

This is a repository copy of Moral distress in advanced practice nurses during the COVID-19 pandemic.

White Rose Research Online URL for this paper: https://eprints.whiterose.ac.uk/191596/

Version: Published Version

Article:

Wood, E. orcid.org/0000-0002-1910-6230, King, R., Taylor, B. et al. (4 more authors) (2022) Moral distress in advanced practice nurses during the COVID-19 pandemic. Nursing Standard. ISSN 0029-6570

https://doi.org/10.7748/ns.2022.e11885

Reuse

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial (CC BY-NC) licence. This licence allows you to remix, tweak, and build upon this work non-commercially, and any new works must also acknowledge the authors and be non-commercial. You don't have to license any derivative works on the same terms. More information and the full terms of the licence here: https://creativecommons.org/licenses/

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



Why you should read this article:

- To familiarise yourself with the principles of moral distress
- To understand how moral distress may have affected advanced practice nurses during the coronavirus disease 2019 (COVID-19) pandemic
- To appreciate how burnout caused by moral distress can have a negative effect on nurse retention in the NHS

Moral distress in advanced practice nurses during the COVID-19 pandemic

Emily Wood, Rachel King, Bethany Taylor et al

Citation

Wood E, King R, Taylor B et al (2022) Moral distress in advanced practice nurses during the COVID-19 pandemic. Nursing Standard. doi: 10.7748/ns.2022.e11885

Peer review

This article has been subject to external double-blind peer review and checked for plagiarism using automated software

Correspondence e.f.wood@sheffield.ac.uk

y@emilyfwood

Conflict of interest None declared

Accepted 25 April 2022

20 April 2022

Published online September 2022



This is an open access article distributed under the terms of the Creative Commons
Attribution-Non Commercial
4.0 International (CC BY-NC
4.0) licence (see https://
creativecommons.org/licenses/
by-nc/4.0/), which permits
others to copy and redistribute in any medium or format, remix, transform and build on this work non-commercially, provided appropriate credit is given and any changes made indicated

Abstract

Background Moral distress arises when a person is aware of the right course to take but is prevented from acting on it by institutional constraints. While this concept has been considered by nursing ethicists for many years, it has been particularly associated with the unprecedented healthcare conditions caused by the coronavirus disease 2019 (COVID-19) pandemic.

Aim To investigate the level of moral distress affecting advanced practice nurses (APNs) in the UK during the COVID-I9 pandemic.

Method This was a mixed-methods study in which a bespoke cross-sectional survey was sent to 243 APNs from across the UK who had been recruited to a broader longitudinal cohort study. The survey asked about their experiences, well-being and moral distress. Open-ended questions asked about their concerns regarding the health and well-being of their patients and colleagues.

Findings A total of 97 APNs completed the survey, yielding a 40% response rate. Levels of moral distress were significantly higher among APNs working in secondary care (*P*=0.026) compared with those working in primary care. All of the respondents expressed concerns about patients due to delayed care and about the mental well-being of their colleagues, particularly those who were redeployed to COVID-19 wards.

Conclusion The COVID-19 pandemic has caused moral and psychological distress for APNs. However, the type of distress and its direct causes varied among these practitioners. Tailored support is required to address moral distress and subsequently improve staff retention.

Author details

Emily Wood, research fellow, Health Sciences School, Division of Nursing and Midwifery, University of Sheffield; Rachel King, lecturer, Health Sciences School, Division of Nursing and Midwifery, University of Sheffield; Bethany Taylor, research associate, Health Sciences School, Division of Nursing and Midwifery, University of Sheffield; Steve Robertson, programme director, Health Sciences School, Division of Nursing and Midwifery, University of Sheffield; Michaela Senek, research associate, Health Sciences School, Division of Nursing and Midwifery, University of Sheffield; Angela Tod, professor, Health Sciences School, Division of Nursing and Midwifery, University of Sheffield; Tony Ryan, professor, Health Sciences School, Division of Nursing and Midwifery, University of Sheffield

Keywords

advanced practice, coronavirus, COVID-19, nurses' well-being, practice development, professional, professional issues, research, staff welfare, workforce

Background

It has been well-documented that the coronavirus disease 2019 (COVID-19) pandemic has taken a toll on nurses around the world, with post-traumatic stress identified in around 30% (Zhu et al 2020), emotional exhaustion in 61% (Hu et al 2020) and anxiety in 38% of nurses (Labrague and De Los Santos 2020).

