Journal of Religion and Health (2023) 62:2836–2860
https://doi.org/10.1007/s10943-023-01803-w

ORIGINAL PAPER

The Perceptions of Healthcare Staff Regarding Moral Injury and the Impact on Staff Life and Work During COVID-19: A Scoping Review of International Evidence

Fiona J. G. Jack[1] · **Grigorios Kotronoulas**[2]

Accepted: 17 March 2023 / Published online: 7 April 2023

Abstract

The COVID-19 response introduced legal restrictions on social distancing globally, affecting healthcare staff personally and professionally. These restrictions suspended routine hospital visiting, which may have left staff feeling they had to compromise on the care they provided. Such conflict may be experienced as moral injury. This scoping review aimed to synthesise international evidence, to answer this question: "Have COVID-19 restrictions affected healthcare staff's experiences of moral injury? If so, how?" Nine studies met the search criteria. Although healthcare staff seemed to be aware of the risks and effects of moral injury, they were still reluctant to "name" it. Healthcare staff's own emotional and spiritual needs were mostly ignored. Although psychological support is often the recommended approach by organisations, a greater focus on spiritual and emotional support is recommended.

Keywords Moral injury · Healthcare staff · COVID-19 · Perceptions · Impact · Spiritual · Healthcare chaplain · Scoping review

✉ Fiona J. G. Jack
fiona.jack2@nhs.scot

Grigorios Kotronoulas
grigorios.kotronoulas@glasgow.ac.uk

[1] NHS Fife–Department of Spiritual Care, Queen Margaret Hospital, Whitefield Road, Dunfermline, Fife KY12 OSU, Scotland, UK

[2] School of Medicine Dentistry and Nursing, Nursing and Health Care School, College of Medical, Veterinary and Life Sciences, University of Glasgow, 57-61 Oakfield Avenue, Glasgow G12 8LL, Scotland, UK

Introduction

Within weeks of the World Health Organization's declaration of the COVID-19 outbreak in March 2020, several countries around the globe entered social lockdown (Dunford et al., 2020; Ghebreyesus, 2020). In addition, many countries introduced restrictions to reduce social contact in health care, suspending routine visiting of patients in hospital. Social support for healthcare staff was lifted overnight. Healthcare staff in many countries were not allowed to socialise, in or out of the workplace, to maintain their sense of connectedness. Globally, healthcare staff increasingly sought support from healthcare chaplains during this time to explore how the pandemic situation affected healthcare staff personally and professionally (Snowden, 2021). This task, during pastoral supervision (Paterson, 2019), led the first author to wonder whether a consequence of the legal restrictions on social distancing was contributing to perceptions of moral injury among healthcare staff, and if so, how.

Background

Moral Injury: A Bio-Psycho-Socio-Spiritual Phenomenon

The term "moral injury" has been widely used for centuries in philosophical circles. Seton (1775), while debating whether truth can be "bad" or "good", posits that disclosing truth may lead to physical or moral injury. In the literature, moral injury commonly describes the apparent dis-ease people feel when they are asked to do something they consider goes against their morals, values or beliefs. There are several definitions of moral injury with varying degrees of consideration of the impact of the context on the person. One definition describes healthcare professionals as "moral agents" experiencing distress when they cannot act within their own moral systems, particularly under institution or contextual constraints (Ulrich & Grady, 2018). This reflects the philosophical roots of the term "moral distress" described by Jameton (2017), where institutional constraints prevent one from doing what one considers "right". For some, the definition is evolving, with additional subcategories (Musto & Rodney, 2018).

Definitions based in military terms from Shay (2014) and Litz and colleagues (2009) are often cited in the literature too. These definitions deal with the choice of the person to commit an act that goes against their values, but almost universally do not consider the coercive aspects to the context the person is in. One review of the military literature reports 17 different definitions, including those of Shay and Litz above, indicating the complexity and variety of perspectives to moral injury (Hodgson & Carey, 2017). Farnsworth and colleagues (2017, p. 392) propose functional approaches, bringing spirituality into the definition, whereby moral injury "can be defined as expanded social, psychological, and spiritual suffering stemming from costly or unworkable attempts to manage, control, or cope with the experience of moral pain". However, this work stops short of addressing spiritual needs to any extent, in particular forgiveness, connectedness, trust and value. This leads to the

medical classification of a phenomenon which predates modern psychology, and may be described from a spiritual perspective.

The omission of proactive or preventative care for moral injury as evidenced in the military-focused literature highlights that caution must be exercised when applying the norms of a phenomenon to a different population. Transferring reactive interventions for moral injury from the military to the healthcare context may be insufficient. The military appear to acknowledge that moral injury is likely to occur (Carey & Hodgson, 2018). The same is not true of healthcare staff. Perhaps moral injury in this different population can be prevented as a "complex bio-psycho-socio-spiritual phenomenon" (Ames et al., 2021, p. 3058) by considering the whole person that befits a holistic multidisciplinary approach.

Moral Injury of Healthcare Staff in the COVID-19 Context

As a result of COVID-19, moral injury has regained attention in popular and medical literature (Alexander, 2021; Greenberg et al., 2020). Current evidence indicates COVID-19 restrictions have increased the risk for healthcare staff to experience moral injury and distress as health care moved from person-centred to public health-centred ethics (Hossain & Clatty, 2021). Andrist and colleagues (2020) argue that several situations introduce conflict in healthcare staff implementing rules. These occasions include supporting patients at the end of life, patients whose moment of death does not follow expected trajectories, and arbitrary times before death where restrictions may be eased. While providing a measure of comfort, technology-assisted contact has also raised concerns of privacy among healthcare staff, particularly where staff must use their personal devices and accounts to facilitate conversations (Rose et al., 2020). The cumulative effects of moral injury and distress can result in long-lasting responses to trauma, likely leading to increased risk of serious mental health decline (Ames et al., 2021). Moreover, long-term suffering that is related to moral injury likely contributes to long-term compassion fatigue, post-traumatic stress and burnout (Alharbi et al., 2020).

In this context, it is important to assess the perceived impact of moral injury among healthcare staff to minimise or prevent the long-term consequences they could be left with. This will allow healthcare chaplains to better support staff who experience moral injury due to COVID-19 restrictions. Therefore, the authors conducted a scoping review of international evidence to explore perceptions of healthcare staff experience of moral injury and the impact on staff life and work during COVID-19.

Methods

This scoping review was informed by the Joanna Briggs Institute methodology for mixed methods systematic reviews (Lizarondo et al., 2020). The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (Page et al., 2021) was used to report this review.

Review Questions

The Population, Issue, Context, Outcome (PICO) model (Davda et al., 2018) was used to structure and refine the question and search terms. Following PICO, the primary review question was formulated as: "Have COVID-19 restrictions affected healthcare staff's experiences of moral injury? If so, how?" A secondary review question also arose: "How has moral injury due to COVID-19 restrictions contributed to healthcare staff's experiences of moral distress, compassion fatigue or burnout?".

Search Strategy

Four major bibliographic databases were searched, that is, MEDLINE, EMBASE, CINAHL and APA PsychInfo. Each database search used medical subject headings, as well as key words, their synonyms and antonyms as appropriate (Supplementary Table 1). Three key journals were absent from the above databases; therefore, volumes from 2020–2021 were searched manually: *Health and Social Care Chaplaincy; Journal of Health Care Chaplaincy; and Journal of Pastoral Care and Counseling.*

Inclusion and Exclusion Criteria

Studies were eligible if:

- The population was healthcare staff, working in hospitals (any role, any department) in any country.
- Moral injury or distress, compassion fatigue, post-traumatic stress, burnout or resilience was investigated and reported.
- The context staff worked in was discussed. For example, restrictions or protocol changes or impact of lockdown or other effects of COVID-19.
- They were primary or secondary research (including literature reviews), published in English in peer-reviewed journals.
- They were published since 1 January 2020, including those published before the COVID-19 pandemic was declared.

