Moral Injury: alertering

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'Moral injury', in het Nederlands ook wel 'moreel trauma' genoemd, is een begrip dat verwijst naar de psychosociale klachten die mensen kunnen ontwikkelen wanneer zij ervaringen hebben meegemaakt waarin belangrijke morele verwachtingen en overtuigingen worden geschonden.

Elke maand zet de ARQ-bibliotheek nieuwe publicaties over *Moral Injury* op deze lijst.
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1.
Ammar, A. and A. Shoka (2022). Moral Injury and Education Trauma! Moral Injury Seriously Hinders the Education and Career Development. Learning and Career Development in Neurosurgery: Values-Based Medical Education. A. Ammar. Cham, Springer International Publishing**:** 167-181.10.1007/978-3-031-02078-0_17

The relationship between the trainees, faculty staff, and trainers is the most important and fundamental relationship not only in education, learning, and teaching, but also for the human development throughout all the history. This Nobel and indispensable relationship is built on mutual respect, trust, vision to shape the future and ethics. This relationship should be protected and nurtured, and any division or torus of such vital relationship should be immediately corrected. Therefore, it is important to explore, discuss, and carefully analyze such problems or disorders which may breach the main principles of ethics of education which was stated in the concept and principles of Values-Based Medical Education (VsBME). There are several serious problems we may witness or face frequently in teaching and learning quantum, which are not clearly identified, and their borders are overlapping, mixed-up, and confusing. Some of these problems are moral injury, moral distress, compassion fatigue, burnout, and post-traumatic stress disorder. The aim of this chapter is to help to identify and recognize each of such problems, understand the symptoms, discuss the methods of management, and suggest how to avoid and prevent such distressing psychological disorders.

2.
Archer, C. A. (2022). "Expanding Moral Injury: Why Resilience Training Won't Fix It." Jama **328**(12): 1199-1200. 10.1001/jama.2022.15721

The summer of 2020 posed some unique and specific challenges when I began residency training in family medicine, from the masks that placed a new barrier between myself and patients, to the surges of COVID-19 infections that overwhelmed my hospital, to the travel limitations that impeded my ability to visit loved ones. I expected to feel overwhelmed by the combination of a rigorous training program and global pandemic. Instead, each day I felt a growing sense of dread about the work that I was being asked to do: Treat COPD (chronic obstructive pulmonary disease) with inhalers and other medications my patients needed but could not afford. Discharge patients to untenable home situations knowing they would be doomed to return in a matter of days. Recommend mental health services while recognizing it would take months for patients to be seen.

3.

Barr, N., et al. (2022). "Toward a dual process model of moral injury and traumatic illness." <u>Frontiers in psychiatry Frontiers Research Foundation</u> **13**: 883338. https://dx.doi.org/10.3389/fpsyt.2022.883338

Moral injury has emerged as a topic of significant research and clinical interest over the last decade. However, much work remains to be done to comprehensively define the moral injury construct, with implications for understanding the etiology and maintenance of moral injury, its symptoms, associations with and distinctions from traumatic illness, and treatment approaches. We provide a brief overview of the existing moral injury literature and introduce a novel dual process model (DPM) of moral injury and traumatic illness. The DPM posits an event exposure which may satisfy DSM-5 posttraumatic stress disorder (PTSD) criterion A, potential morally injurious event (PMIE) criteria, or both, followed by individual role appraisal as a perpetrator through action or inaction, a witness, a victim, or a combination of the these. Role appraisal influences symptoms and processes across biological, psychological, behavioral, social, spiritual/religious, as well as values, character, and identity domains to support a label of traumatic illness, moral injury, or both. The DPM provides a flexible analytical framework for evaluating symptoms associated with moral injury and traumatic stress and has important implications for treatment. The most thoroughly reviewed evidence-based interventions for traumatic stress hinge on exposure and habituation mechanisms to manage dysregulation of fear and memory systems, but these mechanisms often do not address core domains of moral injury identified in the DPM, including spiritual, religious, values, character, and identity domains as these exist largely outside of the putative fear network. We provide brief vignettes to illustrate the practical application of the DPM and argue that adjunct and stand-alone approaches which address values and character domains, leveraging principles of Stoicism, non-judgment of experience, acceptance, and values-oriented action, are more likely than traditional trauma treatment approaches to positively affect moral injury symptoms.

4.

Botelho, F., et al. (2022). "Re-engaging cultural differences: Culture, morality, trauma and the integration of non-Western migrants." <u>Current Opinion in Psychology</u> **48**: 101454. https://dx.doi.org/10.1016/j.copsyc.2022.101454

We locate our review of recent social scientific literature on non-Western migrants in Western liberal democracies within two opposing master narratives: a subtractive and an additive view of migration. Within this framework, we bring to light the contemporary conceptualizations of non-Western migrants in psychology by focusing on trauma. We then examine the cultural and moral clashes that sometimes arise from trans-global migration and the psychology of integration. We end by highlighting the importance of further research on cultural pluralism and omniculturalism to help foster more peaceful and diverse societies.