Staff shortages, a lack of personal protective equipment and fear of becoming unwell with COVID-19 have led to an exacerbation of burnout in the nursing profession (Ross 2020).

The authors of this article investigated the consequences of the COVID-19 pandemic for UK-based advanced practice nurses (APNs) as part of an ongoing longitudinal cohort study on

their experiences and well-being (Wood et al 2020).

Literature review

A UK survey carried out in June 2020 identified that many APNs were experiencing stress and fear, with 47% considering leaving their job during the first three months of the COVID-19 pandemic (Wood et al 2021). These APNs also reported being concerned that patients were not receiving routine care, either due to a reluctance to visit healthcare centres, or because some services were closed to enable staff redeployment to COVID-19 priority areas (Wood et al 2021). In 2020, 6 million fewer patients in the UK were referred to consultantled clinics than in 2019 (Gardner and Fraser 2021), and it has been estimated that 41% of US adults delayed or avoided medical care during 2020 (Czeisler et al 2020).

Moral distress is a concept that has been considered by nursing ethicists for many years. It is not a mental health condition, although it is highly correlated with posttraumatic stress disorder, depression and anxiety (Giannetta et al 2020). Jameton (1984) defined moral distress as occurring 'when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action'. Unresolved and long-term moral distress can lead to moral injury (čartolovni et al 2021).

Moral distress in healthcare staff has been linked to the unprecedented healthcare conditions resulting from the COVID-19 pandemic. These conditions included: having to provide crisis-level standards of care; staff shortages; changes to visiting policies; a lack of medical equipment such as ventilators leading to the rationing of care; and witnessing suffering and dying in numbers rarely seen by nurses and other healthcare staff during peacetime (Cacchione 2020, Daubman et al 2020, British Medical Association 2021, Silverman et al 2021). US research has identified an increase in moral distress among nurses as a result of the pandemic (Lake et al 2022), and in the UK there have been similar

findings in other professionals such as doctors (Rimmer 2021).

When they encounter a moral dilemma at work, healthcare professionals have three options: say nothing and act as instructed; speak up and attempt to instigate changes; or leave the team, organisation or profession. However, many healthcare professionals do not feel confident to raise concerns about the quality of care or patient and staff well-being due to a fear of retaliation (Ekpenyong et al 2021). If NHS staff feel unable to speak up and continuing to work leads to psychological and emotional trauma, the only course of action left for them is to leave their roles. There was a severe staff retention crisis in the NHS even before the pandemic, with more than 43,000 nurse vacancies across the UK (Mitchell 2019). The presence of widespread moral distress in healthcare organisations, during and after the pandemic, may compound any issues related to staff retention.

To avoid exacerbating these workforce challenges (Hossain and Clatty 2021), it is important for healthcare organisations to support staff in raising concerns and to identify moral distress. Relative to other nurses, APNs often have additional clinical responsibilities and require a higher level of decision-making, which may increase the risk of moral distress in this group.

Aim

To investigate the level of moral distress affecting APNs in the UK during the COVID-19 pandemic.

Method

Design

This was a mixed-methods study that involved a cross-sectional survey. The research question was: 'Were UK APNs working during the COVID-19 pandemic affected by moral distress, and to what extent and does this differ by sector?' Respondents were asked about their experiences during the previous year (February 2020 to February 2021).

Respondents

The respondents were APNs who were already taking part in a longitudinal study. The cohort

was initially recruited between September 2018 and March 2019 (Wood et al 2020), with further recruitment between December 2019 and February 2020. The cohort comprises 243 APNs from across the UK who work in advanced practice roles, although their job titles varied significantly (Wood et al 2020). They were working predominantly as NHS employees, but some worked as freelance locums.

Data collection

All 243 cohort members were emailed the link to an online survey between 10 March 2021 and 26 April 2021. The survey contained the standard annual questionnaire for the cohort with some modifications to take into account responses from previous years and the COVID-19 pandemic. These modifications included the addition of questions about moral distress and their intent to leave their role or the profession. The standard questionnaire includes the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS) (Stewart-Brown et al 2009), a seven-item tool for measuring mental well-being.