Studies were excluded if they reported on:

- Incorrect population: patients, staff in non-hospital settings.
- Incorrect issue: exclusively dealt with mental health, psychology, psychiatry or excluded discussion of the wider context, or only mentioned "moral injury" in passing.
- Opinion pieces, letters, study protocols.
- Incorrect context: prior epidemics (Spanish Influenza, etc.).

Data Management, Extraction and Critical Appraisal

Titles and abstracts were imported into EndNote X9 Reference Manager software (https://www.endnote.co.uk), records sorted and duplicates removed. Records were screened twice: once using title and abstract; and then title and discussion. Data extracted from eligible included studies were summarised in a custom evidence table using a Microsoft Excel workbook (Microsoft, 2023) to sort and filter the data. The Critical Appraisal Skills Programme (CASP) checklists for diverse study designs were used (Critical Appraisal Skills Programme, 2021) to critically appraise each of the papers found and assess quality. Based on analysis of the CASP checklists, a simplified three-point assessment scale was used to indicate methodological rigour as good, acceptable or weak.

Data Synthesis

The words, themes and concepts extracted from the included studies were analysed by sorting and filtering the custom evidence table. This was explored visually in Excel charts and word clouds (https://wordart.com). Sentiments found in the data are placed on the word cloud image in a size proportionate to the number of times the word occurs. While word clouds are controversial when looking at "data", they add value when "mining [the] text for insight" and unstructured text analysis (Temple, 2019), being visually straightforward and requiring little explanation.

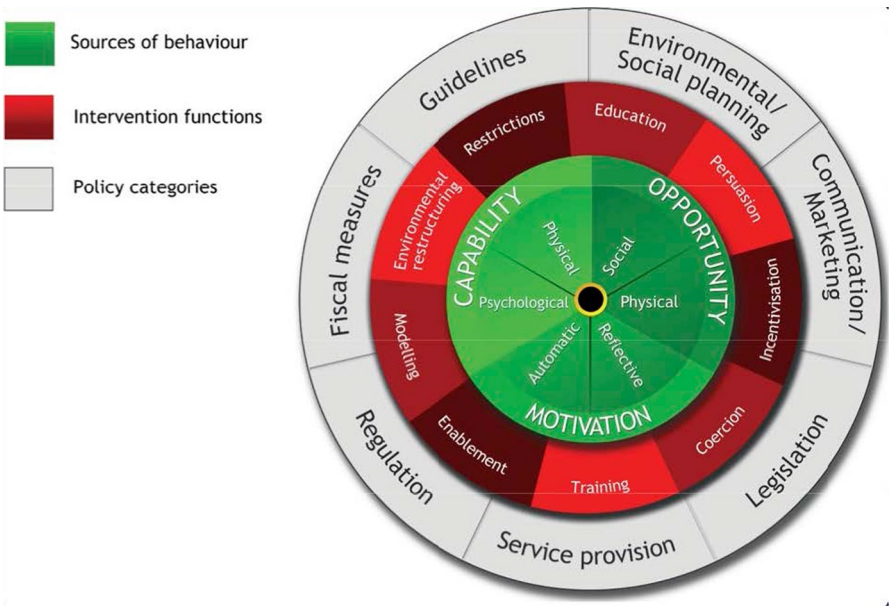

Fig. 1 Behaviour change wheel (used with permission from S. Michie)

The extracted themes were firstly categorised in the soul–role–context of pastoral supervision to view the results from a spiritual perspective (Paterson, 2019). Additionally, the behaviour change wheel (BCW) (Michie et al., 2011; Fig. 1), a three-level theoretical model for behaviour change interventions, was used to subjectively allocate key words, themes and concepts to the model's categories. The BCW focuses on understanding and creating interventions for complex phenomena and uses an evidence-based model of behavioural change; and the strong use of context allows consideration of the impact of COVID-19 restrictions. When categorising concepts, evidence was consulted to understand the behaviour which had to change (Michie et al., 2014).

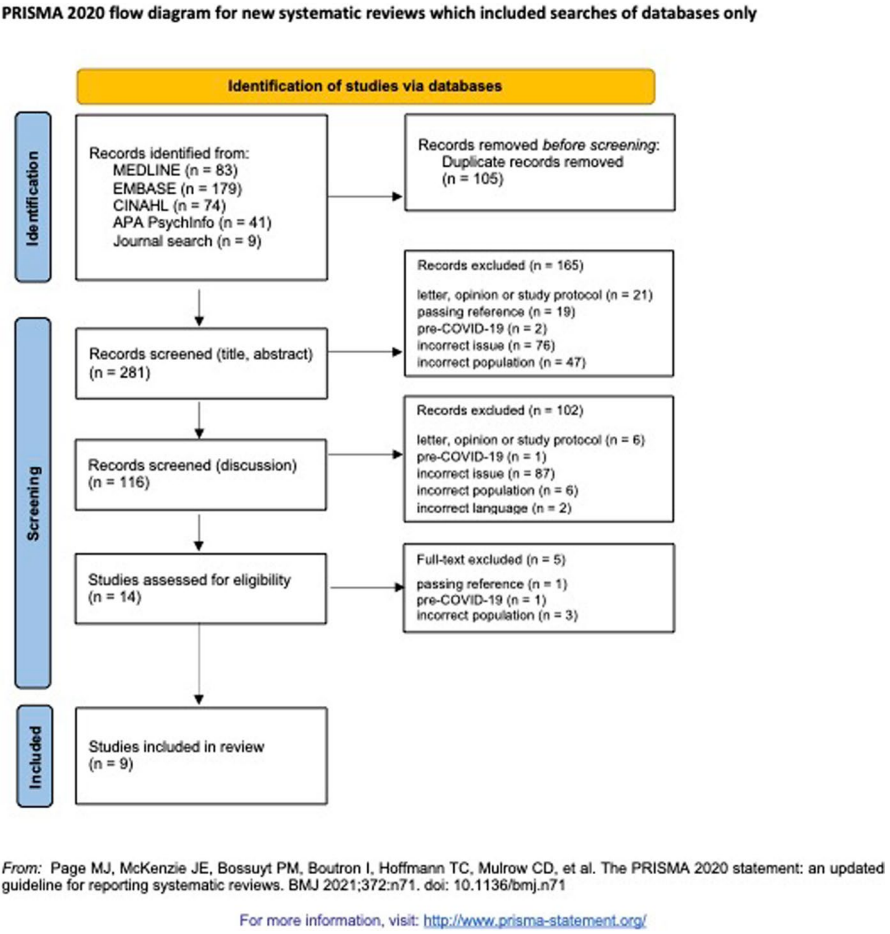

Fig. 2 PRISMA diagram of the screening process

Results

Search Results

From an initial list of 386 studies, 14 studies remained after duplicate removal and initial screening by the first author (Fig. 2). These were subjected to full text screening, resulting in a final sample of nine studies.

Overview of the Included Studies

Table 1 outlines methodological details of the nine included studies, grouped by study design. All nine studies examined or discussed moral injury in healthcare staff. Four studies were conducted in the USA, two in Asia, two in Europe and one internationally. The studies use a variety of methodologies: narrative reviews; cross-sectional and longitudinal surveys; and autoethnography, individual case studies or reflections. The studies mainly investigated moral injury in medical doctors with little mention of other healthcare professions, although four studies were based on experiences of healthcare chaplains, pertaining to their experiences of supporting healthcare professionals during the COVID-19 pandemic.

Critical Appraisal

The studies were assessed as of varying methodological quality. Most ($n=6$) were considered as "good", two as "acceptable" and one "poor". Table 1 outlines potential sources of bias within each study.

Thematic Synthesis

Primary review question: "Have COVID-19 restrictions affected healthcare staff's experiences of moral injury? If so, how?"