5.

Brémault-Phillips, S., et al. (2022). "Scenario-based supported interventions for moral injury and posttraumatic stress disorder: Data report of film and television references for use with uniformed professionals." <u>Front Psychiatry</u> **13**: 917248. 10.3389/fpsyt.2022.917248

Introduction

Uniformed Professionals (UPs), including military members, public safety personnel, and essential service providers, operate in increasingly fast-paced, unpredictable, complex and ambiguous

environments. Situations arising in these contexts often require UPs to make prompt decisions and act rapidly to protect themselves and others. While their decision-making is informed by a values-based framework, code of conduct, implicit and explicit duties, and standards of practice, moral dilemmas that arise in the course of service can challenge their values and beliefs. Moral dilemmas are a special class of moral decisions in which (i) there is a conflict between at least two core values/obligations (loyalty, obedience, respect for life); (ii) acting in a way that is consistent with one underlying value means failing to fulfill the other(s); (iii) harm will occur regardless of the option chosen; and (iv) a decision is inescapable and inevitable; some action must be taken (1). In some cases, moral dilemmas can contribute to mental health problems such as PTSD, depression, anxiety, and moral injury (MI).

MI is a psychological and spiritual injury that arises as a result of exposure to a potentially morally injurious event (PMIE), including participating in, witnessing, or failing to prevent an act(s) that transgresses core beliefs (2). Guilt, shame, anger, betrayal, powerlessness, and suicidal ideation are commonly associated with MI. UPs can experience various types of shame and guilt associated with perceived moral transgressions including dishonesty, harm to others, injustice, violation of trust, failure to care, or lack of self-control. They can also experience survivor guilt, guilt over acts of omission or commission, or guilt about thoughts/feelings. Emerging themes in the field of MI include betrayal (e.g., leadership failures, betrayal by peers, failure to live up to one's own moral standards, betrayal by trusted civilians), disproportionate violence (e.g., acts of revenge, mistreatment of combatants), and incidents involving civilians (e.g., harm caused, assault, destruction of property). Moral transgressions associated with violence in service environments (e.g., sexual trauma, friendly fire, "fragging" (i.e., the deliberate or attempted killing of a soldier by a fellow soldier) have also been the focus of significant consideration. These are all difficult to speak about in advance of and following exposure to PMIEs. Novel approaches and solutions are needed prior to and following exposure to PMIEs to minimize their impact and address PTSD and MI that may result. Such approaches necessitate recognition of moral issues and the development and practice of moral awareness. This requires systematic and continuous interventions focused on enhancing moral reasoning and judgment, and instilling values such as integrity, moral courage, professionalism, and responsibility. We propose that scenario-based supported interventions (SBSIs) that use movie and television references are a novel and promising approach to both stimulate a discourse on PMIEs, PTSD and MI, and support a range of MI interventions including primary prevention, "psychological first aid" training or intervention (3, 4), and individual and group-oriented treatment interventions (5, 6).

SBSIs, informed by moral and ethical training and cognitive-based models, have three substantive objectives: (i) increasing moral awareness, understanding moral dimensions, and recognizing moral implications of their decisions; (ii) exercising moral judgment, recognizing different and at times competing cultural moral systems, and identifying an appropriate understanding of their role in the situation and their potential responses, and (iii) increasing confidence and mastery of managing morally complex situations (7). Importantly, Thompson et al. (8) advocated that scenarios used in primary prevention should be morally ambiguous or complex so that UPs are able to "confront the absence of "right" answers,... [and understand that] they may not [always] be able to resolve the dilemma, solve the problem, or "do the right thing"" (p. 279), as there are times when this may be the case in operations (8). We propose that there is a fourth objective: (iv) providing a reflective mirror - where the mirror is a metaphor for the reflective practitioner and one's experiences that are shared among peers through a common language.

SBSIs can be used in psychoeducational classroom settings and therapeutic contexts. The benefits of integrating movie and television references in UP populations into leader-led discussions during professional military education (PME) was first explored by Thompson et al. (8), followed by Warner et al. (9), and Thompson and Jetly (10). Thompson et al. (8) argued that PME provides the time for critical thinking skills to analyze moral challenges (such as contempt, anger, disgust, shame, guilt, awe, honor, elevation, pride), using three key psychoeducational processes: (i) situational reconstruction, in which individuals revisit the experience in order to gain perspective; (ii) focusing, in which individuals explore their moral emotions and physical reactions to the event; as well as (iii) compensatory self-improvement, in which individuals envision what actions they can now take to develop confidence in their ability to take future action [also see de Graaff et al. (11)]. While the video clips and material provided a novel technique to assist leaders with framing the context of the discussion, retaining soldiers' attention, and focusing it on key training concepts, the greatest impact of the program came from the chain-teaching format: "The brief video clips provided a framework for discussion of topics relevant to the day-to-day scenarios that these soldiers were encountering, sometimes including ambiguous and difficult ethical dilemmas. The chain teaching provided a method for unit leaders to give guidance on how they expected their subordinates to respond to ethically challenging situations and also allowed for direct discussion between participants about situations they had actually encountered in their work." (9, p. 922). A recent scientific review of the effectiveness of a training program for military leaders using SBSIs noted significant reductions in soldier mistreatment of noncombatants and simultaneous improvement in soldiers' ethical attitudes (9). Peer insights and support, mentor supervision, and access to mental health professionals within resident PME can not only allow UPs to "prepare themselves for the morally traumatic situations they may experience during future deployments, and learn how to prepare their colleagues to do the same" (8, p. 278), but "create an environment in which they can process past PMIEs" (8, p. 278).

