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Defining and identifying potentially morally injurious experiences for secure mental healthcare workers: A Delphi study

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MANUSCRIPT DETAILS

TITLE: Defining and identifying potentially morally injurious experiences for secure mental healthcare workers: A Delphi study

ABSTRACT:

Staff in secure mental healthcare settings face unique occupational challenges that may conflict with their personal or professional moral code. Initial research has established the presence of moral injury in this population, though insight into the specific sources and driving factors at the root of this syndrome is limited.

To address this gap, a three-round expert Delphi survey was conducted to gain consensus on the conceptualisation, types and drivers of potentially morally injurious experiences (PMIEs) for secure mental healthcare workers. Healthcare professionals and academics in the field were recruited.

A high level of consensus (80%) was achieved on several sources of moral injury, which related to aspects of the healthcare system, the secure context, relational dynamics and individual practices, behaviours and attitudes. Experts also agreed on several items relating to the definition of a PMIE, the factors driving the occurrence of PMIEs, and the factors increasing risk for the subsequent development of moral injury.

CUST_RESEARCH_LIMITATIONS/IMPLICATIONS__(LIMIT_100_WORDS) :No data available.

The findings suggest that current definitions of PMIEs may, in isolation, be too narrow, prompting the need to attend to the broad range of PMIEs experienced by secure mental healthcare staff. Additionally, recommendations for the primary and secondary prevention of moral injury in secure mental healthcare staff are offered, recognising the particular need for intervention at a systemic level.

CUST_SOCIAL_IMPLICATIONS__(LIMIT_100_WORDS) :No data available.

This study is the first to consider the range of sources of moral injury faced by staff providing care for people with complex forensic and mental health needs.

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Abstract

Purpose: Staff in secure mental healthcare settings face unique occupational challenges that may conflict with their personal or professional moral code. Initial research has established the presence of moral injury in this population, though insight into the specific sources and driving factors at the root of this syndrome is limited.

Method: To address this gap, a three-round expert Delphi survey was conducted to gain consensus on the conceptualisation, types and drivers of potentially morally injurious experiences (PMIEs) for secure mental healthcare workers. Healthcare professionals and academics in the field were recruited.

Findings: A high level of consensus ($\geq 80\%$) was achieved on several sources of moral injury, which related to aspects of the healthcare system, the secure context, relational dynamics and individual practices, behaviours and attitudes. Experts also agreed on several items relating to the definition of a PMIE, the factors driving the occurrence of PMIEs, and the factors increasing risk for the subsequent development of moral injury.

Practical implications: The findings suggest that current definitions of PMIEs may, in isolation, be too narrow, prompting the need to attend to the broad range of PMIEs experienced by secure mental healthcare staff. Additionally, recommendations for the primary and secondary prevention of moral injury in secure mental healthcare staff are offered, recognising the particular need for intervention at a systemic level.

Originality: This study is the first to consider the range of sources of moral injury faced by staff providing for people with complex forensic and mental health needs.

Keywords: Moral injury, Mental healthcare, Staff wellbeing, PMIEs, Secure care, Delphi

Introduction

Secure mental healthcare settings afford a range of challenges and stressors for staff operating within such an environment, who face the risk of direct exposure to several potentially traumatic experiences. This occupational group are frequently subject to displays of aggression by patients, with 67-70% of secure mental healthcare staff being the victim of physical violence (Newman *et al.*, 2023a) and up to 99% being subject to verbal assault (Kelly *et al.*, 2015). Exposure to self-harming behaviours and attempted and completed suicide by patients are also common experiences for staff (Chammas *et al.*, 2022; Newman *et al.*, 2023a), and can be experienced as traumatic (Sandford *et al.*, 2020). Furthermore, the risk for indirect, or 'secondary', trauma is also notably pertinent in secure mental healthcare workers, by nature of caring for people with some of the most pervasive trauma and criminal offending histories (Newman *et al.*, 2023b). By consequence of their increased risk for trauma exposure, presentations of trauma symptomology are also noted to be elevated in secure mental healthcare workers. Examination of the prevalence of PTSD in secure mental healthcare staff indicates that almost a quarter (22%) meet diagnostic criterion for a probable diagnosis, which is two times greater than the prevalence rate seen in staff working in general mental health services (11%; Rodrigues *et al.*, 2021), and five times greater than rates reported for the general UK population (McManus *et al.*, 2016). Thus, the additional 'secure' element of healthcare appears to bring additional challenges for staff and their well-being.

In addition to the traumatic experiences faced by staff in secure mental healthcare, however, there are also several ethical tensions brought about by working in this context that may contribute to distress in the workforce. Secure mental healthcare workers provide care to patients who are detained against their will and whose freedoms are restricted, navigating inherent power imbalances in their relationships with those that they care for. They also contend with the demand of balancing care and managing risk, meeting both the forensic and

