

Research Article

Prevalence and Determinants of Moral Injury and Its Association with General Self-Efficacy among Healthcare Professionals in a National Hospital in Sri Lanka: A Cross-sectional Study

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Abstract

Introduction: Healthcare professionals (HCPs) in low- and middle-income countries face resource constraints and ethical challenges that increase the risk of moral injury. Empirical evidence from South Asian healthcare settings, particularly outside acute crisis contexts, remains limited. This study aimed to determine the prevalence of moral injury, identify its sociodemographic and occupational determinants, and examine its association with general self-efficacy among HCPs at the National Hospital of Sri Lanka.

Methods: An analytical descriptive cross-sectional study was conducted among 391 HCPs at the National Hospital of Sri Lanka, using stratified random sampling. The Moral Injury Symptom Scale-Healthcare Professionals and the General Self-Efficacy Scale were adapted through forward-backward translation into Sinhala. Data were analyzed using descriptive statistics, Pearson correlation, independent-samples t-tests, one-way ANOVA, chi-square tests, and binary logistic regression.

Results: The sample comprised 391 HCPs (16.6% physicians, 38.9% nurses, 44.5% healthcare support workers) with a mean age of 34.53 ± 6.09 years. A total of 28.6% ($n = 112$) met criteria for clinically significant moral injury. The mean self-efficacy score for the full sample was 20.17 ($SD \pm 2.80$). Occupational category was the only statistically significant predictor of moral injury: nurses (Odds Ratio; OR = 0.35, $p = 0.001$) and healthcare support workers (OR = 0.37, $p = 0.001$) had significantly lower odds of clinically significant moral injury compared to physician.

Conclusions: Clinically significant moral injury affected nearly one-third of HCPs, with physicians being disproportionately affected. Occupational category was associated with moral injury, suggesting that workplace and professional-context factors may contribute to variations in moral injury among HCPs.

Keywords: *Moral Injury, Healthcare Professionals, Self-efficacy, Sri Lanka*

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Introduction

Healthcare professionals (HCPs) frequently encounter situations in which clinical responsibilities, patient needs, and available resources are misaligned, challenging their ability to provide care consistent with professional and ethical obligations. When individuals perpetrate, witness, fail to prevent, or feel compelled to participate in actions that violate deeply held moral beliefs or professional values, the resulting psychological, emotional, and existential distress is referred to as moral injury (Litz et al., 2009). Originally conceptualized in military populations, moral injury is increasingly recognized within healthcare settings, where ethically challenging circumstances may lead to guilt, shame, betrayal, loss of trust, and diminished meaning or purpose (Griffin et al., 2023; Litz & Kerig, 2019).

Although moral injury shares some consequences with occupational burnout, the two constructs are conceptually distinct. Burnout primarily reflects chronic work-related stress characterized by emotional exhaustion and reduced professional accomplishment, whereas moral injury arises from perceived violations of moral expectations and professional obligations (Dean et al., 2024; Rabin et al., 2023). Contemporary literature increasingly suggests that moral injury reflects not only individual psychological responses but also organizational and systemic conditions that prevent healthcare professionals from acting in accordance with their ethical commitments (Dean et al., 2024; Reis and Lesandrini, 2025). Consequently, interventions focused

solely on individual resilience may be insufficient when the sources of distress are embedded within healthcare systems.

Global attention to moral injury increased during the COVID-19 pandemic, when HCPs faced treatment rationing, resource shortages, visitation restrictions, and perceived institutional failures (Park et al., 2024; Rushton et al., 2022; Wang et al., 2021). However, growing evidence indicates that moral injury extends beyond crisis contexts and is associated with depression, post-traumatic stress symptoms, psychological distress, reduced job satisfaction, and intentions to leave the profession (Coimbra et al., 2024; Nazarov et al., 2024; Purcell et al., 2024). Organizational culture, workplace ethical climate, leadership practices, and modifiable working conditions have emerged as important contributors, highlighting the need to understand moral injury within specific healthcare contexts (Dean et al., 2024; Purcell et al., 2024).