Movie vignettes and television clips have also been used as cinematherapy to address PMIEs and MI. In addition to cinematherapy, SBSIs using movie and television clips may be helpful in a variety of psychoeducational contexts and include evidence-based methods such as group movie therapy, art therapy, and bibliotherapy. Four distinct but connected stages of self-development can be facilitated through cinematherapy: (i) identification, (ii) emotional release, (iii) insight, and (iv) universalization (12, 13). A teacher or clinician can use these stages to stimulate and structure discussions for prevention through treatment of MI. During the identification stage, individuals see a commonality, similarity, and/or connection with the character and/or situation. This stage offers an opportunity for examination of the behaviors and motives of the characters and self-exploration. In the second stage, individuals can work through a problem and emotions that surface, and release emotions and tensions. In the third stage, by understanding the behaviors and motivations of a character, individuals can empathize with and develop better awareness and understanding of issues and situations within their own lives. In the universalization stage, individuals recognize that others have similar experiences and difficulties. Individuals can experience an increased sense of community and reduced sense of isolation, aloneness, and shame or guilt (14). As an SBSI, cinematherapy can foster critical thinking skills. Via situational reconstruction, moral challenges can be experienced, physical reactions/responses to these events can be explored, and actions can be envisioned that help build confidence in future decision-making and action-taking measures.

UP leaders are among those exploring innovative approaches to address PMIEs in pre/post-deployment training. The research by Thompson et al. (8) was the first of its kind to encourage the use of SBSIs in UP

populations. Our goal was to establish and describe a dataset of relevant movie and television references for use as SBSIs with UPs prior to exposure to PMIEs or in the course of treatment for MI. Development of the dataset was informed by Ge et al. (15), who created an expanded database of emotional film clips for use in treatment with individuals diagnosed with schizophrenia.

6.

DeMoulin, D. (2022). Moral Injury: A Statewide Assessment on the Burden, Risk, and Protective Factors in Minnesota Firefighters, University of Minnesota. **Doctor Of Philosophy**, https://hdl.handle.net/11299/241756

IntroductionThe construct of moral injury is relatively new, primarily studied in trauma-exposed military personnel, and measurement scales recently available to screen symptoms of moral injury. However, no scale exists for firefighters; consequently, resulting in limited data for the risk and protective factors of moral injury in firefighters. Firefighters are considered one of the most stressful occupations, responding to critical incidents involving personal threat or harm to self, a violation of core beliefs about the world, and witnessing pain and suffering of others. Exposures to a single traumatic event or cumulative traumatic events can result in posttraumatic stress disorder (PTSD), depression, suicide ideation and possibly risk for moral injury. The objective of this study aims to address the gap in available instruments by developing a moral injury scale for firefighters and assess the potential risk and protective factors of moral injury in firefighters. MethodsA multi-phased study was conducted using qualitative methods to modify an established moral injury scale used in veterans by employing the Delphi method paired with cognitive interviewing with firefighters, and quantitative methods testing the psychometric properties. A cross-sectional study was conducted using dual-frame sampling methods to recruit Minnesota firefighters statewide assessing the association between moral injury and perceived stress towards traumatic calls, perception of being trained to cope with mental health of firefighting, and moral injury comorbidity with PTSD, depression, and suicide ideation. This study assessed the use of department debriefs and department resources (chaplains, critical incident stress management "CISM", city employee assistance programs "CEAP", and department employee assistance programs "DEAP") and the protective effects for moral injury in trauma-exposed firefighters. ResultsPsychometric properties of the EMIS-F are comparable to the original military scale. The internal consistency of the EMIS-F was excellent (ω=0.94), inter-item correlations showed evidence of EMIS-F measuring a unidimensional construct (ρ=.30-.72). Multivariable analyses identified the risk factors for change in mean moral injury risk scores, which were firefighters self-reporting high perceived stress levels of calls involving fatalities (β=7.7) and children (β=3.1), and strongly disagreeing that they were trained to cope with mental health of firefighting (β=9.9). Firefighters with two or more mental health comorbidities showed over a 16.0 increase in mean moral injury risk scores, and greatly influenced by PTSD comorbidity. The protective factors of moral injury among firefighters self-reporting their most traumatic experience was those that used department debriefs and found them helpful, chaplains, and DEAP. Firefighters who found debriefs unhelpful showed evidence of debriefs as a risk factor for moral injury, in addition to using CEAP and CISM. Stigma showed evidence as a potential effect modifier regarding the impact or use of debriefs and increased moral injury risk scores. ConclusionThis study provides a reliable and valid moral injury scale that can be applied in research, clinical, and fire organization settings to screen symptoms of moral injury in firefighters. Knowledge of specific risk and protective factors presented not only serve for interventions, but an opportunity to evaluate and improve existing practices to enhance the well-being of firefighters.