1
2
3 mental health needs of patients. Such events may not always fit with the 'Criterion A'
4
5 requirement of PTSD (DSM-5; American Psychiatric Association [APA], 2013), which
6
7 recognises traumatic events as those involving 'death, threatened death, actual or threatened
8
9 serious injury, or actual or threatened sexual violence'. However, the effects of such
10
11 experiences may be well accounted for through a 'moral injury' framework.
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16 In accordance with dominant definitions, moral injury defines the distress resulting
17
18 from exposure to 'potentially morally injurious events' (PMIEs) in which an individual
19
20 'perpetrates, fails to prevent, witnesses, or learns about acts that transgress deeply held moral
21
22 beliefs' (Litz *et al.*, 2009, p. 700). Initial research by Morris *et al.* (2022) exploring PMIE
23
24 exposure and subsequent distress in secure mental healthcare staff has noted scores that
25
26 exceed those reported in other healthcare sectors (e.g., Lamb *et al.*, 2021) and parallel those
27
28 reported in military populations (e.g., Forkus *et al.*, 2019). The impacts of moral injury are
29
30 multifaceted, including depression and anxiety (Benatov *et al.*, 2022; Saba *et al.*, 2022), as
31
32 well as sleep disorders, social withdrawal, alcohol and substance use, and suicidal ideation
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34 (e.g., Boscarino *et al.*, 2022; Hall *et al.*, 2022; Padmanathan *et al.*, 2023). Moral injury has
35
36 also been linked to workplace absenteeism and intention to leave the healthcare profession
37
38 (Rabin *et al.*, 2023; Sert-Ozen and Kalaycioglu, 2023). Thus, prevention and management
39
40 strategies that mitigate risk for moral injury in secure mental healthcare staff are warranted,
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42 with potential benefits for workforce well-being as well as the quality and continuity of care
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44 provided.
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51 To inform the development of such strategies, an understanding of the events and
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53 experiences underlying and providing the foundations for moral injury is warranted.
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55 Nevertheless, whilst the relevance and prevalence of moral injury in secure mental healthcare
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57 staff has been noted (Morris *et al.*, 2022), investigation of the PMIEs and driving factors at
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59 the root of such distress is lacking. Thus far, only one study has considered the potentially
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3 morally injurious effect of practices pertinent to the secure mental healthcare setting, with an
4
5 association between exposure to violence and moral injury reported in a sample of secure
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7 mental healthcare workers (Webb *et al.*, 2023). Nevertheless, the cross-sectional,
8
9 correlational design and narrow focus of this study limits the ability to draw substantive
10
11 conclusions regarding the range of morally injurious experiences that occur in this
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13 environment.
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17 In recognition of the limited evidence base, an earlier systematic review of the PMIEs
18
19 faced by staff in forensic and mental health settings was conducted (Webb *et al.*, 2024). The
20
21 review highlighted a broad range of experiences and practices relevant to the secure mental
22
23 health setting that may bear the potential to result in moral injury for staff. However, the
24
25 literature included in the review was primarily focused on ethical dilemmas and morally
26
27 distressing experiences, as opposed to sources of moral *injury*, specifically. Additionally,
28
29 included studies were conducted in forensic or mental health settings, separately, and thus the
30
31 experiences of staff working within both contexts were not reflected in the review.
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35 Accordingly, specific investigation of the potential sources of moral *injury* faced by
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37 healthcare professionals working within the intersection of secure and mental health care is
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39 necessary.
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42 43 44 **Aims**

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46 The aims of the current study were three-fold:

- 47
48 1. To obtain consensus on a definition of PMIEs that suitably captures the range of
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50 sources of moral injury for secure mental healthcare staff
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52 2. To obtain consensus on the PMIEs experienced by secure mental healthcare staff.
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54 3. To obtain consensus on the factors that promote the occurrence of PMIEs in secure
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56 mental healthcare and increase risk for moral injury following PMIE exposure.
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Method

Design

The Delphi method was utilised, as an iterative structured technique for gaining expert opinion on a phenomenon where there lacks a sufficient evidence base (Hsu and Sandford, 2007). The opinions of experts are repeatedly sought over several rounds, for the purpose of reaching consensus on a topic. The study began with an initial exploratory 'idea generation' round, featuring open-ended questions to gather expert opinion on salient issues pertaining to the phenomenon of interest. Ideas generated in the first round were used to develop the survey utilised in two subsequent 'consensus-seeking' rounds, and evaluated by the whole expert panel. The consensus threshold was set a priori at 80%, to ensure that only items on which a high degree of agreement was achieved were retained.

Participants

A purposive sample of 'experts' were recruited. Specifically, healthcare professionals with at least six months experience of working in a secure mental health setting in a clinical, patient-facing role, and academics published in moral injury or distress in healthcare were recruited. The characteristics of experts at each round are presented in Table 1. Overall, 46 experts completed the first round. Thirty-three (71.7%) of these experts completed round two, thirty (90.9%) of whom also participated in the final round. Experts were recruited from the United Kingdom (n=35), as well as the United States of America (n=4), Canada (n=2), Croatia (n=1), Japan (n=1), Norway (n=1), Sweden (n=1) and Switzerland (n=1).

Table 1 here

Materials

The survey presented at round one featured eleven open-ended questions to capture experts' thoughts on the relevance and definition of PMIEs to the experiences of secure mental healthcare staff, as well as the potential sources of moral injury experienced by this population and driving factors (e.g., 'What are the sources of moral injury most commonly faced by healthcare professionals in secure psychiatric settings?', 'Are there any factors unique to the secure psychiatric setting that may cause moral injury?'). The PMIE definition proposed by Litz *et al.* (2009) was provided to experts. Round one responses were analysed using Reflexive Thematic Analysis (Braun and Clarke, 2006) to develop statements that were then rated at round two from 1 ('strongly disagree') to 4 ('strongly agree'). The round two survey was re-presented at round 3, allowing experts to confirm whether they 'agreed' or 'disagreed' with each item.

Procedure

Experts were recruited via email and advertisement on professional networking platforms. Experts were provided with a link through which they could access the participant information sheet, indicate their consent to participate, and provide an email address. Experts who expressed willingness to participate were also encouraged to share the study with others known to them who fit the 'expert' criteria.