Extracted data ($n=347$ items, see Table 1 column "words/themes/concepts") were fitted to the BCW categories (Michie et al., 2014) and presented in Table 2. Data were found across all categories of the BCW. At a high level, most themes relating to moral injury appear in the sources of behaviour level ($n=243$, 70%) (Fig. 3). Within the behaviour level of the BCW, the most numinous categories are the motivation category (with "automatic" and "reflective" categories combined $n=142$, 58% of behaviour level, 41% of all items). In the policy level ($n=58$), almost half of items were categorised in the service provision category ($n=26$; 45% of policy level). These included:

- **Preparing to care**: resource allocation clinician self-care, redeployment, physical protection (Chandra & Vanjare, 2020; Schwartz et al., 2020; Vandenhoeck et al., 2021),

Table 1 Characteristics of the nine studies included in the scoping review, grouped by study design

Study location	Study design	Sample size	Words/ themes/ concepts	Methodological quality	Bias concerns
Chandra et al. (2020) India	Narrative review	[1,2]	79	Acceptable	Location, selection
Schwartz et al. (2020) USA	Narrative review	96[2]	44	Acceptable	Location, mental health, selection
Mantri et al. (2020) USA	Cross-sectional survey	181[3]	16	Good	Citation, confirmation, convenience sample, cultural, participant homogeneity, religiosity, response, sample size
Zhizhong et al. (2020) China	Cross-sectional survey	3006[3]	20	Good	Citation, confirmation, confounding, cultural, psychiatry, religiosity, response, translation
Hines et al. (2021) USA	Longitudinal survey	77[4]	44	Weak	Confirmation, confounding, convenience sample, response, survivor
Vandenhoeck et al. (2021) International	Longitudinal survey	1657[3]	59	Good	Chaplain, location, response, social acceptability, wording
Alexander (2020) USA	Case study	1[3]	35	Good	Chaplain, publication
Busfield (2020) England, UK	Reflection	1[3]	18	Good	Author, chaplain, reporting
Stirling (2020) Scotland, UK	Autoethnography	8[3]	29	Good	Author, chaplain, friendliness, social desirability

[1]Not Stated

[2]Number of studies in review

[3]Human participants in study

[4]Participants who completed all 3 time points

Table 2 Summary of themes in BCW categories

BCW level and category		Protectors	Threats	Both
Behaviour (243)	Capability—physical	Diet, exercise, leisure, peer support, presence (11)	Abuse/assault, lip-reading with mask, working with death, exposure to virus; loss of touch (15)	
	Capability—psychological	Agent of noble cause, define moral injury, self-care, normalise response	Feelings: anxiety; frustration; helpless; invisible; sad, suicide ideation (28)	Sharing vulnerability, enter other's suffering
	Motivation—automatic	Caring, obligations, feeling: hope; optimism; safe, meaning in loss (13)	Abuse, loss: faith; hope; meaning; trust, feeling: anxiety; betrayal; unvalued; powerless (59)	Change, sacrifice, vulnerability (15)
	Motivation—reflective	Self-aware, hope, coping, meaning-making, presence, significance of touch (30)	Feeling devalued, lack of reflection, self at risk, no chance to mourn, witness death/suffering (19)	Destruction and growth, opportunity in pain
	Opportunity—physical	Meet physical needs, being/listening in pain/darkness, presence	Elevated stress/anxiety/PTSD/exhaustion/depression, isolation, mask anonymity	Silence
	Opportunity—social	Build trust, rituals, bridge patient/family, peer/social support (13)	Distanced, disconnected, lonely, infection, loss: presence; shared moments; support; touch (11)	
Intervention (46)	Coercion	Security staff	Feeling at risk	
	Education	Routine well-being	Psychological distress in patients	Difficult conversations
	Enablement	Basic needs, facilitate self-care		
	Environment	Culture of caring, space to share stress	Quiet spaces removed	
	Incentivisation	Peer support, training in work hours		
	Modelling	Leader recognition, decrease stress		
	Persuasion	Financial, employer ethic of care		
	Restrictions	Peer support	Social distancing, security staff	Physical safety
	Training	Stress/resilience, skills for new roles	Redeployment: anxiety; safety; New workplace	Care of dying

Table 2 (continued)

BCW level and category		Protectors	Threats	Both
Policy (58)	Communication	Bidirectional leadership, recognition	Mask anonymity	
	Social planning	Reduce stress, leisure, PPE, support	High stress/low support, burnout, stress	
	Fiscal	Develop financial/technical demands	Lack of infrastructure	
	Guidelines	Staff care strategy, support staff health		
	Legislation	Care for absent loved ones	Lockdown, social isolation	
	Regulation	Self-care		
	Service provision	Care: capacity to deliver; best available, decrease stress, staff support needs (13)	Brutal rules "for greater good", loss of high care standards, staff shortages, system overload (10)	Redeployment, care of dying, well-being

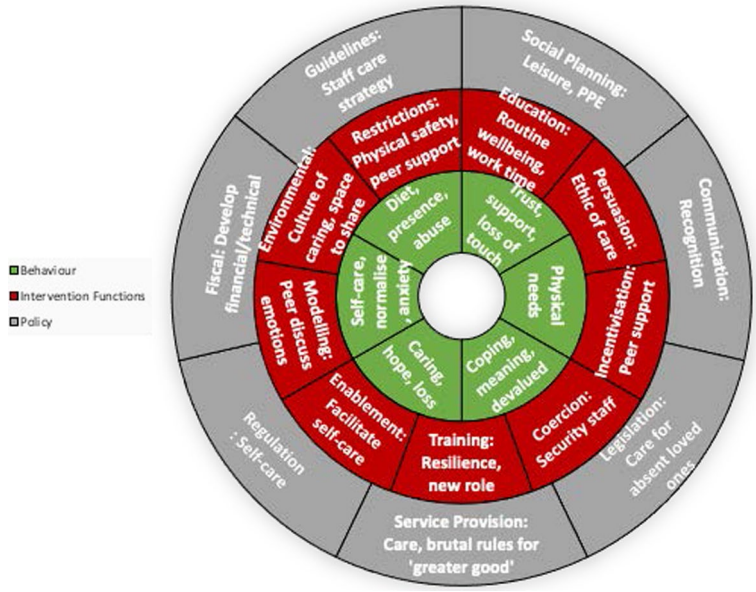

Fig. 3 Sample data from studies in the behaviour change wheel

- **Delivering care**: caring for colleagues and patients, returning to work, focus on medical care, capacity concerns to deliver usual high quality (Busfield, 2020; Chandra & Vanjare, 2020; Mantri et al., 2020; Schwartz et al., 2020; Stirling, 2020; Vandenhoeck et al., 2021).

Sharing vulnerability (Table 2) (Schwartz et al., 2020; Stirling, 2020) has been analysed and categorised as both a "protector" and a "threat". Vulnerability is seen as protective by the authors, since it may lead others to protect or support the person who discloses their vulnerability, or at least walk alongside them in the vulnerability. But it may also be a threat, since disclosing vulnerability may lead to negative or unsupportive responses from colleagues.

