"The unpredictability [of a shift] I would say is the most stressful thing it's, I thrive off it in a way because I do run on the adrenaline". 07P

"I just wanted something where I could learn a broad range of skills, where there was no routine". 08A

#### 3.1.2. A learning environment

They often described a hands-on approach to learning, taking the opportunity to learn from the practical experience and then the opportunity to have it cemented by reading or teaching from the experts.

"I'm more of a doer, learner, if I read, I can read for days, and I'd be like... what was that? I think for me it's getting involved learning; it's definitely made me want to read more". 04A.

All the participants spoke about a willingness to learn, but also an environment where teaching and development opportunity were actively encouraged.

"Everyone is so happy to teach. The learning as well like on a nightshift at 4am people are like 'do you want to go to teaching?' I'm like I'm sorry what?! You want me to do what at 4am?!". 06P.

"If I want to try something new or learn something more someone is always willing to teach me something". 10A

#### 3.2. Theme 2 "Teamwork"

All participants spoke about teamwork within the ED. Working well together as a team was seen as important due to the unpredictable nature of the environment. Participants enjoyed the aspect of getting to know the other members of the team really well, and the team dynamic was described as being like family.

"Your team is who you know, it's like your little family. You know what people's limitations are and where people thrive". 04A

Every time I come in I'm like, oh there's such a nice team on today! but I have realised there's not a team that actually I'm like, this is a bad team! 06P

"I think the one thing that stands out for me is teamwork. Not just the nursing teamwork, but the nurses and doctors' relationship. It's fostered really strongly here that everyone works together". 10A.

#### 3.2.1. Support

The majority of participants spoke about feeling well supported by their seniors and their peers. Participants discussed the benefits of a 'shared understanding' between colleagues when talking about a traumatic event or a challenging shift. There was a sense that only other people working in that environment who had shared or similar experiences would be able to understand and provide adequate support.

"Everyone is really supportive. If you ever had a problem or were concerned about something, could you go and speak to someone, I feel like I always could". 05P

"Everyone's had stuff they've seen that's like affected them a bit... so it's nice to talk to people who understand". 08A

#### 3.2.2. Pieces of the puzzle

We asked participants what happened after traumatic events. Participants described a hot debrief (immediately after the event) and a cold debrief (a few weeks after the event). They said it was useful to hear the perspectives of different team members and be able to talk through what had happened.

"You always carry a load of what you've done, but then speaking about it you obviously see different perspectives and speaking it through you understand more like why you feel the way you do about it". 11P

"It really makes the difference between, what you take home in a sort of positive and healthy way and what you take home that actually, if you're not back for two or three days is just going to sit and fester and is actually really negative". 07P

Immediately after an event emotions and adrenaline were running high and a hot debrief was not helpful for everyone. Speaking about a traumatic event in resus, nurse 04A said:

"I think if you'd asked me to speak about it then I probably wouldn't want to because it was just so raw. Kind of wanted to just have a break from it and process it, and just to believe that just happened and then maybe talk to somebody".

Cold debriefs with the wider multidisciplinary team were useful in being able to see the full picture of an event. Nurse 07P remarked on how cold debriefs helped "the pieces of the puzzle come together" when describing how social workers had filled in the background details of a situation which had led to a trauma.

# 3.3. Theme 3 "Time to care"

# 3.3.1. Juggling care

Participants talked about enjoying the aspect of being busy and having to 'think on your feet'. The unpredictability of how a shift was going to go was stressful but also what made participants thrive.

"I feel like I kind of thrive when it's a bit mental, and a bit chaotic. A&E is like that, you're juggling loads of things at once and you need to be on it".

It was hard to strike a balance. When the department was too busy,

often patients were being cared for on corridors due to lack of space. Participants found this stressful, challenging and they felt unable to provide the level of care they wanted to provide.

"It's almost like you've fought fire, you've kept everything at bay, but you don't feel like you've done anything well". 01A

"When we've got corridor patients and cubicle patients, that is a challenge. You can't divide yourself to give the level of care you want to give". 04A

Participants felt happy when they were able to provide the level of care they wanted to provide. Having the time to talk to patients, reassure them and get them a cup of tea were mentioned as giving participants satisfaction.

"For me, elderly patients, really sorting them out, that makes me happy. Just having the time to sit with someone and really find out what their problems are". 03A

# 3.4. Theme 4 "Reflections on the impact"

#### 3.4.1. Psychological impact

Participants spoke about a never-ending list of tasks that needed to be completed, being pulled from one priority patient to the next. This left them with a sense of exhaustion and burnout at the end of a busy shift.