Two open-ended questions were added to the standard questionnaire:

- » Are you seeing consequences of delayed care for patients in your area of work? (please describe what is happening in your area).
- » Do you have ongoing safety/wellbeing concerns for staff in your area of work? (please describe what is happening in your area). The Measure of Moral Distress for Healthcare Professionals (MMD-HP) (Epstein et al 2019) was included as an addition to the main questionnaire. It was not incorporated in the main questionnaire to ensure it was as user-friendly as possible. The MMD-HP was adapted and updated from the Moral Distress Scale-Revised (Hamric et al 2012). It has 27 items, each of which is rated according to frequency and intensity on a five-point Likert scale (0-4). The two scores for each item are multiplied together because 'this

eliminates items never experienced

or not seen as distressing, giving

Permission

To reuse this article or for information about reprints and permissions, contact permissions@ rcni.com a more accurate reflection of the respondent's actual moral distress' (Epstein et al 2019). This means the item scores range from 0 to 16 for each item and the overall score ranges from 0 to 432. The higher the score on the MMD-HP, the higher the moral distress.

Data analysis

Descriptive statistics were used for most of the questionnaire. Inferential statistics were used to investigate the MMD-HP and its relationship to the main variables identified from the survey data. The survey was completed online and almost all of the questions were mandatory, so there was no missing data.

Independent groups *t*-tests were used to compare the APN respondents with the general population for the SWEMWBS score and to compare APNs working in primary and secondary care for the MMD-HP. Pearson's correlation was used to look for a relationship between respondents' MMD-HP and SWEMWBS scores. and between their MMD-HP scores and intent to leave. The open-ended questions were analysed using thematic analysis (Braun and Clarke 2006) to identify the main themes. Reporting of the findings followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines (von Elm et al 2007).

Ethical approval

The broader longitudinal cohort study was reviewed by the institutional ethics committee and granted approval in September 2018. This included permission to include additional questions as research questions or as ongoing events developed. Informed consent to participate was received from all respondents. This research was carried out in accordance with the principles of the Declaration of Helsinki (World Medical Association 2018).

Patient and public involvement APN stakeholders, including individual APNs and professional bodies, were involved in the initial design of the cohort and continue to be involved in this research. This survey did not directly involve stakeholder or patient and public involvement in its development, but the research team agreed the questions based on multiple anecdotal reports of issues experienced by nurses and other healthcare professionals from social media, mainstream media and medical journals. APNs were involved in planning the dissemination of the study findings.

Findings

Of the 243 APNs sent the survey, 97 completed it, yielding a response rate of 40%. Table 1 shows selected characteristics of the respondents. Pay and conditions for NHS staff are standardised across the UK under the Agenda for Change system. Previous research has shown that the APN role is not well standardised, with wide variety in pay and conditions (Wood et al. 2020). This was reflected in the APN respondents in this study, who ranged across five pay bands (bands 6-8c). However, most of them were on band 8a (n=55, 57%).

Respondents reported significant changes in practice and service delivery due to the COVID-19 pandemic. Almost all the respondents (n=92, 95%) expected some of these changes to continue, with 25% (n=24) expecting the extensive changes to their services to be permanent.

Around 60% (*n*=58) of respondents were considering leaving their current role and 23% (*n*=22) were considering leaving nursing entirely. One in four respondents reported that they were more likely to leave now than they were 12 months ago (*n*=24, 25%), 62% (*n*=60) reported no change and 14% (*n*=13) reported that they were now less likely to leave.

Half of respondents (*n*=49, 51%) reported feeling unwell due to work-related stress in the past 12 months, which is slightly higher than the 2020 NHS staff survey figure of 44% (NHS Providers 2021). The respondents' mean well-being score on the SWEMWBS was 22.45 (standard deviation (SD) 3.6), which is significantly lower than the mean for the general female population in England (23.59 *P*<0.01) (Ng Fat et al 2017).

Measure of Moral Distress for Healthcare Professionals scores Of the cohort, 69 respondents (71%) completed the MMD-HP, and their mean score was 50.46 (SD 42.6). This is lower than the mean score of 112.3 (SD 73.2) that was previously reported in a study of US nurses (Epstein et al 2019). The findings of this study indicated that there is a significant difference in mean MMD-HP scores between APNs in primary care (39.6) and secondary care (62.3) (*P*=0.026, t -2.2801, degrees of freedom (df) 67). There was no significant correlation between SWEMWBS and MMD-HP (P=0.310, Pearson -0.124, df 67) or between MMD-HP and intent to leave (P=0.511, Pearson -0.081, df 67).