7.

Donoso, C. C., et al. (2021). "Exposed lives, suffering and moral injury: The case of workers in the psychosocial area in times of the COVID-19 pandemic." Psicoperspectivas **20**(3): 1-14. https://ovidsp.ovid.com/ovidweb.cgi?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=psyc18&AN=2022-45676-013

The results of a study, carried out in Santiago, Chile, are presented, which aimed to identify the work experiences of workers in the psychosocial area of the programs that make up the Chile Crece Contigo social protection system and in the context of the pandemic, taking Axel Honneth's recognition theory as a frame of reference. This is a qualitative study in which a semi-structured interview was applied to 15 professionals from eight districts of the Region Metropolitana. The results are structured in four categories: Work in the air; Lack of implementation supports: Exposed lives; Personal costs: Working without conditions, and In COVID mode: Scenario for new agencies. It is concluded that professionals have been exposed to negative forms of recognition and that could be explained by the precarious work conditions and the lack of institutional support for intervention and the new demands for assistance caused by the health crisis. It is highlighted that this precarious scenario has mobilized new labor agencies in which creativity and criticism are key. (PsycInfo Database Record (c) 2022 APA, all rights reserved) Abstract (Spanish) Se presentan los resultados de un estudio llevado a cabo en Santiago, Chile, que tuvo por objeto identificar las experiencias laborales de trabajadores del area psicosocial de los programas que componen el sistema de proteccion social Chile Crece Contigo en el contexto de la pandemia, tomando como marco de referencia la teoria del reconocimiento de Axel Honneth. Se trata de un estudio cualitativo en el que se aplico una entrevista semiestructurada a 15 profesionales de ocho comunas de la Region Metropolitana. Los resultados se estructuran en cuatro categorias: Trabajar en el aire; Ausencia de soportes de implementacion: Vidas expuestas; Costos personales: Trabajar sin condiciones, y En modo COVID: Escenario para nuevas agencias. Se concluye que los profesionales se han visto expuestos a formas de reconocimientos negativas y que se podrian explicar por las condiciones de precariedad del trabajo y la falta de soportes institucionales para la intervencion y las nuevas demandas de asistencia provocada por la crisis sanitaria. Se destaca que este escenario de precariedad ha movilizado nuevas agencias laborales en que la creatividad y la critica son claves. (PsycInfo Database Record (c) 2022 APA, all rights reserved)

8.

Fernandez, P. (2022). Exploring the Interplay of Moral Injury Outcomes and Intimate Relationship Functioning among Combat Veterans with Trauma-Related Problems. Clinical and Counseling Psychology, University of South Alabama. **Master of Science**, https://jagworks.southalabama.edu/cgi/viewcontent.cgi?article=1090&context=theses_diss

Moral injury (MI) can be conceptualized as a social construct with implications for the individual as seen through symptoms of shame and isolation, and self-harming behaviors such as increase in substance abuse and risk-taking activities (Litz et al. 2009). Despite the probable impact on social relationships, research has not yet looked at the impact of MI outcomes on close social relationships in US service members and veterans (SM/V). Using a sample of 65 combat veterans, a multiple regression analysis was conducted to determine whether scores on the Expressions of Moral Injury Scale (EMIS-M) (Currier et al., 2017) uniquely predicted scores on the Romantic Subscale of the Inventory of Psychosocial Functioning (IPF) Scale (Bovin et al., 2018) when holding symptoms of PTSD constant.

Bivariate analyses revealed that veterans who scored higher on the PTSD Checklist for DSM-5 (PCL-5) reported worse MI outcomes, r=.58, p< .001. Results indicate that assessing for MI outcomes within intimate relationships can give providers a different perspective on how to treat mental health symptoms rather than only focusing on PTSD. Providers can potentially focus interventions on strengthening the relationship to reduce divorce rates or other adverse relationship outcomes among SM/V.

9.