Ethical considerations

Ethical approval was obtained from the University of Central Lancashire (UCLan) Science Ethics Committee. Organisational permission was also obtained from the research committee of the organisation from which healthcare workers were recruited. During the recruitment period, an electronic participant information sheet and consent form were provided. A brief statement re-confirming consent was also included at each round of the Delphi. A debrief sheet

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3 was presented at the end of each round, or at the point of withdrawal for those terminating their
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5 participation.
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8 **Results**

9 ***Round one***

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12 Twelve primary themes were extracted at round one. Responses related to the conceptualisation
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14 of PMIEs, potential sources of moral injury, and factors driving the occurrence of PMIEs and
15
16 subsequent development of moral injury. The primary themes and associated subthemes
17
18 encompassed within each of these domains are reported in Table 2.
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22 To assess the reliability of themes yielded, a list of the themes and a short description
23
24 of each was presented to a co-rater, who was instructed to place a sample of 10% of experts'
25
26 qualitative responses into themes. Inter-rater reliability indicated substantial agreement
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28 between raters, Kappa = .72, $p < .001$, with 73.9% of responses placed into the same themes.
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Table 2 here

Rounds two and three

The second and third rounds of the Delphi sought to develop consensus on the items generated from expert responses at round one. The percentage of agree and disagree responses on items are presented in Table 3.

At round two, 64 items were presented to experts, of which 36 items (56.3%) reached consensus on agreement ratings. At round three, three items reached the consensus threshold on disagreement ratings; specifically, over 80% of experts disagreed with the conceptualisation of PMIEs as an ‘unavoidable event in which an individual has had no personal choice in the course of action taken’, and disagreed that ‘having greater autonomy than patients and carers over care decisions’ and ‘renewing or extending the detention of a patient under the Mental Health Act’ were potential PMIEs. Of the remaining 61 items, agreement was achieved on 44 (72.1%) items (see Table 3).

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Table 3 here

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3 Consensus amongst experts on the need to adopt a broader definition of PMIEs, and to
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5 acknowledge the systemic and structural issues that give rise to such experiences, was
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7 maintained across rounds. In line with Shay's (2003) definition, a 'high-stakes' element, in
8
9 which there is an imminent risk of harm, also reached the threshold to be considered a feature
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11 of a morally injurious event by round three.
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15 Furthermore, across both rounds, PMIEs most frequently reaching consensus were
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17 those related to specific practices (*practices of profession*) and care quality (*standards of care*
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19 *delivered*), as well as instances where harm had occurred, either to or by patients, colleagues,
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21 others, or oneself (*past and present harm*). With regards to driving and risk factors,
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23 consensus on relational factors increased between round two and three, with experts agreeing
24
25 that pressure from various parties may drive a healthcare professional to engage in morally
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27 injurious behaviours. With the exception of personal mental health difficulties, agreement
28
29 was reached on all other risk factors relating to *staff well-being* and *system-created conditions*
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31 across both rounds. The final list of items for which agreement was achieved at the $\geq 80\%$
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33 consensus threshold is presented in Table 4.
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Discussion

Using a Delphi method, agreement amongst experts on PMIEs occurring within secure psychiatric settings was achieved. Experts agreed on the need for a broader conceptualisation of PMIEs that captures the range of sources of moral injury that staff may experience in secure mental healthcare settings. Additionally, factors driving the occurrence of PMIEs and the subsequent development of moral injury were established.

In line with Shay's (2003) definition of a morally injurious event, a 'high-stakes' element was identified by the majority of experts as a defining feature of a PMIE. However, many of the proposed PMIEs on which consensus was reached did not reflect situations in which an imminent risk of harm was apparent (e.g., '*working in a system that focuses on risk management and security, rather than healthcare needs*'). Thus, it appears that this may be a characteristic of some, but not all morally injurious experiences. Experts also agreed that the definition of PMIEs should account for experiences of betrayal by trusted others, again aligning with Shay's (2003) conceptualisation of the term. Thus, the current findings support the importance of including of betrayal-based experiences in the conceptualisation and assessment of moral injury.

Experts also agreed that the definition of PMIEs should acknowledge systemic and structural issues as an important contextual feature of moral injury. Indeed, when examining results for factors driving the occurrence of PMIEs and the subsequent development of moral injury, highest levels of consensus were obtained on items describing systemic features. In line with the funnel model proposed in an earlier systematic review of PMIEs in forensic and mental health settings (Webb *et al.*, 2024), several systemic conditions were identified which likely provided the foundations for many PMIEs to occur. For example, experts agreed that prematurely discharging patients to free up beds reflected a potential source of moral injury, which was a consequence of an under-funded healthcare system. Organisations were also