Table 2 shows the mean frequency x intensity scores for the five highest scoring items on the MMD-HP. It should be noted that many of these items have systemlevel root causes.

Open-ended questions

Table 3 shows the themes and subthemes identified from the open-ended questions.

Table 1. Selected characteristics of the respondents (<i>n</i> =97)	
Characteristic	n (%)
Setting: >> Primary care >> Secondary care >> Mixed	47 (48%) 38 (39%) 12 (12%)
Employer: NHS Non-NHS organisation	81 (84%) 16 (16%)
Length of service: >>> Registered nurse for ≥15 years >>> Registered nurse for <15 years	86 (89%) 11 (11%)
Credentialing: >> Credentialed with the Royal College of Nursing >> Not credentialed with the Royal College of Nursing	51 (53%) 46 (47%)
Satisfaction with remuneration: Satisfied or very satisfied Neither satisfied nor dissatisfied Dissatisfied or very dissatisfied	57 (59%) 16 (16%) 23 (24%)
Felt unwell due to work-related stress in the past 12 months: >> Yes >> No	49 (51%) 48 (49%)

Concerns about the impact of COVID-19 on patient care
Several APNs expressed anxiety about the effects of the COVID-19 pandemic on patient care for non-COVID-19-related conditions. Of particular concern was that patients had delayed accessing services either by choice or because of the reduction in normal services, which was leading to an increase in advanced illnesses and missed 'red flag' symptoms:

'Patients have become symptomatic and cancers have been found, which could have been detected earlier if they had received their surveillance procedure.' (APN 73)

Respondents described situations where patients had delayed the use of emergency care and other services as a result of COVID-19, which in some cases was indicated by untreated fractures and bone metastases. These delays had left patients in pain with uncertainty about when they may be treated. Delayed consultations led to the initial presentation of patients with more serious illnesses, which were terminal in some cases:

'I am seeing premature death.' (APN 23)

Some respondents described cases of patients presenting to services later than usual due to their fear

Table 2. The mean frequency x intensity scores for the five highest scoring items on the Measure of Moral Distress for Healthcare Professionals

Item	Mean frequency x intensity scores (standard deviation)
9. Watch patient care suffer because of a lack of provider continuity	3.67 (3.87)
16. Be required to care for more patients than I can safely care for	3.52 (4.47)
17. Experience compromised patient care due to lack of resources/ equipment/bed capacity	3.33 (4.34)
19. Have excessive documentation requirements that compromise patient care	2.88 (4.25)
14. Witness low quality of patient care due to poor team communication	2.74 (3.31)

of contracting COVID-19 or their adherence to UK government advice to 'stay at home' and 'protect the NHS' to 'save lives':

'I have also seen patients unwilling to go to have investigations due to risks of COVID – even though I would deem them as urgent or red flag situations.' (APN 50)

Respondents also reported that there has been an adverse effect on the quality of patient care provided due to staff shortages:

'Delayed medication administration due to staff shortages, falling short of sepsis guidelines.' (APN 12)

'Waiting times for hospital appointments and non-urgent operations [are] very long now.' (APN 39)

While not everyone with a red flag symptom will have a serious condition, some patients will, and the purpose of a red flag referral is that early identification is essential for these conditions to improve prognosis. These opportunities for early identification may be being missed. Other respondents described an increase in patients presenting with mental health issues:

'We are seeing many patients (way beyond our normal numbers) with acute mental health problems. This is providing increasing stress within the work environment.' (APN 89)

Lockdown, isolation and financial concerns have led to mental health issues for many people, which are challenging to manage in short general practice consultations and may also overwhelm already overstretched mental health services. The cancellation of routine reviews of long-term conditions was also noted as concerning but yet to be evaluated:

'Annual reviews...investigations delayed for many patients with long-term conditions due to the pandemic. No clear consequences of this [is] evident yet.' (APN 75)

There was also concern for the longterm implications of these delays: '[We are] now getting backlog of chronic pain, mental health, undiagnosed chronic conditions.' (APN 5)