These concerns may be particularly relevant in low- and middle-income countries (LMICs), where HCPs often work within chronically resource-constrained systems. In Sri Lanka, longstanding workforce and resource limitations were further exacerbated by the economic crisis that began in 2022, resulting in shortages of medicines, medical consumables, diagnostic resources, and healthcare personnel, alongside increasing migration of healthcare workers from the public sector (Athauda-Arachchi et al., 2024; Niriella et al., 2025). Such conditions may increase the likelihood of situations in which clinicians perceive themselves as unable to provide the care they believe patients require.

Similar links between resource limitations, ethical strain, and moral injury have been reported in Pakistan, Ethiopia, and sub-Saharan Africa (Anito et al., 2024; Fatima et al., 2023). Despite these contextual vulnerabilities, empirical evidence regarding moral injury among HCPs in Sri Lanka remains limited.

While organizational and structural factors are increasingly recognized as central drivers of moral injury, individual psychological resources may also influence responses to morally challenging situations. One such resource is general self-efficacy, defined as an individual's belief in their capability to organize and execute actions necessary to manage challenges and achieve desired outcomes (Bandura, 1977). Higher self-efficacy has been associated with adaptive coping, psychological resilience, occupational functioning, and reduced vulnerability to stress-related outcomes (Makara-Studzińska et al., 2019; Zeng et al., 2021). However, the relationship between self-efficacy and moral injury remains theoretically uncertain. Because moral injury often arises when external constraints prevent individuals from acting in accordance with their professional and ethical values despite possessing the necessary competence and motivation, confidence in one's abilities may have limited protective value. This perspective has been described as a competence paradox, whereby highly capable clinicians may nevertheless experience moral injury when organizational or systemic conditions prevent ethical practice (Beadle et al., 2024; Dean et al., 2024). Consequently, self-efficacy may either protect against moral injury or show

little association once structural constraints become dominant, yet evidence evaluating these competing explanations remains limited, particularly in LMIC healthcare systems.

Evidence regarding the sociodemographic and occupational determinants of moral injury also remains inconsistent. Previous studies have reported mixed findings regarding the influence of professional role, gender, age, and clinical experience, suggesting that vulnerability may vary across healthcare systems and contexts (Griffin et al., 2023; Purcell et al., 2024; Vlckova et al., 2025). Understanding whether particular professional groups experience a greater burden of moral injury is important for informing targeted organizational interventions.

Despite growing international interest in moral injury among HCPs, evidence from South Asia remains scarce. Furthermore, no published study in Sri Lanka has simultaneously examined the prevalence of moral injury, its sociodemographic and occupational determinants, and its relationship with general self-efficacy among a heterogeneous sample of HCPs. Accordingly, this study aimed to determine the prevalence of moral injury, identify its sociodemographic and occupational determinants, and examine its association with general self-efficacy among HCPs at the National Hospital of Sri Lanka.

Methods

Study setting and sample

This study employed an analytical descriptive cross-sectional design. Data

collection was conducted at the National Hospital of Sri Lanka (NHSL) in Colombo, the country's largest tertiary referral institution, with a bed capacity exceeding 3,000 and a catchment population spanning the Western Province and beyond.

The target population comprised adult HCPs, specifically physicians, registered nurses, and healthcare support workers (including hospital attendants and health service assistants), fulfilling the following inclusion criteria: (1) active engagement in direct patient care and (2) a minimum of one year of clinical experience. Individuals who declined to provide written informed consent were excluded.

Sampling procedure

Sample size was calculated using the Yamane (1967) formula for cross-sectional studies ($n = N / [1 + N \cdot e^2]$), applying a standard 5% margin of error, yielding a minimum required sample of 375. The Yamane formula was selected because the total population size of eligible healthcare professionals was known. Accounting for a projected 10% non-response rate, the recruitment target was set at 412. Stratified random sampling with proportionate allocation was employed across three professional strata: physicians, nurses, and healthcare support workers. Within-stratum selection was conducted using a computer-generated random number table. Of 412 questionnaires distributed, 21 were excluded due to incomplete responses, yielding a final analysed sample of 391 participants (response rate: 94.9%).