"You fix what wasn't fixed or sort out what needs sorting out or you continue from where they've left off and that's all it is, your day just goes on that way until handover. Til that last break when you're completely burnt out". 04A

It was discussed how some incidents would have a lasting impact, that they would mull on, or have flashbacks to over a period of time. When talking about a particularly distressing trauma call involving a severely injured paediatric patient 06P said: "having flashbacks was awful and obviously I was quite new to ED, so everyone was like it's fine, it's normal to be like this, like it's not a normal situation, it is really traumatic. I was like, am I just not coping with ED? It is quite scary...".

There was a sense of trepidation and anxiety before coming to work for some of the nurses, particularly if it followed a particularly traumatic/stressful shift/run of shifts.

"For me, more times than not I find myself being quite anxious about starting a shift". 04A

# 3.4.2. Caution

The participants spoke about how exposure from working in an ED in a trauma centre has given them a different perspective on life, acknowledging how quickly and unexpectedly life and death situations can occur. On the other hand, there was an increased wariness of potential dangers for themselves and their families:

"I think it put things into perspective quite a lot. When you're out and about you maybe take things, like you realise how lucky you are quite often... it's also made me a bit more nervous about things. Like my dad suggested getting a motorbike and I was like absolutely not, like you can't. I think it's made me a little bit heightened to some dangers but also yeah makes you realise how lucky you are and how quickly life can change as well". 06P

# 3.4.3. Facing violence and aggression

Participants spoke about the different faces of violence and aggressions that they faced working in the ED - violence and aggression directed towards them and caring for people who have been injured as a result, and the impact it has on them. They described the impact of patients, or their relatives, act towards staff in a violent or aggressive way, made the nurses wonder if it was worth it:

"But then you walk away, and you are sad, and you are angry, and those emotions do affect the rest of your shift. You spend the whole 12 h looking after complete strangers to the best of my ability and that person has come in and completely disregarded that and come and called me names or thrown a punch at me, swore at me, it does affect you, to the point of you think, what's the point in coming back tomorrow." O4A

They expressed worry that this was affecting their care of other patients, changing the way they nursed:

"because of the preconceptions I have about maybe getting spat at or attacked or shouted at or called names, I think that after a while it does affect you mentally, so maybe that brought up more of a barrier for me" .02A

#### 3.4.4. Growth

Participants spoke about personal growth as a result of facing challenging situations. There was a sense of "not sweating the small stuff" and becoming more adaptable. Participants spoke about growing in confidence, which improved their own communication and enabled them to better support others.

"I think it makes me very adaptable. It gives me the mentality that I am able to handle several situations at once, and I can take a step back and look at the bigger picture". 10A

"When I think about the interactions I've had with people, and the support I've had from people, it's had a really positive effect on me working here. I've grown as a person". 09A

#### 4. Discussion

This study has shown the dynamic relationship nurses have with their work in the ED, a relationship that encompasses contradictions. Nurses are drawn to work in ED because they like to be challenged; they are motivated and enjoy learning new skills. The lack of routine and the unpredictability of each shift can be a source of anxiety and also what drives participants. Participants spoke about situations that they found to be particularly upsetting and traumatic. For some, this led to feelings of emotional burnout and 'flashbacks' of events. It was discussed how the opportunity to debrief, particularly with the wider team was helpful for them to fit 'the pieces of the puzzle together' and make sense of things. Support from senior colleagues and their team helped to buffer or mitigate the negative impact of traumatic and stressful situations. Participants felt most satisfied when they felt they could give the level of care that they wanted to give; when the workload was manageable, and they had time to provide this. Participants discussed a sense of perspective that they gained from their work; an increase in confidence and personal growth.

The challenges of working in the ED were consistent with those described in previous research. High workloads and departmental overcrowding [1] and exposure to violence and aggression [15,22] were all identified by participants. Nightmares and flashback memories regarding particular traumas; and being hypervigilant in day-to-day life outside of the hospital is also consistent with previous research [23].

Our research explored what early careers nurses found to be the stressful and challenging elements of ED nursing; and identified coping mechanisms they use used to mitigate these. Participants highlighted the importance of the team togetherness as a form of support, and this appears to be an effective strategy. Social support has been found to be to be an exceptionally important stress resilience factor [8,24]. Seeking support from peers was considered advantageous as the team were likely to have a better understanding of their experiences [1,25,26]. Practising the use of protective factors; engaging with others for support and development and being able to assert influence but accept external controls are all recognised characteristics of high levels of resilience [27].