Concerns about the impact of COVID-19 on staff well-being
The pandemic conditions have affected not only patient health, but also staff well-being. The respondents described several factors that affected their well-being, with staff shortages – as a consequence of shielding, illness, isolation and issues retaining experienced staff – being raised as a concern by several respondents:

'[We are] understaffed and overworked.' (APN 88)

While some respondents mentioned being well-supported by their employers, others felt that support was lacking, and the ongoing issues associated with 'long COVID' were not adequately addressed:

'Long COVID is not supported in the trust, which is something I have recently identified as an area where improvements may be needed to ensure equity of return to work.' (APN 55)

Increased workload and being unable to take annual leave were identified as further causes for concern:

'Staff are overworked and have struggled to take holiday or time in lieu.' (APN 26)

For some of the APNs in primary care, the increased workload was a consequence of the additional responsibility of delivering the national COVID-19 vaccination programme:

'We're all exhausted – especially combining vaccine work with dayto-day work.' (APN 3)

The respondents described how these and other COVID-19-related challenges affected their well-being. For some, social distancing policies led to feelings of isolation and a lack of peer support:

'Lack of usual social contact as part of a working day, which can impact on well-being of staff, particularly those who also live alone.' (APN 71)

Others reported they have become exhausted from the ever-changing workload and distressed from caring for increasingly unwell patients, with concomitant concerns about the risk of burnout and mental health issues. The pressures experienced by respondents during the COVID-19 pandemic negatively affected their mental well-being:

'My main concern is mental health and burnout as we have been flat-out throughout this period.' (APN 74)

'My staff are well supported but many of those who were redeployed are suffering with degrees of [posttraumatic stress disorder] and mood disorder.' (APN 84)

Discussion

In the UK, the COVID-19 pandemic has exacerbated the pressures on an already overstretched healthcare system. Even before the pandemic, there had been growing patient demand that was not matched by a corresponding increase in nursing staff, and the pandemic has compounded this issue (Buchan et al 2020). Respondents in this study described some of their workplace challenges and the effect these had on their well-being. The prevailing message was one of exhaustion and concern about mental health issues in their fellow APNs and colleagues.

The APNs were also concerned about the delayed presentations of patients and the large backlog of patients needing to be seen by healthcare services. The study data indicated that there was a difference between staff in primary and secondary care, with primary care staff experiencing isolation and secondary care staff at greater risk of trauma and moral distress. This reflects similar research by King et al (2022), which found that trainee and newly qualified nurse associates based in community and primary care were significantly more likely to report concerns about staffing, overtime, missed care and safety than those working in secondary care.

The average well-being score for the cohort was significantly lower than that for the general population of England (P<0.01), although this finding should be viewed with caution since the general population figure is based on data from 2010-2013 (Ng Fat et al 2017). Several studies indicate that the well-being of the population has decreased due to the COVID-19 pandemic and the subsequent lockdowns (Groarke et al 2020, O'Connor et al 2021). However, without reliable measures this cannot be confirmed. The well-being of this APN cohort may be higher than that of other groups; for example, this cohort has significantly higher well-being than UK-based university students during lockdown (Evans et al 2021).

Moral distress appears significantly higher in APNs working in secondary care compared with those working in primary care. There may be clinical reasons for this, such as the increase in patient demand in secondary care services due to COVID-19. However, this could also be because some questions in the MMD-HP are more likely to be an issue in secondary care than primary care - for example item 17 (experienced compromised patient care due to lack of resources/equipment/bed capacity). Almost all investigations of moral distress in healthcare professionals have used the Moral Distress Scale-Revised (Hamric et al 2012) or the MMD-HP (Epstein et al 2019), or local translation and/or adaptation of these scales. Most studies have focused on secondary care and usually acute adult inpatient hospitals.

Total moral distress scores tend to be higher in studies based in the US (Epstein et al 2019, Bleicher et al 2021) than in Europe (Colville et al 2019, Donkers et al 2021). The total scores of the APNs in this study appear to be similar to those of healthcare professionals in other European studies, particularly among respondents working in secondary care. All respondents in this study described exhaustion as a serious concern; among primary care APNs this was frequently articulated as 'isolation', while secondary care APNs often referred to exhaustion in terms of 'trauma'.