Gherman, M. A., et al. (2022). "Protective Factors against Morally Injurious Memories from the COVID-19 Pandemic on Nurses' Occupational Wellbeing: A Cross-Sectional Experimental Study." International Journal of Environmental Research & Public Health [Electronic Resource] **19**(18): 19. https://dx.doi.org/10.3390/ijerph191811817

The COVID-19 pandemic was a fertile ground for nurses' exposure to self- and other-Potentially Morally Injurious Events (PMIEs). Our study explored the effects of nurses' memories of self- and other-PMIEs on occupational wellbeing and turnover intentions. Using an experimental design on a convenience sample of 634 Romanian nurses, we tested a conceptual model with PLS-SEM, finding adequate explanatory and predictive power. Memories of self- and other-PMIEs were uniquely associated with work engagement, burnout, and turnover intentions, compared to a control group. These relationships were mediated by the three basic psychological needs. Relatedness was more thwarted for memories of other-PMIEs, while competence and autonomy were more thwarted for memories of self-PMIEs. Perceived supervisor support weakened the indirect effect between type of PMIE and turnover intentions, through autonomy satisfaction, but not through burnout. Self-disclosure weakened the indirect effect between type of PMIE and turnover intentions, through autonomy satisfaction, and both burnout and work engagement. Our findings emphasize the need for different strategies in addressing the negative long-term effects of nurses' exposure to self- and other-PMIEs, according to the basic psychological need satisfaction and type of wellbeing indicator.

10.

Griffith, A. M. (2022). The Influence of Potentially Morally Injurious Experiences on the Stigma of Seeking Professional Mental Health Care Among Service Members and Veterans, East Carolina University. **Doctor**, http://hdl.handle.net/10342/11142

Background: Moral injury, or the engagement in or witnessing of an act that violates a person's moral code, has undergone increased research in the past decade, especially as it applies to service members and Veterans. Moral injury stems from exposure to potentially morally injurious experiences (PMIEs), which have been associated with many psychosocial concerns, but there is still limited literature on the prevalence rates of and potential risk factors for PMIEs. Additionally, there is limited knowledge of the rates of mental health treatment seeking by service members and Veterans for PMIEs, as well as how these influence stigma and attitudes towards help seeking. Methods: Participants (n = 730) were post-9/11 era service members and Veterans recruited from a Qualtrics Panel and social media platforms to complete a survey that included informed consent, validity items, demographic and military history information, moral injury measures, stigma and attitudes towards help seeking scale, and several mental health screeners. Descriptive statistics were used to examine the prevalence rates of PMIEs and associated mental health treatment seeking rates. Through structural equation modeling, I examined factors associated with the types of PMIEs in the MIES, perceived transgressions by self or

others and betrayals by others, in and outside the military. Additionally, structural equation modeling was employed to determine if PMIEs and screening positive for various types of mental health disorders interacted with stigma to influence the established model of public stigma, self-stigma, and attitudes towards help seeking. Results: While over three-quarters of the participants endorsed at least one PMIE and the average score on the Moral Injury Events Scale was 35.17 (SD = 12.98), fewer than half of all participants reported seeking mental health care for concerns related to PMIEs. Among those who did seek treatment, the most common treatment source was military behavioral health providers. Combat experience and military sexual trauma were significantly correlated with both types of PMIEs whereas serving as a warrant officer was significantly correlated with betrayals by others, in and outside the military. There was a significant indirect effect of public stigma on attitudes towards help seeking through self-stigma as well as a direct effect of perceived transgressions by self or others on self-stigma. No significant interactions were found between PMIEs or screening positive for mental health disorders and public or self-stigma on attitudes towards help seeking. Discussion: The current study contributed prevalence rates of PMIEs among post-9/11 era service members and Veterans, as well as associated mental health treatment seeking rates associated with PMIEs. Additionally, while higher endorsement of perceived transgressions is associated with higher levels of self-stigma, there were no interactions between PMIEs and stigma on predicting attitudes towards help seeking. Future research should include the development of improved measurement tools for PMIEs, continued exploration of unique barriers to seeking care for concerns related to PMIEs, and treatments to address the associated psychosocial concerns for PMIEs, especially as conceptualization of moral injury develops further.

11.
Grimell, J. (2022). "Can Service Members and Veterans Find Parallels Between Biblical Combat Veterans and Their Own Lives?" Spirituality in Clinical Practice **9**(3): 175 - 185. urn:nbn:nl:ui:31-d68d7a65-20ee-495f-8f5b-a049e7df1f5e

The purpose of this article is to introduce the health care services potential parallels between biblical combat characters and modern understandings of posttraumatic stress disorder, moral injury, and spiritual injury. A gallery of biblical combat veteran types is presented as a potential tool to help serve spiritual/religious (S/R) service members. This article presents a condensed conceptualization of these types and further discusses why it can be helpful for some service members and veterans to explore parallels between biblical combat characters and their own lives. For some this illustrates an unrecognized landscape of biblical combat veteran types with a variety of S/R dimensions/challenges which are potentially related to their own. It also demonstrates a previously unrealized resource for health care providers. This article contributes to S/R-related considerations of war zone deployment and combat a novel biblical and hermeneutical approach. At this point, however, the gallery of biblical combat veterans has only reached a conceptual or theoretical stage. The value of an intervention to real-life cases is unknown because it has not yet been tested or explored in either clinical practice or research studies