Data collection instruments

Data were collected via a structured self-administered questionnaire distributed to eligible participants during routine working hours.

Moral injury was measured using the Moral Injury Symptom Scale-Healthcare Professionals (MISS-HP), a tool developed and validated specifically for screening clinically significant moral injuries (Mantri et al., 2020). The MISS-HP comprises 11 items, of which ten constitute the scored instrument assessing conceptually distinct dimensions of moral injury: betrayal, guilt, shame, moral concerns, loss of trust, loss of meaning, difficulty forgiving, self-condemnation, religious struggle, and loss of religious faith (Mantri et al., 2020). Item 11 assesses perceived impact on professional performance and is recorded for descriptive purposes only. Responses are recorded on a 1-10 Likert scale; five positively worded items are reverse coded prior to summation, yielding a total score ranging from ten to 100 (Furnham, 1986). Higher scores indicate greater moral injury severity. The clinical cut-off of ≥ 36 was adopted from Mantri (Mantri et al. (2020), who established this threshold through receiver operating characteristic (ROC) curve analysis, and has been applied in multiple international studies (Tao et al., 2024). As the MISS-HP has not been formally standardized for Sri Lankan healthcare populations, it was adapted for local use through forward-backward translation into Sinhala by bilingual experts. Prior to data collection, a pre-test was conducted among 20 nurses at the Infectious Diseases Hospital (IDH), Sri Lanka. The

instrument demonstrated good internal consistency, with a Cronbach's alpha coefficient of 0.82.

Self-efficacy was assessed using the General Self-Efficacy Scale (GSES; Schwarzer & Jerusalem, 1995), a 10-item unidimensional instrument. Items are rated on a 4-point Likert scale (1 = not at all true; 4 = exactly true), yielding a total score of 10-40. The GSES has demonstrated strong cross-cultural internal consistency ($\alpha = 0.75-0.91$) (Luszczynska et al., 2005) and was translated using the same adaptation protocol and pre-testing. Cronbach's α in the current pre-test sample was 0.79.

Beyond forward-backward translation and review of the translated items by bilingual experts for conceptual and linguistic equivalence, no formal validity testing was conducted in the present study.

Data collection procedure

Data were collected using a structured, self-administered, paper-based questionnaire comprising three sections: sociodemographic and occupational characteristics, the Sinhala-adapted MISS-HP, and the Sinhala-adapted GSES. Eligible participants selected through stratified random sampling were approached in person at their respective wards and units during routine working hours. The purpose, procedures, and voluntary nature of the study were explained to each participant, and written informed consent was obtained prior to participation. Participants completed the questionnaire independently and anonymously, without interference from the research team, and returned the completed questionnaire directly to the data collectors.

No identifying information was recorded on the questionnaires, and confidentiality of responses was maintained throughout. All returned questionnaires were checked for completeness, and questionnaires with incomplete responses were excluded from the analysis.

Statistical analysis

Categorical variables are reported as frequencies and percentages; continuous variables are reported as means $\pm$ standard deviations (SD). Prior to inferential analyses, normality was assessed using the Shapiro-Wilk test. The results indicated that the study variables were approximately normally distributed ($p > 0.05$). Therefore, parametric statistical tests were considered appropriate and applied throughout the analyses.

Statistical tests were selected according to the study objectives. The prevalence of clinically significant moral injury was estimated using descriptive statistics. Associations between sociodemographic and occupational factors and clinically significant moral injury (MISS-HP ≥ 36 vs. <36) were assessed using chi-square tests and simple binary logistic regression, with unadjusted odds ratios (OR) and 95% confidence intervals (CI). Mean MISS-HP scores were compared between groups using independent-samples t-tests (two groups) and one-way ANOVA with Tukey HSD post-hoc tests (three or more groups). The relationship between general self-efficacy and moral injury severity, and relationships among continuous sociodemographic variables, were examined using Pearson product-moment correlation. All sociodemographic and occupational variables were entered into the univariate

stage.