Of the 152 protective themes categorised, 52% ($n=79$) fitted into the behaviour level, 23% ($n=35$) the intervention level and 25% ($n=38$) in the policy level. Within the behaviour level, most "protective" themes are in the reflective motivation category ($n=30$: 38% of behaviours; 20% of all protective themes). Reflective motivation protective themes from Table 2 perhaps indicate that reflective practice (formal or informal) might protect a person from the effects of moral injury, summarised in 4 key areas:

- **Personal assets**: bear, not avoid, limitations (Alexander, 2020); adaptive responses, coping, self-efficacy (Schwartz et al., 2020); wounded helper (Stirling, 2020)

- **Normalisation**: chaplains expect to meet people in adversity whose identity is threatened (Alexander, 2020); normalisation of mental health and normalisation of response to crisis (Schwartz et al., 2020)
- **Intentional positivity**: listen/acknowledge/recognise individual in midst of generalisation (Busfield, 2020); hope, mindfulness, reflective practice (Chandra & Vanjare, 2020); significance of non-verbal cues and touch (Vandenhoeck et al., 2021)
- **Reflection to make meaning**: live with complexity/uncertainty/uncontrollable, theological wrestling of trauma and suffering (Stirling, 2020); meaning and ministry of presence (Vandenhoeck et al., 2021)

Most "threats" ($n=166$) seem to come from the BCW categories of automatic motivation (36%), psychological capability (17%) and to a lesser extent, reflective motivation (11%). The BCW automatic motivation themes included threats of abuse, the loss of hope or trust, and many feelings including anxiety/powerlessness, anger, betrayal, existential distress and difficulty forgiving (Alexander, 2020; Busfield, 2020; Chandra & Vanjare, 2020; Mantri et al., 2020; Schwartz et al., 2020; Vandenhoeck et al., 2021; Zhizhong et al., 2020).

There was a cluster of results in the intervention level in the training and education categories ($n=20$, 57%). The BCW distinguishes education (knowledge/understanding) from training (skills) (Michie et al., 2014, Table 2.1). This included training for new roles during redeployment (Stirling, 2020), physical protection and personal security (Chandra & Vanjare, 2020), and education in moral injury (Alexander, 2020; Busfield, 2020). Three of the nine studies selected (Chandra & Vanjare, 2020; Hines et al., 2021; Schwartz et al., 2020) convey that stress is something that requires training to be eliminated, or that resilience training could be beneficial for staff.

The soul–role–context of pastoral supervision (Paterson, 2019) shows the greatest collection of factors in the soul ($n=177$; 51%) and context ($n=136$; 39%) facets (Table 3). This may indicate moral injury is role-independent, more related to one's beliefs and values, and the context within which staff work, at least from the analysis in this review. Quotes taken from the studies were visualised as shown in Fig. 4.

Figure 4 indicates that there are groups of data around feelings, care and loss. Feelings across the studies were:

- Spiritual distress (despair, devalued, helpless, hopeless, inner conflict, invisible)
- Psychological response (anxiety, stress, PTSD, powerless to relieve suffering) and
- Strong emotion (anger, numbness, fear, frustration, loneliness, sadness, shame).

Care issues related to both care of self and of others, focus only on medical care and compromised end-of-life care. Themes around loss relate to the loss of previously supportive notions, for example purpose, quiet spaces and touch.

Although the study by Hines and colleagues (2021) was considered of lower methodological quality, the themes it raises are supported by other studies in this review. Hines and colleagues (2021) were the only ones to directly consider social

Table 3 Themes in the soul–role–context lens

BCW	Soul	Role	Context
Behaviour—threats (140/24)	Distress: psychological; existential; suicidal, strong emotions: anger; betrayal; numbness; fear; helpless; hopeless; undervalued, Loss of: joy; faith; reflection; meaning; touch; trust, pessimism, remorse	Communication challenges, death, medicalisation of suffering, no time for self-care, PTSD, serving others at cost of well-being	Abuse, assault and violence; compromised care; reduced social contact (patients, relatives at work or family, friends in personal life); unacceptable/unavoidable risk-taking; and uncertainty
Behaviour—protectors (79/24)[5]	Address spiritual needs of staff, admit vulnerability, awareness (of self and others), bear not avoid limitations, strong emotions: joy, hope, optimism, physically safe, meaning-making, normalise responses	Agents of noble cause, bridge between patient and family, protect clinician health, sharing family emotional moments	Address basic physical needs of staff, ethical social and professional obligations, mindfulness, service support
Intervention—threats (9/2)[5]	High cost of social deprivation to self-efficacy, isolated, distanced	Patients' psychological distress, redeployment anxiety	Loss of: quiet spaces; usual workplace and interventions, how to decrease stress
Intervention—protectors (35/2)[5]	Organisational culture of caring, decrease stress/anxiety, support, track well-being	Check-in, time off for courses, listening/processing moral injury	Self-care resources, peer support, physical safety, recognition from leaders, space to share stress, redeployment specialist training
Policy—threats (17/3)[5]	Social isolation	Staff shortages, system overload, scant resource allocation	Focus on medical care, scant resource allocation, burnout/stress risk, lowering standards, limited infrastructure
Policy—protectors (38/3)[5]	Communication to empower and raise morale, mental and emotional strength, self-care	Train staff in physical protection and technology to assist patients keeping in touch	Care: best available; capacity for, protect staff needs, clear communication, PPE, safety, support, recognition from leaders
Total	177	34	136

[5]Numbers of words, phrases and concepts found/numbers which are both protectors and threats.

Fig. 4 WordArt representation of data extracted

support, where Schwartz and colleagues (2020) only discussed social support in the workplace. Loneliness in clinicians (overworking alone and limited socialising outside of work) has been reported before COVID-19 (Rokach, 2019a) and might have been a valuable area to explore during the various lockdowns. The loneliness cycle, where being isolated leads to increased isolation, can lead to hypervigilance (Rokach, 2019b), which is mentioned in two other selected studies (Chandra & Vanjare, 2020; Schwartz et al., 2020). Themes from Hines and colleagues (2021) excluded from other studies relate to social support: time away from loved ones, feeling insensitive to stress, social justice, space to share stress and lockdown.

Organisations' psychological support for staff was found to be advocated in two studies found (Chandra & Vanjare, 2020; Schwartz et al., 2020), yet organisations' emotional and spiritual support is not advocated in any of the nine studies. Emotional needs were briefly considered under self-care in three of the studies reviewed (Alexander, 2020; Chandra & Vanjare, 2020; Schwartz et al., 2020) while another three studies mentioned spiritual needs (Hines et al., 2021; Mantri et al., 2020; Zhizhong et al., 2020). Schwartz and colleagues (2020) highlight that staff should be aware of their own emotions during self-care. Chandra and Vanjare (2020) advocate discussing emotional challenges and stressors in depth yet do not mention interventions which may be used. Mantri and colleagues (2020) discuss spiritual symptoms and interventions for diagnosed moral injury. Hines and colleagues (2021) recommend supportive workplaces and social support, though they stopped short of exploring what a supportive workplace looked like, and how social support might be valuable.

Secondary review question: "How has experience of moral injury due to COVID-19 restrictions contributed to healthcare staff's experience of moral distress, compassion fatigue or burnout?".

The reviewed studies provide less evidence of moral distress, compassion fatigue and burnout in relation to moral injury. No exploration or discussion of any potential relationships between moral injury and these phenomena as sequalae was found across the nine studies in this review.

Moral distress. Five studies mentioned various kinds of distress (Alexander, 2020; Chandra & Vanjare, 2020; Hines et al., 2021; Mantri et al., 2020; Schwartz et al., 2020), although two studies specifically discussed psychological distress (Chandra & Vanjare, 2020; Mantri et al., 2020). Schwartz and colleagues (2020) highlight the possible links of moral distress to increased burnout, also pointing to the direction of likely augmented distress levels for over two years after a pandemic. The authors advocate for routine social connection to improve well-being, again with no consideration of COVID-19 distancing measures (Schwartz et al., 2020). Hines and colleagues (2021) discussed the financial and ethical dimensions to moral distress, whereby healthcare staff's turnover and decreased productivity impact the organisation. While distress decreased over three months, moral injury scores remained stable, contradicting findings from other countries, showing distress remaining stable or increasing. Alexander (2020) discussed mental, emotional and spiritual distress, and how these can be compared between healthcare staff and military personnel particularly during moral contravention. Due to the healthcare chaplain's ability to consider the "whole" person, hope and direction can be restored when work is done to understand the decisions and responsibilities leading to the distress (Alexander, 2020).

Compassion fatigue. Compassion fatigue was not discussed in any of the studies selected.