12.
Hutajulu, D. R. I. and E. S. Darmawan (2022). "MENTAL HEALTH IMPACT OF PANDEMIC COVID-19 AMONG HEALTH CARE WORKERS: A SYSTEMATIC REVIEW." Journals of Ners Community **13**(3): 340-345. 10.55129/jnerscommunity.v13i3.1947

<p>Basically, this study want to know what is the impact of COVID-19 among Health Care Workers (HCWs), including effect (stress, burnout, and anxiety). This systematic review was performed according to the Preferred Reporting Items for Systematic review. We conducted a systematic review by searching the following databases Proquest, Science Direct, Scopus, Sage, and MDPI from January 2020 to December 2020. The search was limited to the studies that reported mental health impact of COVID-19 in healthcare workers, such as psychological (emotional) trauma, acute stress disorder (ASD) and post-traumatic stress disorder (PTSD), mass traumatic event, secondary traumatic stress (STS), moral injury, sleep disorder. Case reports, duplicate publications, journal reviews, were excluded. The methodological quality of studies was assessed by the Appraisal tools From JBI tools. The initial search returned 34 articles. twelve studies were included in final analysis, with total of 14.205 subjects. Healthcare worker directly giving healthcare to suspected or confirmed COVID-19 patients may develop various mental issues such as anxiety, poor sleep quality, insomnia, parasomnia, changing personal life and enhanced negative effect. Physician and Nurse are healthcare workers professions most at risk of infection of COVID-19. Healthcare Workers have significant mental pressure during the COVID-19 pandemic. The different healthcare workers professions and gender have different levels of risk of mental disorders during COVID-19 pandemic.</p>

13.

Isaak, S. L. (2022). Developing a Brief Measure of Sacred Loss and Desecration: Understanding the Role of Spirituality within Post-Traumatic Adjustment. Clinical and Counseling Psychology, University of South Alabama, https://jagworks.southalabama.edu/theses_diss/89/

Spirituality has been defined as a search for the sacred, which can take place in the context of a religious institution or in any distinctive practice, system, ideology, or philosophy. The term sacred represents that which is divine or "set apart" from what is common—something meriting reverence and honor. Searching for the sacred is something that can, therefore, apply to the theist and the nontheist alike in their pursuit of institutions, associations, and ideologies that facilitate the development of values, purpose, and ultimate meaning. When individuals experience traumatic events, the psychological, social, and physical effects of such crises are often seen as intimately related to sacred foundations that are at the core of the individual's global meaning. When such foundations are threatened, lost, or destroyed, the psychological effects can be devastating. The Sacred Loss and Desecration Scale (SLDS; Pargament et al., 2005a) was developed to assess how negative life events can harm individuals' sacred meaning systems in the context of something being lost or violated. Drawing on this measure, Study 1 was conducted to refine and validate a six-item, correlated-two-factor structural xiii model of the SLDS with two online samples of adults that were split evenly between theists and nontheists. The new SLDS-Short Form (SLDS-SF) displayed strong internal consistency and convergent validity with theoretically related constructs (e.g., Moral Injury, PTSD, depression, and spiritual struggles). Configural and metric invariance testing yielded evidence that the SLDS-SF is a universally valid measure, regardless of religious belief. In Study 2, the SLDS-SF was used to further understand the positive relationship between pre-military religious commitment and moral injury among 224 post-9/11 war-zone Veterans who were experiencing a struggle with their faith or spirituality. A mediation analysis conducted using structural equation modeling indicated that sacred loss and desecration partially mediated the relationship between pre-military religious commitment and moral injury. A significant indirect effect, $\beta = .242$, 95% CI [.125,.374], of pre-military religious commitment was observed through sacred loss and desecration, where moral injury accounted for

68.5% of the total variance within the model. Overall, these findings demonstrate the utility of understanding how sacred foundations are important facets of an individual's global meaning system and how they can be impacted by traumatic events.

14.
Johnstone, R. and P. Edwards (2022). "Supporting nurse leaders to recognise and mitigate the effects of moral injury." Nurs Manag (Harrow). 10.7748/nm.2022.e2067

The concept of moral injury has been around for several decades, yet its effect on nurses remains under-recognised. Moral injury is defined as the biopsychosocial harm that arises from a violation of one's moral code, meaning that a person is powerless to uphold and enact what they believe is morally right. The coronavirus disease 2019 (COVID-19) pandemic has brought the issue of moral injury into focus because many nurses and other healthcare professionals have encountered potentially morally injurious events, resulting in increased pressure and emotional demands. It is essential that nurse leaders recognise moral injury if its effects are to be addressed. This article describes moral injury and its effects on nurses, and offers nurse leaders a practical framework for mitigating this issue. The framework aims to support nurse leaders to increase their understanding of moral injury, address any ethical challenges, ensure they are adequately prepared to provide support to nurses, and enhance their awareness of various interventions that can mitigate moral injury.