Variables achieving statistical significance at $p < 0.05$ at the univariate stage were eligible for entry into a multivariable binary logistic regression model. As only one predictor (occupational category) met this threshold, construction of a multivariable model was not warranted, since a model with a single predictor is analytically equivalent to the univariate estimate. Accordingly, the unadjusted odds ratios from the simple logistic regression are presented as the final model.

Data were analysed using IBM SPSS Statistics Version 26. Statistical significance was set at $\alpha = 0.05$ for all analyses, and all tests were two-tailed.

Ethical considerations

Ethical clearance for this study was obtained from the relevant institutional Ethics Review Committee (Reference: KIU_ERC_25_128) prior to data collection, and written informed consent was obtained from all participants.

Results

Sample characteristics

The final sample comprised 391 HCPs: 16.6% physicians ($n = 65$), 38.9% nurses ($n = 152$), and 44.5% healthcare support workers ($n = 174$). The sample was slightly female-predominant (50.6% female, $n = 198$). The mean age was 34.53 ± 6.09 years. The majority of participants were married ($n = 212$, 54.2%), followed by single ($n = 132$, 33.8%) participants. Mean clinical experience was 9.42 ± 5.50 years, and mean family monthly income was LKR 110,950 $\pm$ 43,270. By religion, the sample comprised

Buddhist ($n = 252$, 64.5%), followed by Christian ($n = 55$, 14.1%) participants (Table 1). Although ethnicity data were initially collected, a substantial proportion of responses were non-standardized free-text entries that could not be reliably and reproducibly categorized; therefore, ethnicity was excluded from the descriptive profile and all subsequent analyses.

Prevalence of moral injury

The mean MISS-HP total score for the full sample was 32.7 ± 5.92 . Applying the established clinical cut-off of ≥ 36 , 28.6% of participants ($n = 112$) met the criteria for clinically significant moral injury (MI+), while 71.4% ($n = 279$) remained below the clinical threshold (MI-).

Self-efficacy levels

The mean GSES score was 20.17 ± 2.80 . Independent sample t test revealed that GSES scores did not differ significantly between the MI+ group (Mean = 20.01) and the MI- group (Mean = 20.43), $t(389) = -1.34$, $p = .181$.

Sociodemographic and occupational factors associated with moral injury

To examine the broader associations with moral injury status, chi-square tests of independence were conducted for all categorical variables. Occupational category was the only variable significantly associated with clinically significant moral injury, $\chi^2(2) = 13.87$, $p = 0.001$. Specifically, 47.7% of physicians met the clinical threshold, compared with 24.3% of nurses and 25.3% of healthcare support workers.

Conversely, no statistically significant

Table 1: Sociodemographic and occupational profile of participants (n = 391)

Variable	Category	Frequency	Percentage (%)
Gender	Male	193	49.4
	Female	198	50.6
Marital status	Single	132	33.8
	Married	212	54.2
	Divorced / Widowed / Other	47	12.0
Religion	Buddhist	252	64.5
	Hindu	48	12.3
	Muslim	36	9.2
	Christian	55	14.1
Occupational category	Physicians	65	16.6
	Nurses	152	38.9
	Healthcare Support Workers	174	44.5
Variable		Mean±SD	
Age (years)		34.53 ± 6.09	
Clinical experience (years)		9.42 ± 5.50	
Family monthly income (LKR thousands)		110.95 ± 43.27	

Note. LKR = Sri Lankan Rupee; SD = standard deviation

associations were observed between moral injury and the remaining categorical variables: gender ($\chi^2(1) = 0.00$, $p = 0.949$), marital status ($\chi^2(2) = 0.90$, $p = 0.637$), religion ($\chi^2(3) = 0.03$, $p = 0.999$), or categories of clinical experience ($\chi^2(3) = 0.56$, $p = 0.905$).

Determinants of moral injury

Simple binary logistic regression showed that occupational category significantly predicted moral injury. Compared with

physicians, nurses had significantly lower odds of clinically significant moral injury (OR = 0.35, 95% CI [0.19, 0.65], $p = 0.001$). Healthcare support workers also demonstrated significantly lower odds (OR = 0.37, 95% CI [0.21, 0.67], $p = 0.001$).