Burnout. Five studies reported on burnout, two studies in passing (Chandra & Vanjare, 2020; Schwartz et al., 2020). One study directly tested a link between burnout and moral injury (Mantri et al., 2020) finding a correlation ($r = 0.57$) between moral injury and burnout among mostly doctors when tested against Maslach Burnout Inventory, although its statistical significance is not disclosed. Hines and colleagues (2021) advocated for early identification of moral injury to prevent long-term issues like burnout or post-traumatic stress developing. In the fifth study, Alexander (2020) discussed at length the debate surrounding the interrelatedness of burnout and moral injury, debating whether burnout and moral injury are the same, completely different, or whether burnout overlaps with depression.

Discussion

This review synthesised international evidence to explore whether and how COVID-19 restrictions affected healthcare staff's experiences of moral injury. In the main, it seems that staff are aware of the concept of moral injury, it resonates with them on some level, but they perhaps cope by not reflecting on it. From clinical practice, the first author has noted many healthcare staff talking of that sense of betrayal and

strong emotional response outlined in the evidence above. In general, there may be a reluctance to "name" or label the experience as moral injury, in line with existing evidence that some staff are concerned with discrimination and stigmatisation in the workplace associated with disclosure of a diagnosed mental health condition (Waugh et al., 2017). Describing moral injury as a purely psychological concept, rather than a whole-person concept (compare, for example, the spiritual need to be valued or loved), seems disadvantageous in anecdotal evidence from practice and the findings of this review. Staff appear reluctant to put a label to moral injury, but the labels are attached by others (Alexander, 2020; Busfield, 2020; Mantri et al., 2020; Zhizhong et al., 2020). Some experiences of healthcare staff reported in the nine studies which could be labelled "moral injury" are: lack of organisational preparedness and fear of exposure (Chandra & Vanjare, 2020); immediate threat to safety, social isolation, witnessing physical suffering and death (Hines et al., 2021); and loss of presence and touch, and "not being able to work as we should as healthcare professionals" (Vandenhoeck et al., 2021).

Current evidence found during this review indicates that spiritual concerns and strong emotions are perhaps discussed in less direct terms. An example of this would be the discussion above regarding loneliness and isolation resulting from decreased social support during various lockdown or social distancing measures introduced for COVID-19. Additionally, the feelings of spiritual distress (of feeling despair, devalued, helpless, hopeless, inner conflict, invisible) and strong emotion (anger, numbness, fear, frustration, loneliness) were voiced to/by chaplains providing staff support, rather than formally assessed. The exception to this is feeling shame, which is traditionally associated with the moral injury literature (for example Mantri et al., 2020; Zhizhong et al., 2020). Dwelling on the situations or events which generate strong negative emotions (feeling frustrated, helpless, invisible) may lead to rumination (Borders, 2020). So, it might be that the context causes moral injury, but that cogitating compounds the injury.

The greater focus on psychological, rather than spiritual or emotional support in the studies found, may be influenced by organisations prioritising psychological support over spiritual or emotional support. Five papers included in this review advocate a psychological or mental health response from clinicians and organisations (Alexander, 2020; Chandra & Vanjare, 2020; Hines et al., 2021; Mantri et al., 2020; Schwartz et al., 2020); three papers mention moral injury within a purely a spiritual context (Busfield, 2020; Stirling, 2020; Vandenhoeck et al., 2021); only one advocates for preventative programmes (Hines et al., 2021). Evidence from Alexander (2020) also shows that clinical language can be unhelpful sometimes, particularly when the focus is on "diagnosis" and "treatment", which may not coincide with what healthcare staff expect when they seek spiritual/emotional support for themselves. This coincides with the findings of Farnsworth and colleagues (2017), who indicate that pathologising moral processes to fit a psychological diagnosis can be unhelpful. Instead, viewing the person holistically as a spiritual entity, complete with complex multi-threaded life stories might be beneficial. Alexander advocates using the person's story and meaning-making "*in their own words"* (Alexander, 2020) to promote holistic healing and allowing the person to move forward even with issues that cannot be fixed.

One area of future research may be to investigate ways a more spiritually focussed approaches to the prevention of moral injury experienced by healthcare staff and their effectiveness. This highlights the value of the healthcare chaplain who provides non-judgemental support to aid reflection, while he/she/they allows the individual to restore, transform and make meaning in their own way. Nursing professionals who adopt "compassionate self and […] sensitive, non-judgemental and respectful towards oneself" foster compassion for others (Wiklund Gustin & Wagner, 2013). This intentional use of self as an expression of compassionate caring, mutually engaged with another's vulnerability, honours courageous people's vulnerability towards each other. If vulnerability is not well received, the person sharing might feel ashamed and exposed (Wiklund Gustin & Wagner, 2013), thus contributing to perceptions of moral injury. If caring cannot be "taught" (Judkins & Eldridge, 2001) it should be nurtured in those who display it. When healthcare staff model stressful behaviour, stress across the organisation may be the result. Staff who care for patients and colleagues might have an expectation that their employing organisation will care for them.

We found considerably less evidence to help us answer our secondary review question (that is, experience of moral distress, compassion fatigue or burnout). Compassion fatigue was not discussed in any of the studies selected. This is concerning, as evidence from the police force links moral injury/distress to compassion fatigue and burnout (Papazoglou & Chopko, 2017). Perhaps when considering moral injury, comparisons should be drawn between healthcare staff and first responders rather than the military. There may be greater similarities across these non-combatant populations. Alternatively, another area of future research could explore the indicators above that moral injury is independent of role, being more associated with soul (one's beliefs and values) and context (Table 3). It might be valuable to repeat this scoping review search and synthesis method using the military moral injury literature to explore whether the soul–role–context paradigm produces a similar result.

The evidence found which indicates stress can be eliminated by training is perhaps unrealistic, and may be framed instead as learning to manage stress. Healthcare organisations, and COVID-19 restrictions, may even be the source of some of that stress. Long-standing issues known to cause stress in healthcare staff include: long hours, unrealistic time pressure, unachievable deadlines and poor staff support (Royal College of Nursing, 2015). Organisations have a legal duty of care for employees during the COVID-19 pandemic period (Scottish Government, 2020); however, two aspects must be considered, that is, (1) whether this is truly effective in practice and (2) whether staff do feel that they belong to an organisation with a culture of caring.

Several themes were created under the BCW "motivation" and "service provision" categories (Table 2). Our findings suggest that how managers design and implement services might be affected by the motivation of the staff delivering those services. If managers detect underperforming services, then a potential reason might be declining staff motivation, perhaps linked to moral injury. This implies that a policy encouraging self-care across the organisation and protecting staff from moral injury needs to be supported by additionally providing opportunities within the context of the working day for staff to exercise self-care. Potentially valuable

opportunities include honouring and respecting rest breaks (Royal College of Nursing, 2015), and providing cover when staff undertake training. Staff may feel undervalued due to lack of organisational support. Since it is more expensive for organisations to recruit, train and place new nurses than keep existing staff (Royal College of Nursing, 2015), the savings could pay for additional staff to facilitate breaks.

Measures and Diagnostic Tools

Two of the included studies (Mantri et al., 2020; Zhizhong et al., 2020) reported on the validation process of the Moral Injury Symptoms Scale (MISS), adapting the military version (Koenig et al., 2018) for use with healthcare staff. In both studies, the starting point was the short form of the military version (10 items), rather than the original long form of 54 items. This can be seen as a lost opportunity to understand how and which of the 54 items could be could be translate for use in the health care. For instance, items such as M27 "Most people will respond in kind when they are trusted" and M34 "Seeing so much death has changed me" might provoke different responses in healthcare staff and non-combatant populations due to contractual obligations and life-saving expectations.