15.
Jong, C. d. (2022). Morele stress tijdens de coronacrisis: een empirisch en kwalitatief casestudyonderzoek onder zorgmedewerkers in het verpleeghuis. Faculteit der Filosofie, Theologie en Religiewetenschappen, Radboud Universiteit. **Master**, https://theses.ubn.ru.nl/handle/123456789/13562

Deze scriptie beschrijft de stressoren die verpleeghuismedewerkers hebben ervaren in het verlenen van zorg tijdens de eerste fase van de coronacrisis in 2020 en onderzoekt of deze hebben geleid tot morele stress. Deze ervaringen van morele stress zijn onderzocht onder zorgmedewerkers van een verpleeghuis in Noord-Holland. Morele stress is een persoonlijke ervaring waarbij de professional niet kan handelen naar persoonlijke en professionele waarden. Naast het typisch persoonlijke karakter van morele stress vindt deze ervaring altijd plaats in interactie met de directe werkomgeving en een bredere sociaal-politieke context. Met behulp van het zorgethisch model van Joan Tronto en het werk van Inge van Nistelrooij zijn de belangrijkste morele waarden binnen het cliënt-zorgproces in kaart gebracht.

16.
Levi-Belz, Y., et al. (2022). "Moral Injury and Suicide Ideation Among Combat Veterans: The Role of Trauma-Related Shame and Collective Hatred." European Psychiatry **65**(S1): S844-S844. 10.1192/j.eurpsy.2022.2187

IntroductionExposure to potentially morally injurious events (PMIEs) among combat veterans has been acknowledged as a significant stressful combat event that may lead to mental health problems, including suicide ideation (SI). Several studies have examined the risk and protective factors that can explain the conditions in which PMIEs may contribute to the development and maintenance of SI. However, the contribution of social-emotional factors has yet to be examined.ObjectivesIn the current study, we examined the association between PMIE-Self and SI among combat veterans and

explored the mediating role of trauma-related shame and the moderation role of collective hatred in this association.MethodsA volunteer sample of 336 Israeli combat veterans was recruited, completing self-report questionnaires in a cross-sectional study.Results indicated that PMIE-Self was positively associated with SI, and trauma-related shame mediated this association. Moreover, collective hatred moderated both their direct (PMIE -SI) and indirect (PMIE-Shame-SI) association. Notably, collective hatred had an inverse role for each of the associations. Thus, collective hatred was found to comprise both a risk and a protective factor for SI following PMIE-Self.ConclusionsThe current findings highlight the crucial contribution of trauma-related shame and collective hatred to the association between moral injury and suicidality. Moreover, the findings demonstrate that even years after their military service release, combat veterans exposed to PMIEs may still feel consumed by painful memories and maintain premonitions of a foreshortened future. Furthermore, the findings help to better understand the dynamics of collective hatred and the challenge of modifying it.DisclosureNo significant relationships.

17.
McNeely, P. W. (2022). "Addressing moral injury from a spiritually integrated view." Dissertation Abstracts International: Section B: The Sciences and Engineering **83**(10-B): No Pagination Specified. https://ovidsp.ovid.com/ovidweb.cgi?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=psyc18&AN=2022-62752-038

Since Shay (1994) proposed the concept of moral injury after working with U.S. combat veterans from the Vietnam war, researchers have looked to define, understand, and treat moral injury in many different populations. Individuals who suffer from moral injury tend to experience deep shame, guilt, and a sense of de-moralization. Combat veterans with moral injury are also at higher risk of experiencing PTSD symptoms and experience more difficulty in attaining positive treatment outcomes. The psychological literature consistently shows that these individuals often experience spiritual and religious struggles in their lives as a consequence of moral injury. Given the high number of religious individuals in the U.S. military and veteran population, this dissertation looks to examine moral injury from the tradition of the Catholic/Christian view of the person. This dissertation proposes that the Catholic/Christian vision of the person can add insight into the understanding and treatment of moral injury. Specifically, this dissertation will explore ways that integrating the Catholic/Christian view of the person can add a strategy for treatment that aims to help those who suffer from moral injury to heal in a way that is re-moralizing and that provides opportunities to connect with transcendent goals. (PsycInfo Database Record (c) 2022 APA, all rights reserved)

18.
Molendijk, T. (2021). Morele verwondingen. None (EN), Ministerie van Defensie - NLDA.urn:nbn:nl:hs:34-7c1ae1f8-a9eb-46ac-972e-d666fdc20035

In deze eerste aflevering van het tweede seizoen praten we met dr. Tine Molendijk over morele verwondingen, oftewel ?moral injuries?. Dr. Tine Molendijk is een interdisciplinair georiënteerde cultureel antropoloog ? sociaal wetenschapper ? gespecialiseerd in de thema?s geweld, militaire cultuur en geestelijke gezondheid, met name post-traumatische stressstoornis (PTSS) en morele verwonding. Op dit moment leidt zij het NWO NWA-project van de Radboud Universiteit Nijmegen, de Nederlandse Defensie Academie, de Politieacadamie, het Nederlands Veteraneninstituut en het ARQ Nationaal Psychotrauma Centrum naar morele verwondingen: http://projectmoralinjury.nl/

19.