All other examined variables, including gender, marital status, religion, clinical experience, family monthly income, and self-efficacy, were not statistically significant predictors of moral injury (all $p > .05$) (Table 2).

Table 2: Associations between sociodemographic and occupational factors and clinically significant moral injury (n = 391)

Variable / Category	MI+ n (%)	OR (95% CI)	p value
Gender			
Male (Reference)	55 (28.5)	1	-
Female	57 (28.8)	1.01 (0.65-1.57)	0.949
Occupational category			
Physicians (Reference)	31 (47.7)	1	-
Nurses	37 (24.3)	0.35 (0.19-0.65)	0.001
Healthcare support workers	44 (25.3)	0.37 (0.21-0.67)	0.001
Marital status			
Single (Reference)	37 (28.0)	1	-
Married	64 (30.2)	1.11 (0.69-1.79)	0.669
Divorced / Widowed / Other	11 (23.4)	0.79 (0.36-1.70)	0.539
Religion			
Buddhist (Reference)	72 (28.6)	1	-
Hindu	14 (29.2)	1.03 (0.52-2.03)	0.933
Muslim	10 (27.8)	0.96 (0.44-2.10)	0.921
Christian	16 (29.1)	1.03 (0.54-1.95)	0.938
Clinical experience			
1-5 years (Reference)	31 (26.5)	1	-
6-10 years	31 (28.4)	1.10 (0.61-1.98)	0.743
11-15 years	28 (29.5)	1.16 (0.63-2.12)	0.631
16-21 years	22 (31.4)	1.27 (0.66-2.44)	0.469
Family monthly income (per LKR 1,000)	-	1.00 (0.99-1.01)	0.561
Self-efficacy (GSES, per unit)	-	0.98 (0.89-1.07)	0.632

MI+ clinically significant moral injury (MISS-HP ≥ 36). OR unadjusted odds ratio obtained from simple binary logistic regression; CI = confidence interval.

Table 3: Pearson correlations between MISS-HP total score and continuous variables (n = 391)

Variable	Correlation	p value
Age (years)	0.008	0.877
Clinical experience (years)	0.039	0.448
Family monthly income (LKR)	0.069	0.174
General self-efficacy total score	-0.030	0.549

LKR Sri Lankan Rupee

Correlations between moral injury and continuous variables

Pearson product-moment correlations among continuous variables are presented in Table 3. MISS-HP total scores showed no significant correlation with self-efficacy ($r = -0.030$, $p = 0.549$), age ($r = 0.008$), clinical experience ($r = 0.039$), or family income ($r = 0.069$; all $p > 0.05$).

Discussion

This study examined the prevalence of moral injury, its sociodemographic and occupational determinants, and its association with general self-efficacy among HCPs at the National Hospital of Sri Lanka. The findings indicate that moral injury represents a significant occupational concern within this setting, with more than one-quarter of participants meeting criteria for clinically significant moral injury. Occupational category emerged as the only statistically significant determinant, whereas self-efficacy and other sociodemographic variables were not significantly associated

with moral injury.

Moral injury prevalence

Although the mean MISS-HP score was below the established clinical threshold, 28.6% of participants met criteria for clinically significant moral injury, indicating that a substantial subgroup of HCPs experienced clinically relevant levels of moral injury. This finding is noteworthy because data collection occurred outside an acute crisis, disaster, or pandemic context. Although moral injury among HCPs has received considerable attention during the COVID-19 pandemic, the present findings suggest that clinically significant moral injury may persist even under routine healthcare conditions.

The prevalence observed in this study is broadly comparable with findings reported in several international healthcare settings. Studies conducted during and after the COVID-19 pandemic have documented substantial levels of moral injury among HCPs exposed to ethically challenging

clinical environments, resource limitations, and difficult treatment decisions (Coimbra et al., 2024; Rushton et al., 2022; Wang et al., 2021;). While direct comparisons should be interpreted cautiously because of differences in study populations, healthcare systems, and measurement approaches, the present findings contribute evidence that moral injury is not exclusively a crisis-related phenomenon. Rather, moral injury may also arise within routine clinical practice where healthcare professionals are repeatedly exposed to ethically complex situations.