Participants spoke about feeling satisfied when the workload was manageable, and they felt able to provide good care. This is consistent with Antonovsky's 'sense of coherence' (SOC) theory, which suggests that when work is seen as meaningful and manageable, people are able to stay healthy under stress rather than become ill [28]. Our study found that being able to see the full picture of an event helped participants make sense of things. This is consistent with previous research; rumination and meaning making have been identified as helping nurses to find personal growth after a traumatic event [29]. Debriefing, whether formal or informal, has been identified as beneficial to resilience and psychological well-being [29]. It is recommended that time for

reflection and discussion through debriefing is encouraged. Debriefing may not be useful for everyone; participants differed in whether they found debriefing to be useful and at what stage they were ready to talk about an event.

The study found that participants enjoyed the learning environment of the ED and the opportunity to acquire new skills. Time set aside for teaching and courses is valuable and should be encouraged; the opportunity to develop professionally was highlighted by participants and is hugely beneficial to the ED.

#### 5. Limitations

A limitation of this study is that recruitment occurred from a single site. While the findings provide authentic details specific to this ED, the knowledge is limited by this local context. Purposive sampling ensured we had a subset of both adult and paediatric nurses, however there is a risk that the findings may not be reflective of others working in ED. Our study looked at early careers nurses, but it could be useful to compare the coping strategies of nurses who have more ED experience and look at what they have found to be the most efficient ways of mitigating stress.

#### 6. Conclusion

The findings of this study provide a valuable context to the experiences of early careers nurses in the ED. By identifying the factors that maintain wellbeing and sustain the workforce, we can promote and support these. The benefits to a stable and well supported workforce in ED are many; improved and sustainable patient care, reduced staff turnover and alleviating pressures on the existing workforce [3]. The COVID-19 pandemic has been and continues to be a time of immense stress and uncertainty for healthcare staff. Research is now drawing on how we can provide psychological support to those who have been faced with caring for patients in a way that challenges their own moral framework [30–32]. It is important to reflect on the pre-pandemic challenges that were faced in the ED. Corridor nursing, workload and violence and aggression are still real problems that may have been temporarily overshadowed by the pandemic.

# CRediT authorship contribution statement

**Helen Power:** Conceptualization, Formal analysis, Investigation, Writing – original draft. **Imogen Skene:** Conceptualization, Formal analysis, Investigation, Writing – original draft. **Esther Murray:** Formal analysis, Supervision, Writing – review & editing.

#### **Declaration of Competing Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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#### References

[1] Elder E, Johnston ANB, Wallis M, Crilly J. The demoralisation of nurses and medical doctors working in the emergency department: a qualitative descriptive