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3 positioned as having a potential role in shaping risk for moral injury following PMIE
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5 exposure, indicating the potential value of systemic solutions in both the primary and
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7 secondary prevention of moral injury.
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10 Despite recognition of the systemic factors that underlie morally injurious acts at both
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12 rounds two and three, however, experts opposed the conceptualisation of PMIEs as
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14 unavoidable events in which actions taken were outside of one's choice. Thus, healthcare
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16 professionals may maintain a sense of personal responsibility for morally injurious situations,
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18 regardless of the rationale for their actions.
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21 Findings also positioned systemic factors as potential sources of moral injury
22
23 themselves. Some of the identified features were inherent to the secure healthcare context,
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25 such as the tensions between risk management and healthcare needs, and the nature of
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27 detaining individuals against their will in a secure environment. This reinforces the notion
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29 that the nature of secure mental healthcare may be an intrinsic source of moral tension. Other
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31 features were extrinsic to secure mental healthcare, however, such as a non-therapeutic
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33 culture and physically inadequate ward environments, the latter of which has been noted
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35 previously in the moral distress literature (Austin *et al.*, 2003, 2005; Danda, 2020). Thus,
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37 there appears need to go beyond solely framing systemic factors as contributors to distressing
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39 experiences, but also as direct sources of moral distress and, potentially, moral injury. This
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41 lends support to experts' suggestion that 'non-action transgressions' in which morals have
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43 been transgressed but no direct culpable 'act' by an individual or individuals has occurred,
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45 should be incorporated within the PMIE definition.
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52 Relational factors were also identified as potential drivers of PMIEs in secure mental
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54 healthcare. Experts agreed that pressure from authority figures, such as regulators and
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56 leaders, as well as colleagues and carers may motivate staff to engage in moral
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58 transgressions. However, the desire to maintain good relationships alone was not considered
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3 enough of a motivator. In accordance with the Conservation of Resources theory (Hobfoll,
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5 1989), the immoral aspects of the healthcare profession and system may lead staff to respond
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7 to pressures from others in order to cope with the loss of self-integrity that may result from
8
9 working within an immoral system, and to avoid any other threatened losses that may arise as
10
11 a consequence of resisting such pressures. Experts also recognised the potential protective
12
13 effects of relationships, however, agreeing that the presence of a social support network can
14
15 mitigate the risk for moral injury, following PMIE exposure. This finding is in line with
16
17 extensive evidence noting a protective role of social support in mitigating against PTSD (e.g.,
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19 Ferrajão and Oliveira, 2014; Ozer *et al.*, 2003) following a traumatic experience. Drawing on
20
21 the stress-buffering hypothesis (Cohen and Wills, 1985), access to a social support network
22
23 may reduce risk for moral injury via the provision of alternative appraisals of events from
24
25 others that challenge guilt and shame-based appraisals.
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31 Findings also echoed claims that the healthcare profession may be an inherent moral
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33 paradox (Hine, 2007; Hofmann, 2001). Experts indicated that duties of the role may
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35 necessitate morally transgressive actions, for the purpose of ensuring safety. Non-
36
37 maleficence, which reflects the obligation to do no harm, is a key ethical principle in
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39 healthcare. Yet, the findings suggest that acting in accordance with one professional moral
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41 value may necessitate the violation of another, with the need to ensure the safety of patients,
42
43 the self, and/or others positioned as a factor motivating staff to engage in moral
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45 transgressions. The inherently morally conflicting nature of healthcare may be particularly
46
47 amplified in secure mental health settings, where there is a heightened need for prevention of
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49 harm that extends to a duty for public protection, as well as one of patient safety.
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54 Whilst several PMIEs on which consensus was reached reflected general experiences
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56 that may be shared by healthcare professionals outside of the secure mental health context
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58 (e.g., the inappropriate admission of assessments and treatment), a number of practices
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3 inherent and particularly pertinent to the secure mental healthcare setting were also identified.

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5 This included practices previously identified as ethical challenges for staff working in mental
6 healthcare such as the use of restrictive practices (when used inappropriately) and coercion
7 (e.g., Hem *et al.*, 2014; Moran *et al.*, 2009), as well as factors novel to the current study,
8 namely experiences relating to threatened or actual harm committed by patients. Items on
9 which consensus was reached related to harm occurring in the secure psychiatric setting,
10 specifically (e.g., witnessing a patient commit harm to themselves). Alternatively, items
11 relating to harm caused in the past, such as caring for people who have committed serious
12 criminal offences, did not reach consensus. In situations where harm has been directly
13 experienced or witnessed, the conditions necessary for moral responsibility – that is, that the
14 individual had a degree of control over the situation (control condition) and had awareness
15 and knowledge of their actions (epistemic condition) – are likely to be met, making self-
16 transgression appraisals of such incidents more probable. Where harm has occurred prior to a
17 patient's admission, the conditions for moral responsibility are not met and thus the appraisal
18 of such events as a self-transgression are less likely to occur.
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43 **Practice Implications**

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45 The findings pose several implications for the prevention and management of moral injury in
46 secure mental healthcare. In the first instance, experts' opinion regarding the definition of
47 PMIEs and the breadth of potential sources of moral injury agreed upon indicate the need for
48 a broader conceptualisation of PMIEs than is afforded by singular definitions proposed thus
49 far. Current definitions and corresponding assessment tools, such as the Moral Injury Events
50 Scale (Nash *et al.*, 2013), fail to capture the range of PMIEs that may be experienced by
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3 secure mental healthcare staff, as identified in this study. Accordingly, the development of
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5 more comprehensive assessment tools is arguably warranted.
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8 Furthermore, the range of systemic factors identified as potential drivers of PMIEs
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10 indicate the critical need for organisational strategies that address moral injury risk at the
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12 source, as a primary prevention approach. A number of recommendations can be drawn from
13
14 the findings, such as the need to attend to the non-therapeutic and potentially re-traumatising
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16 aspects of the service environment and culture, and the need to ensure appropriate training in
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18 and thorough regulation of use of restrictive practices.
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22 In consideration of the finding that many of the PMIEs identified were inherent to the
23
24 secure mental health setting (e.g., detention of patients against their will), secondary systemic
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26 interventions that minimise the risk for moral injury following exposure to a PMIE are also
27
28 warranted. Specifically, findings indicate the need to educate staff on moral injury and equip
29
30 them with the skills necessary to manage the moral challenges they may inevitably face in
31
32 such an environment, as well as the provision of opportunities to process and seek support for
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34 moral transgressions; this may include the provision of ethical consultation groups and
35
36 trauma support services, though the effectiveness of such strategies warrants evaluation.
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41 As several of the PMIEs reaching consensus were unique or particularly pertinent to
42
43 the secure mental healthcare setting (e.g., exposure to harm by patients towards the self and
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45 others, provision of care against patients will), a need for individualised organisational
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47 assessments of moral injury tailored to the unique complexities of the secure mental health
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49 setting is indicated.
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52 53 **Limitations**