In low- and middle-income healthcare systems, persistent pressures such as high patient volumes, workforce shortages, and limited resources may create circumstances in which HCPs experience difficulty providing care consistent with their professional values. Although these factors were not directly measured in the present study, previous literature has highlighted their potential relevance to moral injury among HCPs working in resource-constrained environments (Anito et al., 2024; Athauda-Arachchi et al., 2024; Beadle et al., 2024). Future research incorporating direct measures of workplace conditions would help clarify the extent to which these factors contribute to moral injury in Sri Lankan healthcare settings.

Occupational category as a determinant of moral injury

Among all variables examined, occupational category was the only statistically significant determinant of clinically significant moral injury. Physicians demonstrated substantially higher odds of meeting the clinical threshold

compared with nurses and healthcare support workers. Specifically, nurses and healthcare support workers exhibited approximately 63-65% lower odds of clinically significant moral injury relative to physicians.

One possible explanation for this finding is that physicians often occupy positions involving greater responsibility for clinical decision-making, treatment prioritization, and management of complex ethical dilemmas. Such responsibilities may increase exposure to situations where optimal clinical decisions are constrained by factors beyond the clinician's control. Previous studies have similarly suggested that moral injury may be associated with professional responsibilities involving ethically consequential decisions and perceived accountability for patient outcomes (Beadle et al., 2024; Griffin et al., 2023; Purcell et al., 2024).

At the same time, the literature regarding occupational differences in moral injury remains mixed. Some studies have reported higher levels of moral injury among physicians, whereas others have identified elevated rates among nurses and other frontline healthcare workers (Purcell et al., 2024; Vlckova et al., 2025). Such inconsistencies may reflect differences in healthcare systems, workforce structures, cultural contexts, and the specific circumstances under which moral injury develops. Consequently, the present findings suggest that physicians appeared more likely to meet criteria for clinically significant moral injury in this sample; however, further multi-centre studies are required to determine whether this pattern is consistent across other Sri Lankan healthcare institutions.

Importantly, although occupational category was statistically significant, the overall explanatory power of the models was modest. Therefore, occupational role should not be interpreted as the sole determinant of moral injury. Rather, it may serve as an indicator of differential exposure to workplace experiences that were not directly assessed in the current study.

Self-efficacy and moral injury

General self-efficacy was not significantly associated with moral injury in either the correlation analyses or logistic regression models. Participants with higher self-efficacy scores were no less likely to meet criteria for clinically significant moral injury than those with lower self-efficacy scores. Similarly, no meaningful relationship was observed between continuous self-efficacy scores and moral injury severity.

This finding is theoretically important because self-efficacy is widely recognised as a protective psychological resource associated with resilience, adaptive coping, and occupational wellbeing (Bandura, 1977; Makara-Studzińska et al., 2019). However, the present findings suggest that general confidence in one's ability to manage challenges may not adequately explain variations in moral injury among healthcare professionals.

One possible interpretation is that moral injury differs conceptually from other forms of occupational distress. Whereas burnout and work-related stress are often linked to perceived coping capacity and resource availability, moral injury may arise when

individuals encounter situations that challenge deeply held ethical or professional values. Under such circumstances, confidence in one's abilities may be insufficient to prevent psychological distress if external constraints limit the ability to act in accordance with those values (Dean et al., 2024; Griffin et al., 2023).

Nevertheless, caution is warranted when interpreting this null finding. The absence of a statistically significant association does not imply that self-efficacy is irrelevant to healthcare professionals' wellbeing. Rather, it suggests that self-efficacy alone was not a meaningful predictor of moral injury within this sample. Future studies should explore whether self-efficacy interacts with organizational characteristics, ethical climate, leadership support, or exposure to potentially morally injurious events to influence moral injury outcomes.