The data from the open-ended questions and the higher rates of moral distress in secondary care reflect Ffrench-O'Carroll et al's (2021) findings that staff in the Republic of Ireland who were redeployed during the COVID-19 pandemic had higher rates of moral and psychological distress than those who remained in their usual place of work. The effect of caring for increasingly unwell patients on APNs' well-being supports previous research by Daubman et al (2020), which found that moral distress often results from witnessing increased suffering.

The moral and psychological distress experienced by healthcare professionals as a result of the COVID-19 pandemic had the potential to significantly worsen the pre-existing workforce crisis in the NHS (Buchan et al 2017, Wood et al 2021). Staff were mentally and physically exhausted and many would need support to cope with their isolation, stress and trauma. These issues needed to be addressed in a timely and person-centred manner to improve staff retention.

Despite their exhaustion and the inherent risks of burnout, the

Table 3. Themes and subthemes identified from the open-ended questions

Themes	Subthemes	Codes
Impact on patient care	Delayed care	Reluctance to attend healthcare services
		Late presentations
		Long waiting lists
		Cancellation of routine reviews
	Consequences for patients	Missed care
		Delayed diagnoses
Impact on staff well- being	Challenges	Staffing levels
		Safety
		Support
		Workload
	Consequences for staff	Isolation
		Burnout
		Mental health issues
		Exhaustion

APNs in this study maintained considerable concern for their patients, which again was similar to reports from trainee and newly qualified nursing associates (King et al 2022). The APNs in this study also reported long waiting lists, treatment backlogs and delayed presentation of red flag symptoms. This reflects an analysis by the British Medical Association (2022), which reported there were more than 6.73 million people waiting for treatment in June 2022, compared with 4.43 million in February 2020 before the pandemic. These factors would need to be considered as part of any resource planning in the NHS in the foreseeable future.

Limitations

The response rate in this study was relatively low, but this may be due to the challenging circumstances being experienced at the time by the cohort. The authors have also heard anecdotally that many staff were moving away from using emails and towards messaging applications such as WhatsApp, so it is possible that the research communication method used was outdated. Given

that around 60% of the respondents were considering leaving their role, another possibility is that many of the non-respondents may have left their previous job and subsequently changed their email address, so were uncontactable. Many in the cohort may have been redeployed so they might not have had access to the email address they initially provided when recruited to the cohort. One previous respondent emailed to say she could no longer take part as she had retired.

Due to the lack of standardisation and direct regulation of APNs in the UK, the exact number of these advanced practitioners is unknown. It is unclear whether the size and/or diversity of the cohort was sufficient to be representative of the breadth of APNs' experience. However, the cohort was comprised of APNs from a variety of geographical locations across all four UK nations and different specialities of healthcare, and as such it had external validity.

Conclusion

This study found that the COVID-19 pandemic caused moral

and psychological distress for many APNs. However, the type of distress and its direct causes varied across these practitioners. It also identified that APNs working in primary care tended to experience isolation, whereas APNs working in secondary care tended to experience trauma. APNs in all settings were mentally and physically exhausted. These issues need to be addressed in a sensitive and timely manner, with tailored support provided to staff to prevent further exacerbation of the NHS workforce crisis and concomitant staff attrition in the vears to come.

IMPLICATIONS FOR PRACTICE

- The findings of this study support anecdotal reports of moral distress among nurses due to the COVID-19 pandemic, particularly in secondary care settings
- » APNs in all settings are physically and mentally exhausted. Support will be essential to promote staff retention and address the backlog of patients in a timely manner
- » Responses to the COVID-19 pandemic at national and local levels should include comprehensive psychological well-being support, and any initiatives that are introduced should be evaluated
- Support should be person-centred and tailored to local and individual needs

References

Bleicher J, Place A, Schoenhals S et al (2021) Drivers of moral distress in surgical intensive care providers: a mixed methods study. Journal of Surgical Research. 266, 292-299. doi: 10.1016/j.jss.2021.04.017

Braun V, Clarke V (2006) Using thematic analysis in psychology. Qualitative Research in Psychology. 3, 2, 77-101. doi: 10.1191/1478088706qp063oa

British Medical Association (2021) Moral Distress and Moral Injury: Recognising and Tackling it for UK Doctors. BMA, London.

British Medical Association (2022) NHS Backlog Data Analysis. www.bma.org.uk/adviceand-support/nhs-delivery-and-workforce/ pressures/nhs-backlog-data-analysis (Last accessed: 21 September 2022.)