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55 The findings of the study should be considered in light of several caveats. Firstly, the study
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57 utilised experts almost exclusively from westernised countries, in particular, the UK.
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3 Healthcare systems and policies differ across cultures (Popic and Schneider, 2018) and thus,
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5 generalising the findings risks drawing ethnocentric conclusions about the experience of
6
7 PMIEs in secure mental health settings. Additionally, experts were predominantly from
8
9 psychology and nursing disciplines. Thus, the experiences of staff in roles outside of these
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11 professions may not be wholly reflected in the results.
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15 Furthermore, whilst an 80% consensus threshold was selected as the closing criteria,
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17 stability in responses is suggested to be a more appropriate closing criterion (Nasa *et al.*,
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19 2021). The notable change in percentage of agree ratings between rounds two and three for
20
21 several items indicates that there may have been value in conducting a fourth round. Changes
22
23 in consensus on items were unlikely to be wholly a result of changes in the expert panel at
24
25 each round; whilst the number of registered nurses and psychologists participating in the
26
27 study decreased slightly between rounds two and three, the characteristics of the sample
28
29 remained largely comparable. As shifts in consensus on items were primarily towards the
30
31 majority group opinion, such changes are likely to be the result of the provision of feedback
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33 at round three. This is in line with previous research, which has demonstrated feedback to
34
35 have a greater influence on opinion change between rounds than sociodemographic or
36
37 professional characteristics in mental healthcare workers (Barrios *et al.*, 2021).
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45 **Future research directions**

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47 The findings of the current study indicate additional avenues and recommendations for future
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49 research in this field. Primarily, further research is necessary to establish the potential sources
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51 of moral injury and associated driving factors across the secure mental healthcare workforce,
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53 both within and beyond the UK. The current study examined the experiences of UK
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55 healthcare staff in clinical, patient-facing positions. Given that non-clinical staff represent
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57 over half of the NHS workforce (NHS Digital, 2024), there is need to expand investigation to
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3 inform prevention strategies that minimise risk for moral injury across the secure mental
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5 healthcare sector. Additionally, cultural differences in healthcare systems, practices and
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7 values warrants the need to replicate the current study with a more diverse expert panel.
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10 Furthermore, in consideration of the finding that only one item related to the COVID-
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12 19 pandemic achieved consensus by round three, there is need to adopt a much wider scope
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14 within research on moral injury in healthcare; thus far, the majority of research has centred
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16 on exploring pandemic-related experiences of healthcare workers, though the findings of this
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18 Delphi suggest the relevance of moral injury extends beyond this limited period.
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24 **Conclusion**

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26 Within the field, concerns have been raised over widening the definition and application of
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28 moral injury, for fear of diluting the construct. Nevertheless, failing to capture the breadth of
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30 experiences prompting moral dissonance and the context in which they occur is arguably
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32 likely to have greater repercussions for both theoretical understanding and advancement of
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34 the framework, and the resulting models, treatments and wider systemic strategies
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36 implemented to address moral injury. Experts within the current study identified a broad
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38 range of PMIEs pertinent to the secure mental healthcare setting, framing systemic factors as
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40 not only a contributor to the occurrence of PMIEs, but also a primary source of moral injury
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42 in itself. Going forward, greater attention to the morally challenging aspects of secure mental
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44 healthcare practice which may both drive and be a source of moral injury for staff is needed,
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46 both in research and in practice. In particular, consideration of moral harms and conflicts
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48 within organisational policies and processes, is key to establishing a culture that supports the
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50 effectiveness of any strategies and support implemented.
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Table 1. Expert panel characteristics per round

	Round 1 (n=46)		Round 2 (n=33)		Round 3 (n=30)	
	n	%	n	%	n	%
Expert group						
<i>Clinical expertise</i>	32	69.6	23	69.7	22	73.3
<i>Academic expertise</i>	9	19.6	5	15.2	5	16.7
<i>Both clinical and academic expertise</i>	5	10.9	5	15.2	3	10.0
Profession type ^a						
<i>Psychology</i>	15	40.5	10	35.7	8	32.0
<i>Registered nursing</i>	8	21.6	7	25.0	5	20.0
<i>Unregistered nursing</i>	5	13.5	3	10.7	3	12.0
<i>Psychiatry</i>	4	10.8	4	14.3	4	16.0
<i>Speech and language therapy</i>	3	8.1	2	7.1	2	8.0
<i>Other</i>	2	5.4	2	7.1	2	8.0

Notes. ^aPercentages calculated for those with clinical expertise of working in a secure psychiatric setting