A similar method was used to validate the Moral Injury Events Scale (Nash et al., 2013), whose items were used to populate the betrayal and moral concerns subscale of the MISS. Two positively worded items relating to trust in self and others were removed instead of being reworded and further validation of the new version was not done. We would argue that trust is an important aspect to morality, and efforts to include it would have benefitted the scale's content validity.

The difficulty with any tool assessing moral injury, is that it implies that the moral values and beliefs cited on the questionnaire are the standard to which a person should compare themselves against. Rather, a person's beliefs and values are unique to them, a combination of their culture, religion, language, history, nationality and the laws of the country they live in. In a diverse multicultural world, it may be unrealistic to imagine that one questionnaire can be flexible enough to cater for all beliefs and values. The best person to diagnose moral injury is the person themselves, as the expert in their moral code, the context in which they live and work, and the constraints their role puts on them.

Comparing Military and Healthcare Populations

When assessing literature discussing moral injury, a number of factors must be considered. In the military, there is an endorsement, if not necessarily an expectation, that one may be asked to do something one does not consider right, bear witness to inhuman conduct, or be the victim of someone else's behaviour (Litz et al., 2022). This expectation is simply not present in the general population and indeed, for healthcare staff, the expectation is the opposite: that one will do ones best to save life, to prevent life ending prematurely, to support that life to be as pain-free as possible. If there is a legal obligation for assisted death or suicide, voluntary assisted dying or euthanasia, this may pose difficulties for healthcare staff in the future.

Healthcare staff save lives: the military protect lives. In the pastoral supervision lens above, while the soul and role might show similarities across populations, the context difference is crucial, resulting in different constraints and expectations placed on them. Also, the UK military population is < 12% female according to Harding (2021). The healthcare workforce in England and Scotland is > 75% female (NHS England, 2021; Scottish Government, 2022). There are some important pieces of work carried out on moral injury; however, some do not report sex, so it is difficult to assess how the differences in population might affect transferability of findings, for example Koenig and colleagues (2018). Much of the literature focuses on participants who score highly on diagnostic questionnaires, and those questionnaires focus on the presence of negative qualities, for example guilt, shame, loss, self-condemnation (Koenig et al., 2018). It could be argued that a more healthy, holistic approach could assess the presence or absence of positive qualities, for example the spiritual need to love or be loved. Perhaps over time, balanced assessments might indicate when a person reaches a point where tolerance of moral violation requires intervention.

Interventions

There are several interventions available to the healthcare chaplain. Arguably, the most essential is the intentional use of self (Kelly, 2019), which is based on a non-judgemental presence offered to the person being supported. As noted above, not feeling valued contributes towards many of the automatic behaviours which formed part of this review (Tables 2; 3) but also one of the principal reasons for leaving healthcare professions (Neville, 2021). The BCW automatic motivation themes found included threats of abuse, the loss of hope or trust and feelings of anxiety/powerlessness. These issues seem to provoke a response that precedes thinking about them (Zajonc, 1980), as if the soul is responding before engaging the brain. These are perhaps hardest to control and recover from, but might protect against moral injury's potential to harm healthcare staff. It would be interesting to explore whether a healthcare chaplain's non-judgemental presence might contribute to the person's sense of value to the organisation. This could have the potential to lessen the effects of morally injurious events on the person before any cumulative effects lead to compassion fatigue or burnout.

The social support of the chaplain walking alongside people in pain, confusion and sadness is illustrated by Busfield who "can't do anything about the coronavirus, but I can attempt to address the loneliness virus" (Busfield, 2020, p. 220). Kwak and colleagues (2022) in a survey of healthcare chaplains in the USA, highlight the increase in patients' sense of isolation/abandonment, but also a greater depth to the conversations when supporting staff, particularly the greater speed required for end-of-life conversations. This increase in staff support provided by chaplains is also reported in a survey by Snowden (2021). Lack of workplace social support contributes to occupational stress, leading to burnout (Galek et al., 2011). It may be that the advantage of a healthcare chaplain within an organisation arises from the relationships they build with staff, so that, during times of crisis or enhanced stress,

the chaplain is known to the staff and can provide valuable social support, rather than providing more clinical or psychological support.

One intervention available is pastoral supervision (Association for Pastoral Supervision & Education, 2021): a structured way for staff to reflect on practice using their world view, morals and beliefs to aid self-awareness and growth. The purpose of reflective practice (Paterson, 2019) is the "soul, role and context dialogue" that creates a spiritual way of connecting inner values with the outer world while acknowledging their interdependency. Supporting staff through pastoral supervision, the healthcare chaplain offers a ministry of presence (Holm, 2009), providing a safe, confidential and non-judgmental space, allowing the person to explore their potential and discovering who they might become.

Group reflective practice, perhaps in the form of Values Based Reflective Practice®, has been found to be beneficial for some when integrating, and comparing, personal and organisational values (Kennedy & Kennedy, 2022). This enables staff to reflect on their practice with others who share similar values; for example, belonging, sense of value, caring and supporting; but may perform very different clinical roles. This reflective space has similarities with the Schwartz rounds® (Maben et al., 2021) where the multidisciplinary team come together to discuss the emotional and ethical impact that workplace stories have on individuals. Art narratives have been found to be effective in reflective emotional debrief with student nurses (Kinsella Frost, 2019). Reflective practice, including pastoral supervision, should be used cautiously as a "fix-all": evidence indicates people talking prematurely may worsen the effects of post-traumatic stress (Van Emmerik et al., 2002).

Additional Interventions

Carey and Hodgson's (2018) trauma-based definition of moral injury breaks down the complexity of moral injury into component (biological, psychological, social and spiritual) symptoms: it is one of the few definitions to separate the psychological and spiritual concerns. Following a summary of the existing moral injury screening tools, they introduce "Pastoral Narrative Disclosure", a structured therapeutic narrative technique to walk a person through their story. This may be beneficial for discussing specific trauma contributing to the moral injury although it is not clear how it applies to the healthcare situation, where suspending routine family visits for patients results in staff having to compromise on the care they believe patients deserve, like the slow dripping of a tap, wearing down the person into moral injury rather than the suddenness of a traumatic triggering event. Consideration of preventative measures to protect a person from developing moral injury would have also been beneficial.

Review Strengths and Limitations

This review was based on rigorous planning, analysis and recording of results from international studies, underpinned by current methodological guidance. The evidence was analysed in three different ways to help highlight emerging themes, thus

reducing slightly the bias of creating findings based on a small-scale scoping review. The "rapid" nature of the review, to analyse the evidence to inform clinical practice, gives an indicator of the issues and concerns of healthcare staff.

We nevertheless acknowledge a number of limitations. Setting the inclusion criteria to English-language studies, and only searching four databases, limits the number of eligible studies found from the evidence base. Data extraction from studies to inform a review is necessarily subjective. Given that the first author is a healthcare chaplain, the possibility of bias in the interpretation of results cannot be ruled out, although it was minimised by the presence of the second author whose background is nursing. This has allowed for the evidence to be examined through different lenses before being synthesised and reported.

Conclusions

This scoping review synthesised international evidence on healthcare staff's experiences of moral injury and its perceived impact on staff's life and work due to COVID-19 restrictions. This review found nine studies which offer a depth of understanding of how healthcare staff experience moral injury. Moral injury seems to resonate with healthcare staff internationally; however, they may be reluctant to "name" it. The spiritual and emotional needs of healthcare staff seem to be mostly ignored. Although psychological support is often the recommended approach by organisations, a greater focus on spiritual and emotional support is recommended.

Supplementary Information The online version contains supplementary material available at https://doi.org/10.1007/s10943-023-01803-w.

Author Contributions Contributor and guarantor information is as follows: FJGJ conceived the initial idea, performed literature search, wrote the first draft of the manuscript and is a guarantor. GK supervised the literature search, and edited and prepared the manuscript. Both authors read and approved the final manuscript.

Funding This scoping review was conducted during a Master of Science degree in Advanced Healthcare Practice and did not receive funding.