- study. Int Emerg Nurs 2020;52:100841. https://doi.org/10.1016/j.
- [2] Cronin G, Cronin C. Why does A&E attract newly qualified registered nurses? Accid Emerg Nurs 2006;14(2):71–7. https://doi.org/10.1016/j.aaen.2005.11.008.
- [3] Health Education England. Securing the Future of the Emergency Department Workforce. Retrieved from https://www.hee.nhs.uk/our-work/emergency-medicine/emergency-departments-workforce; 2018.
- [4] Beck CT. Secondary traumatic stress in nurses: a systematic review. Arch Psychiatr Nurs 2011;25(1):1–10. https://doi.org/10.1016/j.apnu.2010.05.005.
- [5] Duffy E, Avalos G, Dowling M. Secondary traumatic stress among emergency nurses: a cross-sectional study. Int Emerg Nurs 2015;23(2):53–8. https://doi.org/ 10.1016/j.jenj.2014.05.001.
- [6] Dominguez-Gomez E, Rutledge DN. Prevalence of secondary traumatic stress among emergency nurses. J Emerg Nurs 2009;35(3):199–204. https://doi.org/ 10.1016/j.jen.2008.05.003.
- [7] Von Rueden KT, Hinderer KA, McQuillan KA, Murray M, Logan T, Kramer B, et al. Secondary traumatic stress in trauma nurses: prevalence and exposure, coping, and personal/environmental characteristics. J Trauma Nurs JTN 2010;17(4): 191-200
- [8] Brooks S, Amlôt R, Rubin GJ, Greenberg N. Psychological resilience and posttraumatic growth in disaster-exposed organisations: overview of the literature. J R Army Med Corps 2020;166(1):52–6. https://doi.org/10.1136/jramc-2017-000876.
- [9] NHS Digital. (2019, 7th June 2021). NHS Vacancy Statistics England, February 2015 - June 2019. Retrieved from https://digital.nhs. uk/data-and-information/publications/statistical/nhs-vacancies-survey/february-2015—june-2019-provisional-experimental-statistics#.
- [10] Nursing and Midwifery Council. Leavers' survey 2019. Retrieved from https://www.nmc.org.uk/globalassets/sitedocuments/data-reports/march-202 0/nmc-leavers-survey-2019.pdf; 2019.
- [11] Buchan J, Charlesworth, A., Gershlick, B., Seccombe, I. A Critical Moment: NHS staffing trends, retention and attrition. 2019.
- [12] The Kings Fund. 2022. The Kings Fund Position: NHS Workforce: Our position. Retrieved from https://www.kingsfund.org.uk/projects/positions/nhs-workforce.
- [13] Cole E, Lecky F, West A, Smith N, Brohi K, Davenport R. The impact of a panregional inclusive trauma system on quality of care. Ann Surg 2016;264(1): 188–94. https://doi.org/10.1097/sla.000000000001393.
- [14] Hunsaker S, Chen H-C, Maughan D, Heaston S. Factors that influence the development of compassion fatigue, burnout, and compassion satisfaction in emergency department nurses. J Nurs Scholarsh 2015;47(2):186–94. https://doi. org/10.1111/jnu.12122.
- [15] Copeland D, Henry M. The relationship between workplace violence, perceptions of safety, and Professional Quality of Life among emergency department staff members in a Level 1 Trauma Centre. Int Emerg Nurs 2018;39:26–32. https://doi. org/10.1016/j.ienj.2018.01.006.
- [16] Murray E, Krahe C, Goodsman D. Are medical students in prehospital care at risk of moral injury? Emerg Med J 2018;35(10):590-94. https://doi.org/10.1136/emer med-2017-207216.
- [17] Braun V, Clarke V. Using thematic analysis in psychology. Qualitative Res Psychol 2006;3(2):77–101. https://doi.org/10.1191/1478088706qp0630a.
- [18] Iphofen R, Tolich M. The SAGE handbook of qualitative research ethics. SAGE Publications; 2018.
- [19] Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Int J Qual Health Care 2007;19(6):349–57. https://doi.org/10.1093/intqhc/mzm042.
- [20] Holloway I, Galvin K. Qualitative research in nursing and healthcare. 4th Edition. Wiley; 2016.
- [21] Maltby J, Williams G, McGarry J, Day, L. Research Methods for Nursing and Healthcare, 2021. https://doi/org/10.4324/9781315847221.
- [22] Hassankhani H, Parizad N, Gacki-Smith J, Rahmani A, Mohammadi E. The consequences of violence against nurses working in the emergency department: a qualitative study. Int Emerg Nurs 2018;39:20–5. https://doi.org/10.1016/j. ienj.2017.07.007
- [23] Berg GM, Harshbarger JL, Ahlers-Schmidt CR, et al. Exposing compassion fatigue and burnout syndrome in a trauma team. J Trauma Nurs 2016;23(1):3–10. https:// doi.org/10.1097/jtn.0000000000000172.
- [24] Ozbay F, Fitterling H, Charney D, Southwick S. Social support and resilience to stress across the life span: a neurobiologic framework. Curr Psychiatr Rep 2008;10 (4):304–10. https://doi.org/10.1007/s11920-008-0049-7.
- [25] Walton H, Navaratnam AV, Ormond M, et al. Emergency medicine response to the COVID-19 pandemic in England: a phenomenological study. Emerg Med J 2020: emermed-2020-21. https://doi.org/10.1136/emermed-2020-210220.
- [26] Harris LJM. Caring and Coping: exploring how nurses manage workplace stress. J Hospice Palliative Nurs 2013;15(8):446-54. https://doi.org/10.1097/NJH.0b013 e3182a0de78.
- [27] NHS England. High Impact Actions. Topic sheet 6.2. Retrieved from PHE-England-Personal-Resilience.pdf. https://www.workingwellglos.nhs.uk > 2019/01; 2016.
- [28] Haugan G, Eriksson M, editors. Health Promotion in Health Care Vital Theories and Research. Cham: Springer International Publishing; 2021.
- [29] Allen RC, Palk G. Development of recommendations and guidelines for strengthening resilience in emergency department nurses. Traumatology 2018;24 (2):148–56. https://doi.org/10.1037/trm0000141.

- [30] Maguen S, Price MA. Moral injury in the wake of coronavirus: attending to the psychological impact of the pandemic. Psychol Trauma: Theory Res Pract Policy 2020;12(S1):S131–2. https://doi.org/10.1037/tra0000780.

  [31] Heath C, Sommerfield A, Von Ungern-Sternberg BS. Resilience strategies to
- manage psychological distress among healthcare workers during the COVID-19
- pandemic: a narrative review. Anaesthesia 2020;75(10):1364-71. https://doi.org/ 10.1111/anae.15180.
- [32] Greenberg N, Docherty M, Gnanapragasam S, et al. Managing mental health challenges faced by healthcare workers during covid-19 pandemic. BMJ 2020: m1211. https://doi.org/10.1136/bmj.m1211.