Buchan J, Ball J, Shembavnekar N et al (2020) Building the NHS Nursing Workforce in England: Workforce Pressure Points. The Health Foundation. London.

Buchan J, Charlesworth A, Gerslick B et al (2017) Rising Pressure: the NHS Workforce Challenge. Workforce Profile and Trends of the NHS in England. The Health Foundation, London.

Cacchione PZ (2020) Moral distress in the midst of

the COVID-19 pandemic. Clinical Nursing Research. 29, 4, 215-216. doi: 10.1177/1054773820920385

Čartolovni A, Stolt M, Scott PA et al (2021) Moral injury in healthcare professionals: a scoping review and discussion. Nursing Ethics. 28, 5, 590-602. doi: 10.1177/0969733020966776

Colville GA, Dawson D, Rabinthiran S et al (2019) A survey of moral distress in staff working in intensive care in the UK. Journal of the Intensive Care Society. 20, 3, 196-203. doi: 10.1177/1751143718787753

Czeisler MÉ, Marynak K, Clarke KE et al (2020) Delay or avoidance of medical care because of COVID-19-related concerns – United States, June 2020. Morbidity and Mortality Weekly Report. 69, 36, 1250-1257. doi: 10.15585/mmyr.mm6936a4

Daubman BR, Black L, Goodman A (2020) Recognizing moral distress in the COVID-19 pandemic: lessons from global disaster response. Journal of Hospital Medicine. 15, 11, 696-698. doi: 10.12788/jhm.3499

Donkers MA, Giglssen VJ, Candel MJ et al (2021) Moral distress and ethical climate in intensive care medicine during COVID-19: a nationwide study. BMC Medical Ethics. 22, 73. doi: 10.1186/s12910-021-00641-3

Ekpenyong MS, Nyashanu M, Ibrahim A et al (2021) Perceived barriers to whistle blowing in healthcare amongst healthcare professionals: an integrative review. International Journal of Human Rights in Healthcare. 14, 1, 10-27, doi: 10.1108/JJHRH-08-2020-0064

Epstein EG, Whitehead PB, Prompahakul C et al (2019) Enhancing understanding of moral distress: the measure of moral distress for health care professionals. AJOB Empirical Bioethics. 10. 2. 113-124. doi: 10.1080/23294515.2019.1586008

Evans S, Alkan E, Bhangoo JK et al (2021) Effects of the COVID-19 lockdown on mental health, wellbeing, sleep, and alcohol use in a UK student sample. Psychiatry Research. 298, 113819. doi: 10.1016/j.psychres.2021.113819

Ffrench-O'Carroll R, Feeley T, Tan MH et al (2021) Psychological impact of COVID-19 on staff working in paediatric and adult critical care. British Journal of Anaesthesia. 126, 1, e39-e41. doi: 10.1016/j.bja.2020.09.040

Gardner T, Fraser C (2021) Longer Waits, Missing Patients and Catching Up: How is Elective Care in England Coping with the Continuing Impact of COVID-19? www.health.org.uk/news-andcomment/charts-and-infographics/how-iselective-care-coping-with-the-continuing-impactof-covid-19 (Last accessed: 21 September 2022.)

Giannetta N, Villa G, Pennestrì F et al (2020) Instruments to assess moral distress among healthcare workers: a systematic review of measurement properties. International Journal of Nursing Studies. 111, 103767. doi: 10.1016/j.ijnurstu.2020.103767

Groarke JM, Berry E, Graham-Wisener L et al (2020) Loneliness in the UK during the COVID-19 pandemic: cross-sectional results from the COVID-19 Psychological Wellbeing Study. PLoS One. 15, 9, e0239698. doi: 10.1371/journal.pone.0239698

Hamric AB, Borchers CT, Epstein EG (2012) Development and testing of an instrument to measure moral distress in healthcare professionals. AJOB Primary Research. 3, 2, 1-9. doi: 10.1080/21507716.2011.652337

Hossain F, Clatty A (2021) Self-care strategies in response to nurses' moral injury during COVID-19 pandemic. Nursing Ethics. 28, 1, 23-32. doi: 10.1177/0969733020961825 Hu D, Kong Y, Li W et al (2020) Frontline nurses' burnout, anxiety, depression, and fear statuses and their associated factors during the COVID-19 outbreak in Wuhan, China: a large-scale cross-sectional study. EClinicalMedicine. 24, 100424. doi: 10.1016/j.eclinm.2020.100424

Jameton A (1984) Nursing Practice: The Ethical Issues. Prentice Hall, Englewood Cliffs, NJ.