Declarations

Conflict of interest The authors have no relevant financial or non-financial interests to disclose. All authors declare no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years, no other relationships or activities that could appear to have influenced the submitted work.

Ethical Approval This scoping review was conducted during a Master of Science degree in Advanced Healthcare Practice and does not require ethics approval.

References

Alexander, D. W. (2020). Walking together in exile: Medical moral injury and the clinical chaplain. *Journal of Pastoral Care and Counseling, 74*(2), 82–90. https://doi.org/10.1177/1542305020912263

Alexander, M. (2021, April 12). *NHS staff are suffering from 'moral injury', a distress usually associated with war zones.* The Guardian. https://www.theguardian.com/commentisfree/2021/apr/12/nhs-staff-moral-injury-distress-associated-with-war-zones-pandemic

Alharbi, J., Jackson, D., & Usher, K. (2020). The potential for COVID-19 to contribute to compassion fatigue in critical care nurses. *Journal of Clinical Nursing, 29*(15–16), 2762–2764. https://doi.org/10.1111/jocn.15314

Ames, D., Erickson, Z., Geise, C., Tiwari, S., Sakhno, S., Sones, A. C., Tyrrell, G., Mackay, R. B., Steele, W., Van Hoof, T., Weinreich, H., & Koenig, H. G. (2021). Treatment of moral injury in U.S. veterans with PTSD using a structured chaplain intervention. *Journal of Religion and Health, 60*, 3052–3060. https://doi.org/10.1007/s10943-021-01312-8

Andrist, E., Clarke, R. G., & Harding, M. (2020). Paved with good intentions: Hospital visitation restrictions in the age of coronavirus disease. *Pediatric Critical Care Medicine, 21*(10), e924–e926. https://doi.org/10.1097/PCC.0000000000002506

Association for Pastoral Supervision and Education. (2021). *Definition and ethos*. https://www.pastoralsupervision.org.uk/definition-and-ethos

Borders, A. (2020). Beliefs, traits and motivations underlying rumination. In A. Borders (Ed.), *Rumination and related constructs* (pp. 239–277). Cambridge: Academic Press.

Busfield, L. (2020). Listening on the outside—screaming on the inside: Reflections from an acute hospital chaplain during the first weeks of COVID-19. *Health and Social Care Chaplaincy, 8*(2), 218–222. https://doi.org/10.1558/hscc.41807

Carey, L. B., & Hodgson, T. J. (2018). Chaplaincy, spiritual care and moral injury: Considerations regarding screening and treatment. *Frontiers in Psychiatry, 9*(619), 1–10. https://www.frontiersin.org/articles/10.3389/fpsyt.2018.00619/full

Chandra, A., & Vanjare, H. (2020). Coping by the healthcare workers during COVID-19 pandemic in developing countries–a review. *Anaesthesia, Pain and Intensive Care, 24*(3), 346–353. https://doi.org/10.35975/apic.v24i3.1288

Critical Appraisal Skills Programme. (2021). *CASP checklists*. https://casp-uk.net/casp-tools-checklists/

Davda, L., Gallagher, J., & Radford, D. (2018). Migration motives and integration of international human resources of health in the United Kingdom: Systematic review and meta-synthesis of qualitative studies using framework analysis. *Human Resources for Health*. https://doi.org/10.1186/s12960-018-0293-9

Dunford, D., Dale, B., Stylianou, N., Lowther, E., Ahmed, M., & de la Torre Arenas, I. (2020, April 7). *Coronavirus: the world in lockdown in maps and charts*. British Broadcasting Corporation. https://www.bbc.co.uk/news/world-52103747

Farnsworth, J. K., Drescher, K. D., Evans, W., & Walser, R. D. (2017). A functional approach to understanding and treating military-related moral injury. *Journal of Contextual Behavioral Science, 6*(4), 391–397. https://doi.org/10.1016/j.jcbs.2017.07.003

Galek, K., Flannelly, K. J., Greene, P. B., & Kudler, T. (2011). Burnout, secondary traumatic stress, and social support. *Pastoral Psychology, 60*(5), 633–649. https://doi.org/10.1007/s11089-011-0346-7

Ghebreyesus, T.A. (2020, March 11). *WHO director-general's opening remarks at the media briefing on COVID-19–11 March 2020*. World Health Organization. https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020

Greenberg, N., Docherty, M., Gnanapragasam, S., & Wessely, S. (2020). Managing mental health challenges faced by healthcare workers during covid-19 pandemic. *BMJ, 368*, m1211. https://doi.org/10.1136/bmj.m1211

Harding, M. (2021). Representation of women in the armed forces. UK Parliament, House of Commons Library. https://commonslibrary.parliament.uk/representation-of-women-in-the-armed-forces/

Hines, S. E., Chin, K. H., Glick, D. R., & Wickwire, E. M. (2021). Trends in moral injury, distress, and resilience factors among healthcare workers at the beginning of the covid-19 pandemic. *International Journal of Environmental Research and Public Health, 18*(2), 1–11. https://doi.org/10.3390/ijerph18020488

Hodgson, T. J., & Carey, L. B. (2017). Moral Injury and definitional clarity: Betrayal, spirituality and the role of chaplains. *Journal of Religion and Health, 56*(4), 1212–1228. https://doi.org/10.1007/s10943-017-0407-z

Holm, N. (2009). Practising the ministry of presence in chaplaincy. *Journal of Christian Education, 52*, 29–42. https://doi.org/10.1177/002196570905200305

Hossain, F., & Clatty, A. (2021). Self-care strategies in response to nurses' moral injury during COVID-19 pandemic. *Nursing Ethics, 28*(1), 23–32. https://doi.org/10.1177/0969733020961825

Jameton, A. (2017). What moral distress in nursing history could suggest about the future of health care. *American Medical Association Journal of Ethics, 19*(6), 617–628. https://doi.org/10.1001/journalofethics.2017.19.6.mhst1-1706

Judkins, S., & Eldridge, C. (2001). Let's put "caring" back into healthcare. *Journal of Nursing Administration, 31*(11), 509–511.

Kelly, E. (2019). Formation and the intentional use of self. In E. Kelly & J. Swinton (Eds.), *Chaplaincy and the soul of health and social care: Fostering spiritual wellbeing in emerging paradigms of care.* London: Jessica Kingsley Publishers.

Kennedy, H., & Kennedy, J. (2022). "It's real, it's much more real": An exploration of values based reflective practice® as a reflective tool. *Health and Social Care Chaplaincy, 10*(1), 78–92. https://doi.org/10.1558/hscc.19832

Kinsella Frost, C. (2019). Art in debrief: A small-scale three-step narrative inquiry into the use of art to facilitate emotional debriefing for undergraduate nurses. *Journal of Research in Nursing, 24*(3–4), 197–209. https://doi.org/10.1177/1744987118812539

Koenig, H. G., Ames, D., Youssef, N. A., Oliver, J. P., Volk, F., Teng, E. J., Haynes, K., Erickson, Z. D., Arnold, I., O'Garo, K., & Pearce, M. (2018). The Moral Injury Symptom Scale-Military Version. *Journal of Religion and Health, 57*(1), 249–265. https://doi.org/10.1007/s10943-017-0531-9

Kwak, J., Rajagopal, S., Handzo, G., Hughes, B. P., & Lee, M. (2022). Perspectives of board-certified healthcare chaplains on challenges and adaptations in delivery of spiritual care in the COVID-19 era: Findings from an online survey. *Palliative Medicine, 36*(1), 105–113. https://doi.org/10.1177/02692163211043373

Litz, B. T., Plouffe, R. A., Nazarov, A., Murphy, D., Phelps, A., Coady, A., Houle, S. A., Dell, L., Frankfurt, S., Zerach, G., & Levi-Belz, Y. (2022). Defining and assessing the syndrome of moral injury: Initial findings of the moral injury outcome scale consortium. *Frontiers in Psychiatry*. https://doi.org/10.3389/fpsyt.2022.923928