Table 2. Themes developed from round one data

Superordinate theme	Primary theme	Subtheme	Example of comment
Defining PMIEs	Type of PMIE	Experiences of authoritative betrayal	“Other definitions include being betrayed by leadership/a leader/superior and this seems important to distinguish moral injury from moral distress”
		Non-action transgressions	“Witnessing decisions (rather than events) that are not always in the interests of patients” “Not being able to get away from it”
	Context of PMIE	Inescapability	“[Occurs] in a high stakes situation”
		High risk for harm or suffering	“I don’t think you can ignore structural issues”
Sources of Moral Injury	Immoral aspects of the healthcare system	Restrictive context of secure psychiatric settings	“The environment of locked doors/restrictions”
		Harmful cultural climate	“A unit culture of coercion”
		Lack of consequences for aggression by patients in the system	“The failure of the police and CPS to proceed against forensic patients when they commit a crime because they are in hospital”
	Past and present harm	Harm to others during admission	“Physical attacks on staff/patients by patients”
		Harm to self [patient] during admission	“Observing acts of self-harm”
		Patients’ pre-admission histories of harm to and from others	“Reading case files of patients histories or hearing what has happened to them/what they have done in the past”

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3	Challenging practices of profession	Restrictive practices	“Excessive use of restraint/control measures over patients”
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6		Coercive care	“Medications against will (meaning the nurse must medicate despite the patient nor wanting the medication”)
7			
8		Detention and discharge practices	“Making recommendations to tribunal panels to uphold section”
9			
10	Inadequate standards of care delivered	Incompetency of self and colleagues	“Work with staff with not enough knowledge or expertise to work in psychiatric settings”
11			
12		Colleagues’ harmful attitudes towards patients and care	“Staff disconnected from understanding service users as people first”
13			
14		Harmful actions of colleagues	“Witnessing a colleague engage in dubious or abusive practices”
15			
16		Inaction by self and colleagues	“When I couldn’t, or didn’t, object other healthcare professionals whose attitudes are inhumane, such as teasing inpatients or bullying them, I felt I was morally injured”
17			
18	Relational factors	Challenging team dynamics	“Intolerances of indifference to the extent that if a staff member disagrees with practice, [they] are ostracised from the team”
19			
20		Hierarchy and power challenges	“The fact alone that professionals are working in a secure setting underscores that they are also being placed in a position of mutual power over another human being”
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22		Balancing competing needs of patients and others	“Conflict with the patients’ needs and the requests from his/her relatives”
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		Working between harmful relationships	“If family/carers have been involved in events that caused the patient trauma”
	COVID-19 factors	Organisational failure to ensure protection	“Not receiving PPE in a timely manner”
		Negative impacts of COVID-19 restrictions and regulations	“Restricting patients leave because wards need to go into lockdown when there is an outbreak”
Driving and risk factors	Systemic conditions	A culture ‘out of touch’ with principles	“Culture of blame, a sense of toughen up and shut up”
		Minimisation of staff and patient voice	“Lack of listening to staff on the frontlines”
		Costs over care	“Corporatization/commoditization of healthcare”
		Insufficient resources	“Underfunding these settings so that care is frequently missed, and care providers cannot have breaks”
		Insufficient investment in staff	“Not really caring about employee’s well-being”
	Relational drivers	Pressure from different parties	“Pressure from the hospital/team to utilise MAPA ¹ [training] in situations where it may not be necessary – likely due to lack of knowledge around other techniques”
		Challenging interprofessional dynamics	“Lack of clarity in the different roles within the staff [team]”

¹ MAPA (Management of Actual or Potential Aggression) is a an accredited training program delivered to staff in some healthcare settings to provide them with skills in de-escalating and managing challenging behaviour.

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Maintaining relationships

“If you have a good relationship with an individual and do not want to jeopardise that”

Poor staff well-being -

“Burnout – short fuse or fatigue contributing to stress, irritability, leniencies with practices”

Duties of role -

“Not being able to get away physically – e.g., having to run towards the PMIEs due to the duty of care”

Notes. PMIE = Potentially Morally Injurious Event

Table 3. Rates of consensus achieved on items at round two and three and percentage change in agree ratings

Item	Round 2		Round 3		Change in agree ratings (%)
	'Agree' ratings (%)	'Disagree' ratings (%)	'Agree' ratings (%)	'Disagree' ratings (%)	
<i>Defining PMIEs</i>					
1. Experiences of betrayal by individuals in a position of authority or trust should be included in the definition of PMIEs	84.9	15.1	93.3	6.7	+8.4
2. The definition of PMIEs should include non-events (i.e., witnessing a decision being made, or learning about an attitude held by a colleague) as well as events and behaviours	81.8	18.2	83.3	16.7	+1.5
3. PMIEs occur in the context of wider structural and systemic issues	97.0	3.0	100.0	0.0	+3.0
4. A PMIE is an event which occurs in a high stakes situation, where there is imminent risk for harm and suffering	72.7	27.3	80.0	20.0	+7.3
5. A PMIE is an unavoidable event in which an individual has had no personal choice in the course of action	24.2	75.8	3.3	96.7	-20.9
<i>Sources of Moral Injury</i>					
6. Displays of poor professional practice by colleagues (i.e., unlawfully breaching patient confidentiality)	90.9	9.1	100.0	0.0	+9.1
7. Use of restrictive practices when inappropriate, or when alternative solutions were available	93.9	6.1	100.0	0.0	+6.1