King R, Ryan T, Senek M et al (2022) The impact of C0VID-19 on work, training and well-being experiences of nursing associates in England: a cross-sectional survey. Nursing Open. 9, 3, 1822-1831. doi: 10.1002/nop2.928

Labrague LJ, De Los Santos JA (2020) COVID-19 anxiety among front-line nurses: predictive role of organisational support, personal resilience and social support. Journal of Nursing Management. 28, 7,1653-1661. doi: 10.1111/jonm.13121

Lake ET, Narva AM, Holland S et al (2022) Hospital nurses' moral distress and mental health during COVID-19. JAN. 78, 3,799-809. doi: 10.1111/jan.15013

Mitchell G (2019) NHS Nurse Vacancies in England

Rise to More Than 43,000. www.nursingtimes. net/news/workforce/nhs-nurse-vacancies-inengland-rise-to-more-than-43000-08-10-2019 (Last accessed: 21 September 2022.)

Ng Fat L, Scholes S, Boniface S et al (2017) Evaluating and establishing national norms for mental wellbeing using the short Warwick– Edinburgh Mental Well-Being Scale (SWEMWBS): findings from the Health Survey for England. Quality of Life Research. 26, 5, 1129-1144. doi: 10.1007/s11136-016-1454-8

NHS Providers (2021) NHS Staff Survey Results 2020. nhsproviders.org/media/691021/nhs-staff-survey-results-2020-nhs-providers-otdb.pdf (Last accessed: 21 September 2022.)

O'Connor RC, Wetherall K, Cleare S et al (2021)
Mental health and well-being during the COVID-19
pandemic: longitudinal analyses of adults in the
UK COVID-19 Mental Health & Wellbeing study.
British Journal of Psychiatry. 218, 6, 326-333.
doi: 10.1192/bjp.2020.212

Rimmer A (2021) Covid-19: eight in 10 doctors have experienced moral distress during

pandemic, BMA survey finds. BMJ. 373, n1543. doi: 10.1136/bmi.n1543

Ross J (2020) The exacerbation of burnout during COVID-19: a major concern for nurse safety.
Journal of PeriAnesthesia Nursing. 35, 4, 439-440. doi: 10.1016/j.jopan.2020.04.001

Silverman HJ, Kheirbek RE, Moscou-Jackson G et al (2021) Moral distress in nurses caring for patients with Covid-19. 28, 7-8, 1137-1164. Nursing Ethics. doi: 10.1177/09697330211003217

Stewart-Brown S, Tennant A, Tennant R et al (2009) Internal construct validity of the Warwick-Edinburgh mental well-being scale (WEMWBS): a Rasch analysis using data from the Scottish health education population survey. Health and Quality of Life Outcomes. 7, 15. doi: 10.1186/1477-7525-7-15

von Elm E, Altman DG, Egger M et al (2007) The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: guidelines for reporting observational studies. The Lancet. 370, 9596, 1453-1457. doi: 10.1016/S0140-6736(07)61602-X Wood E, King R, Robertson S et al (2020) Advanced practice nurses' experiences and well-being: baseline demographics from a cohort study. Journal of Nursing Management. 28, 4, 959-967. doi: 10.1111/jonm.13030

Wood E, King R, Senek M et al (2021) UK advanced practice nurses' experiences of the COVID-19 pandemic: a mixed-methods cross-sectional study. BMJ Open. 11, 3, e044139. doi: 10.1136/bmjopen-2020-044139

World Medical Association (2018) WMA Declaration of Helsinki – Ethical Principles for Medical Research Involving Human Subjects. wma.net/policiespost/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects (Last accessed: 21 September 2022.)

Zhu Z, Xu S, Wang H et al (2020) COVID-19 in Wuhan: sociodemographic characteristics and hospital support measures associated with the immediate psychological impact on healthcare workers. EClinicalMedicine. 24, 100443. doi: 10.1016/j.eclinm.2020.100443