Sociodemographic characteristics and moral injury

Gender, marital status, religion, clinical experience, and family income were not significantly associated with clinically significant moral injury. The similarity of moral injury prevalence across these demographic groups suggests that moral injury may be experienced across a broad spectrum of healthcare professionals regardless of personal background characteristics.

The absence of significant religious differences is particularly noteworthy given Sri Lanka's multicultural healthcare workforce. Prevalence estimates were

remarkably similar across religious groups, suggesting that moral injury may represent a shared occupational experience rather than one concentrated within specific demographic populations. However, because this study was conducted in a single institution, caution should be exercised when generalising these findings to the wider Sri Lankan healthcare workforce.

Similarly, the non-significant associations observed for gender and clinical experience contrast with findings from some international studies that have reported elevated vulnerability among particular demographic groups (Croak et al., 2026; Vlckova et al., 2025). Such discrepancies may reflect contextual differences between healthcare systems or variations in the distribution of occupational responsibilities across settings. Alternatively, it is possible that workplace experiences exert a greater influence on moral injury than demographic characteristics alone.

Taken together, these findings suggest that sociodemographic variables may play a relatively limited role in explaining moral injury within this setting. However, larger studies conducted across multiple healthcare institutions are required before definitive conclusions can be drawn.

Implications

The findings of this study have several implications for healthcare organizations and policymakers. The identification of clinically significant moral injury among more than one-quarter of participants highlights the importance of recognising moral injury as an

occupational health concern within healthcare settings. Routine monitoring of psychological wellbeing among healthcare professionals may therefore be warranted.

The elevated prevalence observed among physicians suggests that certain professional groups may benefit from targeted support mechanisms. Interventions such as structured ethical debriefing, peer-support programmes, ethics consultation services, and opportunities for reflective practice have been proposed as potentially beneficial approaches for addressing moral distress and related outcomes among healthcare professionals (Clark et al., 2025; Reis & Lesandrini, 2025; Rushton et al., 2022).

The absence of a significant relationship between self-efficacy and moral injury suggests that interventions focusing exclusively on individual psychological characteristics may be insufficient. While programmes designed to strengthen resilience and coping skills may offer broader wellbeing benefits, the present findings indicate that a comprehensive approach should also consider workplace and organizational influences. Future research is needed to identify the specific organizational factors most strongly associated with moral injury within Sri Lankan healthcare settings and to evaluate interventions designed to address them.

Strengths and limitations

This study contributes novel evidence regarding moral injury among HCPs in Sri Lanka, a context in which empirical research on the topic remains limited. Strengths

include the use of stratified random sampling, inclusion of multiple professional categories, and application of established instruments demonstrating acceptable internal consistency within the study sample.

Several limitations should be acknowledged when interpreting the findings of this study. The cross-sectional design precludes conclusions regarding causality or temporal relationships between the study variables. In addition, the use of self-reported measures may have introduced recall bias and social desirability bias. As the study was conducted at a single tertiary-care institution, the generalizability of the findings to other healthcare settings may be limited. Although the MISS-HP and GSES were translated and adapted for local use, comprehensive psychometric validation among Sri Lankan healthcare professionals has not yet been established. Furthermore, organizational characteristics, workplace ethical climate, institutional support mechanisms, and exposure to potentially morally injurious events were not directly assessed. Consequently, the underlying mechanisms contributing to moral injury could not be examined within the scope of the present study.

Conclusions

This study demonstrates that clinically significant moral injury is present among HCPs at the National Hospital of Sri Lanka, with more than one-quarter of participants meeting the established clinical threshold. Occupational category was the only variable significantly associated with clinically significant moral injury, with physicians

demonstrating higher odds of clinically significant moral injury than nurses and healthcare support workers. In contrast, self-efficacy and other sociodemographic variables were not significantly associated with moral injury.

These findings contribute to the growing literature suggesting that moral injury is an important occupational health issue among HCPs. However, further research incorporating organizational, institutional, and workplace-level variables is required to better understand the factors contributing to moral injury and to inform the development of effective prevention and intervention strategies within Sri Lankan healthcare settings.

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Conflicts of interest

The authors declare that they have no conflicts of interest.

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