8.	Inappropriately detaining a patient (i.e., due to a lack of alternative, appropriate placements)	97.0	3.0	96.7	3.3	-0.3
9.	Working in a non-therapeutic culture (i.e., a system which re-traumatizes patients)	93.9	6.1	96.7	3.3	+2.8
10.	Working with colleagues who act in ways that demoralise or demean patients	93.9	6.1	96.7	3.3	+2.8
11.	Failing to ensure the safety of patients and/or colleagues	87.9	12.1	96.7	3.3	+8.8
12.	Inappropriate administration of assessments and treatments (i.e., without informed consent)	93.9	6.1	96.7	3.3	-0.3
13.	Caring for patients in a physically inadequate environment ^a	93.9	6.1	93.3	6.7	-0.6
14.	Being unable to meet a patients' care needs	93.9	6.1	93.3	6.7	-0.6
15.	Inappropriately discharging a patient (i.e., prematurely to free up beds)	93.9	6.1	90.0	10.0	-3.9
16.	Witnessing the distress of colleagues when placed into situations that cause them fear (i.e., observing highly aggressive patients)	84.9	15.1	90.0	10.0	+5.1
17.	Failing to challenge the immoral behaviours of others	84.9	15.1	90.0	10.0	+5.1
18.	Use of coercive measures to provide care and treatment to patients against their will	90.9	9.1	86.7	13.3	-4.2
19.	Working with colleagues who demonstrate demoralised attitudes towards patients and care	90.9	9.1	86.7	13.3	-4.2

20. Compromising or failing to provide the necessary care, due to restrictions imposed as a result of COVID-19	90.9	9.1	86.7	13.3	-4.2
21. Silenced patient voice in decision-making processes	87.9	12.1	86.7	13.3	-1.2
22. Restrictions placed on patients contact with family members, carers and friends	81.8	18.2	83.3	16.7	+1.5
23. Restricted interaction and engagement with patients, due to time constraints or to maintain personal safety ^a	87.9	12.1	83.3	16.7	-4.6
24. Being exposed to physical or verbal aggression from patients	75.8	24.2	93.3	6.7	+17.5
25. Witnessing a patient commit harm to themselves (i.e., self-harm, suicide attempts)	72.7	27.3	86.7	13.3	+14.0
26. Working in a system that focuses on risk management and security, rather than healthcare needs ^a	75.8	24.2	86.7	13.3	+10.9
27. Detention of patients against their will	69.7	30.3	83.3	16.7	+13.6
28. Lack of guidance and/or resources to effectively manage during the COVID-19 pandemic	81.8	18.2	73.3	26.7	-8.5
29. Experiencing acts of betrayal towards the team by colleagues (i.e., having a colleague abandon the ward when short-staffed)	78.8	21.2	73.3	26.7	-5.5
30. Restrictions and rigidities placed on patients activities, access to items, and/or freedoms	69.7	30.3	73.3	26.7	+3.6
31. Working with colleagues who lack the skills or capacity to provide quality care	78.8	21.2	73.3	26.7	-5.5

32. Lack of consequences for acts of aggression committed by patients whilst detained in hospital (i.e., failure for police to proceed against assaults)	72.7	27.3	70.0	30.0	-2.7
33. Placing others at risk of COVID-19 (i.e., patients, own family members)	69.7	30.3	66.7	33.3	-3.0
34. Learning about the traumatic histories of patients in one's care	57.6	42.4	60.0	40.0	+2.4
35. Having to report a colleague for unethical behaviour	66.7	33.3	60.0	40.0	-6.7
36. Use of restrictive practices (in the context of appropriate and necessary use)	60.6	39.4	46.7	53.3	-13.9
37. Working amongst non-therapeutic relationships (i.e., with families who have contributed to the patient's admission)	63.6	36.4	46.7	53.3	-16.9
38. Witnessing or experiencing conflict between/with colleagues	63.6	36.4	43.3	56.7	-20.3
39. Caring for people who have committed serious criminal offences	42.4	57.6	36.7	63.3	-5.7
40. Working with multiple parties who have conflicting needs, wants and/or opinions	57.6	42.4	23.3	76.7	-34.3
41. Having greater autonomy than patients and carers over care decisions	48.5	51.5	16.7	83.3	-31.8
42. Renewing or extending the detention of a patient under the MHA	39.4	60.6	6.7	93.3	-32.7

Driving Factors

43. Working in a system where there is a depersonalised approach to care can promote the occurrence of PMIEs	97.0	3.0	100.0	0.0	+3.0
44. A negative workplace culture (i.e., high levels of manipulation and blame, closed culture) can normalise and promote the occurrence of PMIEs	97.0	3.0	100.0	0.0	+3.0
45. Dismissal of the opinions and concerns of patients and staff by the organisation may promote the occurrence of PMIEs	93.9	6.1	100.0	0.0	+6.1
46. Being overworked and burnt out may lead a healthcare professional to act against their moral values	93.9	6.1	100.0	0.0	+6.1
47. Lack of resources (i.e., material, financial, staffing, time) may promote the occurrence of PMIEs	97.0	3.0	96.7	3.3	-0.3
48. Prioritization of costs over care by the organisation/system may promote the occurrence of PMIEs	90.9	9.1	96.7	3.3	+5.8
49. Policies and legal frameworks may necessitate staff to engage in morally injurious actions	81.8	18.2	83.3	16.7	+1.5
50. Pressure from regulatory bodies or leaders may lead a healthcare professional to act against their moral values	75.8	24.2	96.7	3.3	+20.9
51. Pressure from colleagues or carers may lead a healthcare professional to act against their moral values	75.8	24.2	93.3	6.7	+17.5
52. A healthcare professional may act against their moral values in order to ensure the safety of patients, the self, and/or others	78.8	21.2	93.3	6.7	+14.5