Litz, B. T., Stein, N., Delaney, E., Lebowitz, L., Nash, W. P., Silva, C., & Maguen, S. (2009). Moral injury and moral repair in war veterans: A preliminary model and intervention strategy. *Clinical Psychology Review, 29*(8), 695–706. https://doi.org/10.1016/j.cpr.2009.07.003

Lizarondo, L., Stern, C., Carrier, J., Godfrey, C., Rieger, K., Salmond, S., Apostolo, J., Kirkpatrick, P., & Loveday, H. (2020). Mixed methods systematic reviews. In E. Aromataris & Z. Munn (Eds.), *JBI Manual for evidence synthesis.* Adelaide: The Joanna Briggs Institute. https://doi.org/10.46658/JBIMES-20-09

Maben, J., Taylor, C., Reynolds, E., McCarthy, I., & Leamy, M. (2021). Realist evaluation of Schwartz rounds® for enhancing the delivery of compassionate healthcare: Understanding how they work, for whom, and in what contexts. *BioMed Central Health Services Research, 21*(1), 709. https://doi.org/10.1186/s12913-021-06483-4

Mantri, S., Lawson, J. M., Wang, Z., & Koenig, H. G. (2020). Identifying moral injury in healthcare professionals: The moral injury symptom scale-HP. *Journal of Religion and Health, 59*(5), 2323–2340. https://doi.org/10.1007/s10943-020-01065-w

Michie, S., Atkins, L., & West, R. (2014). *The behaviour change wheel. A guide to designing interventions*. Silverback Publishing.

Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science, 6*(1), 42. https://doi.org/10.1186/1748-5908-6-42

Microsoft. (2023). *Excel*. Microsoft Corporation https://www.microsoft.com/en-us/microsoft-365/excel

Musto, L., & Rodney, P. (2018). What we know about moral distress. In C. Ulrich & C. Grady (Eds.), *Moral distress in the health professions* (pp. 9–20). Cham: Springer. https://doi.org/10.1007/978-3-319-64626-8_2

NHS England. (2021). NHS celebrates the vital role hundreds of thousands of women have played in the pandemic. https://www.england.nhs.uk/2021/03/nhs-celebrates-the-vital-role-hundreds-of-thousands-of-women-have-played-in-the-pandemic/

Nash, W. P., Marino Carper, T. L., Mills, M. A., Au, T., Goldsmith, A., & Litz, B. T. (2013). Psychometric evaluation of the moral injury events scale. *Military Medicine, 178*(6), 646–652. https://doi.org/10.7205/MILMED-D-13-00017

Neville, S. (2021, June 15). *'Undervalued' nurses depart, leaving NHS with staffing shortage.* Financial Times. https://www.ft.com/content/f2ace7d9-59ce-406c-9db6-a844e6806e05

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., … Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ, 372*, n71. https://doi.org/10.1136/bmj.n71

Papazoglou, K., & Chopko, B. (2017). The role of moral suffering (moral distress and moral injury) in police compassion fatigue and PTSD: An unexplored topic. *Frontiers in Psychology, 8*, 1999. https://doi.org/10.3389/fpsyg.2017.01999

Paterson, M. (2019). Discipled by praxis: Soul and role in context. *Practical Theology, 12*(1), 7–19. https://doi.org/10.1080/1756073X.2018.1562689

Rokach, A. (2019a). The loneliness of clinicians. In A. Rokach (Ed.), *The psychological journey to and from loneliness* (pp. 237–244). Cambridge: Academic Press. https://doi.org/10.1016/B978-0-12-815618-6.00010-2

Rokach, A. (2019b). Addressing loneliness. In A. Rokach (Ed.), *The psychological journey to and from loneliness* (pp. 245–272). Cambridge: Academic Press. https://doi.org/10.1016/B978-0-12-815618-6.00011-4

Rose, L., Cook, A., Casey, J., & Meyer, J. (2020). Restricted family visiting in intensive care during COVID-19. *Intensive and Critical Care Nursing, 60*, 102896. https://doi.org/10.1016/j.iccn.2020.102896

Royal College of Nursing. (2015). *Stress and you: a guide for nursing staff*. https://www.rcn.org.uk/professional-development/publications/pub-004966

Schwartz, R., Sinskey, J. L., Anand, U., & Margolis, R. D. (2020). Addressing postpandemic clinician mental health: A narrative review and conceptual framework. *Annals of Internal Medicine, 173*(12), 981–988. https://doi.org/10.7326/M20-4199

Scottish Government. (2020). *Staff wellbeing and support: employers' duty of care during COVID-19 pandemic*. Scottish Government Health Workforce Division. https://www.sehd.scot.nhs.uk/dl/DL(2020)08.pdf

Scottish Government .(2022). *Health and social care—staff experience: report 2021*. Health Workforce Directorate. https://www.gov.scot/publications/health-social-care-staff-experience-report-2021/pages/20/

Seton, J. (1775). To Dr. Joseph Priestly. In *The London review of English and foreign literature*, p. 527–531

Shay, J. (2014). Moral injury. *Psychoanalytic Psychology, 31*(2), 182–191. https://doi.org/10.1037/a0036090

Snowden, A. (2021). What did chaplains do during the COVID pandemic? An international survey. *Journal of Pastoral Care & Counseling, 75*(Suppl 1), 6–16. https://doi.org/10.1177/1542305021992039

Stirling, I. (2020). COVID-19. The call of Louisa Jordan: The formation of the spiritual care team at NHS Louisa Jordan, Glasgow Scotland. *Health and Social Care Chaplaincy, 9*(2), 154–174. https://doi.org/10.1558/hscc.42420

Temple, S. (2019, May 12). Word clouds are lame. *Towards Data Science*. https://towardsdatascience.com/word-clouds-are-lame-263d9cbc49b7

Ulrich, C. M., & Grady, C. (2018). Introduction. In C. M. Ulrich & C. Grady (Eds.), *Moral distress in the health professions* (pp. 1–7). Cham: Springer. https://doi.org/10.1007/978-3-319-64626-8_1

Van Emmerik, A. A. P., Kamphuis, J. H., & Hulsbosch, A. M. (2002). Single session debriefing after psychological trauma: A meta-analysis. *Lancet, 360*(9335), 766–771. https://doi.org/10.1016/S0140-6736(02)09897-5

Vandenhoeck, A., Holmes, C., Desjardins, C. M., & Verhoef, J. (2021). "The most effective experience was a flexible and creative attitude"—reflections on those aspects of spiritual care that were lost, gained, or deemed ineffective during the pandemic. *Journal of Pastoral Care & Counseling, 75*(Suppl 1), 17–23. https://doi.org/10.1177/1542305020987991

Waugh, W., Lethem, C., Sherring, S., & Henderson, C. (2017). Exploring experiences of and attitudes towards mental illness and disclosure amongst health care professionals: A qualitative study. *Journal of Mental Health, 26*(5), 457–463. https://doi.org/10.1080/09638237.2017.1322184

Wiklund Gustin, L., & Wagner, L. (2013). The butterfly effect of caring–clinical nursing teachers' understanding of self-compassion as a source to compassionate care. *Scandinavian Journal of Caring Sciences, 27*(1), 175–183. https://doi.org/10.1111/j.1471-6712.2012.01033.x

Zajonc, R. B. (1980). Feeling and thinking–preferences need no inferences. *American Psychologist, 35*(2), 151–175. https://doi.org/10.1037/0003-066X.35.2.151

Zhizhong, W., Koenig, H. G., Yan, T., Jing, W., Mu, S., Hongyu, L., & Guangtian, L. (2020). Psychometric properties of the moral injury symptom scale among Chinese health professionals during the COVID-19 pandemic. *BioMed Central Psychiatry, 20*, 556–566. https://doi.org/10.1186/s12888-020-02954-w