53. Having to follow the orders of colleagues with greater authority may promote the occurrence of PMIEs	72.7	27.3	80.0	20.0	+7.3
54. A lack of clarity or understanding of the roles of different professions within a team can promote the occurrence of PMIEs	72.7	27.3	76.7	23.3	+4.0
55. Engaging in, or being exposed to morally injurious events are inherent to the role of a healthcare professional	72.7	27.3	73.3	26.7	+0.6
56. A desire to maintain good relationships with a patient or colleague may lead a healthcare professional to act in ways that go against their moral values	72.7	27.3	66.7	33.3	-6.0
Risk Factors					
57. Ignorance of staff well-being by the organisation can make it more likely for a healthcare professional to develop moral injury after experiencing a PMIE	97.0	3.0	100.0	0.0	+3.0
58. Lack of opportunity for a debrief within the workplace, following a PMIE, can make it more likely for a person to develop moral injury	97.0	3.0	100.0	0.0	+3.0
59. Lack of training and support within the workplace in dealing with PMIEs can make it more likely for a person to develop moral injury after experiencing a PMIE	97.0	3.0	100.0	0.0	+3.0
60. Lack of time to process immoral experiences can make it more likely for a person to develop moral injury	93.9	6.1	100.0	0.0	+6.1
61. Having no means to deal with exposure to immoral experiences occurring in the workplace	93.9	6.1	100.0	0.0	+6.1

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3	can make it more likely for a person to develop					
4	moral injury					
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6	62. Lack of coping strategies and support outside of	93.9	6.1	100.0	0.0	+6.1
7	the workplace can make it more likely for a					
8	person to develop moral injury after					
9	experiencing a PMIE					
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11	63. Having to hide one's emotional response to	91.9	9.1	89.7	10.3	-1.2
12	immoral events within the workplace can make					
13	a healthcare professional more likely to develop					
14	moral injury					
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16	64. Having pre-existing personal mental health	75.8	24.2	70.0	30.0	-5.8
17	difficulties can make a healthcare professional					
18	more likely to develop moral injury after					
19	experiencing a PMIE					
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Notes. ^a indicates items which were included based on PMIEs identified through the earlier systematic review rather than in the Delphi; agree and disagree percentages at or above the consensus threshold (80%) are indicated in bold

Table 4. Final list of items reaching consensus at round three

Superordinate theme	Theme	Item
Defining PMIEs	Type of PMIE	Experiences of betrayal by individuals in a position of authority or trust should be included in the definition of PMIEs The definition of PMIEs should include non-events (i.e., witnessing a decision being made, or learning about an attitude held by a colleague) as well as events and behaviours
	Context of PMIEs	PMIEs occur in the context of wider structural and systemic issues A PMIE is an event which occurs in a high stakes situation, where this is an imminent risk for harm and suffering
Sources of Moral Injury	Immoral aspects of the healthcare system	Working in a non-therapeutic culture (i.e., a system which re-traumatises patients) Restrictions placed on patients contact with family members, carers and friends Detention of patients against their will
		Past and present harm
	Challenging practices of profession	Use of restrictive practices when inappropriate, or when alternative solutions were available Inappropriately detaining a patient (i.e., due to a lack of alternative, appropriate placements) Inappropriate administration of assessments and treatments (i.e., without informed consent) Inappropriately discharging a patient (i.e., prematurely to free up beds) Use of coercive measures to provide care and treatment to patients against their will Failing to challenge the immoral behaviours of others
		Inadequate standards of care delivered

		Being unable to meet a patients' care needs
		Working with colleagues who demonstrate demoralised attitudes towards patients and care
	Relational factors	Silenced patient voice in decision-making processes
	COVID-19 related factors	Compromising or failing to provide the necessary care, due to restrictions imposed as a result of COVID-19
	Additional items	Caring for patients in a physically inadequate environment
		Restricted interaction and engagement with patients, due to time constraints or to maintain personal safety
		Working in a system that focuses on risk management and security, rather than healthcare needs
Driving Factors	Systemic conditions	Working in a system where there is a depersonalised approach to care can promote the occurrence of PMIEs
		A negative workplace culture (i.e., high levels of manipulation and blame, closed culture) can normalise and promote the occurrence of PMIEs
		Dismissal of the opinions and concerns of patients and staff by the organisation may promote the occurrence of PMIEs
		Lack of resources (i.e., material, financial, staffing, time) may promote the occurrence of PMIEs
		Prioritization of costs over care by the organisation/system may promote the occurrence of PMIEs
		Policies and legal frameworks may necessitate staff to engage in morally injurious actions
	Poor staff well-being	Being overworked and burnt out may lead a healthcare professional to act against their moral values
	Relational factors	Pressure from regulatory bodies or leaders may lead a healthcare professional to act against their moral values
		Pressure from colleagues or carers may lead a healthcare professional to act against their moral values
		Having to follow the orders of colleagues with greater authority may promote the occurrence of PMIEs
	Duties of role	A healthcare professional may act against their moral values in order to ensure the safety of patients, the self, and/or others
Risk Factors	Systemic conditions	Lack of time to process immoral experiences can make it more likely for a person to develop moral injury
		Ignorance of staff well-being by the organisation can make it more likely for a healthcare professional to develop moral injury after experiencing a PMIE
		Lack of opportunity for a debrief within the workplace, following a PMIE, can make it more likely for a person to develop moral injury

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Poor staff well-being

Lack of training and support within the workplace in dealing with PMIEs can make it more likely for a person to develop moral injury after experiencing a PMIE

Having no means to deal with exposure to immoral experiences occurring in the workplace can make it more likely for a person to develop moral injury

Lack of coping strategies and support outside of the workplace can make it more likely for a person to develop moral injury after experiencing a PMIE

Having to hide one's emotional response to immoral events within the workplace can make a healthcare professional more likely to develop moral injury