Mooren, N., et al. (2022). "The impact of morally injurious events in a refugee sample: A quantitative and qualitative study." <u>Frontiers in psychiatry</u> **13**. 10.3389/fpsyt.2022.904808

        <sec>BackgroundPosttraumatic Stress Disorder (PTSD) is often reported by refugees that faced violence and persecution. Some stressful events may also entail moral conflicts or dilemmas, described as "potentially morally injurious events" (PMIE). Very few studies have yet investigated the nature of these PMIEs in traumatized refugees, using both quantitative and qualitative data.</sec><sec>MethodFor this retrospective study, secondary data analysis was used to examine the traumatic events of 183 patients. Based on established definitions of a PMIE, participants were allocated to a Moral Injury (MI) group if they reported lasting distress after exposure to an event of which they indicated that it transgressed their moral beliefs. The remaining participants were allocated to the No-MI group. The type of PMIEs was categorized using qualitative analysis. The groups were compared in terms of PTSD severity, feelings of guilt, and general mental health symptoms.</sec><sec>ResultsOf the total sample, 55 participants reported one or more acts of transgression (MI group) and 128 reported no acts of transgression (No-MI group). Analyses of PMIEs revealed six themes 1) failing to prevent harm to others, 2) not giving aid to people in need, 3) leaving family members behind that consequently lead to injury or death of others, 4) making indirect and direct moral decisions leading to injury or death of others, 5) betrayal, and 6) engaging in the harm of others. No differences were found between groups on the clinical outcomes, except for feelings of guilt.</sec><sec>ConclusionA considerable number of traumatized refugees reported confrontation with PMIEs. Experiencing PMIEs appeared unrelated to elevated posttraumatic mental health issues.</sec>

20.

Raymond, N. (2022). Exploring Moral Injury Among Intensive Care Unit Nurses Working the Frontlines During the Covid-19 Pandemic: A Qualitative Study. <u>Exploring Moral Injury Among Intensive Care Unit Nurses Working the Frontlines During the Covid-19 Pandemic: A Qualitative Study</u>, University of Massachusetts Lowell. **Doctorate In Nursing**, https://www.proquest.com/openview/3098efb1d1040d5d11c921a21900404a/1?cbl=18750&diss=y&pq-origsite=gscholar&parentSessionId=6unrHvi0sgWo2%2FIdjj0Mm%2FazGIBlbcAl5ldidXbB%2BrU%3D

        Background: Understanding factors contributing to Moral Injury (MI) among Intensive Care Nurses (ICU) working on the frontlines of the COVID-19 pandemic may inform education, intervention, and research contributing to nurses' wellbeing and mental health. The toll on our nurses will be much more significant than many realize, with one in five health care workers have left their jobs and 2/3 of intensive care unit (ICU) nurses quitting or transitioning to new specialties. The trauma of these experiences can lead to moral injury, an emerging phenomenon recognized as a possible source of traumatic sequelae for nurses. Aim: The primary aim of this study was to analyze the lived experiences of intensive care nurses delivering care on the frontlines of the COVID-19 pandemic using a trauma-informed lens and specifically exploring factors related to moral injury caused by the pandemic amongst ICU nurses. The study was conducted during the COVID-19 pandemic and provided initial insight into the concept of moral injury and its impact on ICU nurses' wellbeing. Method: The Trauma-Informed Care (TIC) conceptual framework is a multifaceted model adapted to guide the qualitative descriptive study and open-ended response thematic analysis at the intrapersonal, interpersonal, and

collective levels. The interview questions were comprised of The Substance Abuse and Mental Health Services' (SAMHSA) six principles that guide a trauma-informed approach, including Safety, Trustworthiness, Peer support, Collaboration Empowerment & Cultural, historical & gender issues. Findings: Interviews were conducted with 14 (n=14) ICU nurses caring for COVID-19 patients in various ICUs during the pandemic. Most of the participants were female (n=12), with two male participants (n=2); eleven participants identified as White (n=11). Participants' ICU v experience ranged from one year to 11 years or longer. Thematic analysis and NVivo version 12 were used to analyze the data. Six themes emerged from the data analysis: the calling of a nurse, humanity stripped from practice, pervasive isolation, high acuity sadness, powerless, and holding each other up. Conclusion: ICU nurses have experienced profound losses in their personal, interpersonal, and collective milieu, and understanding the impact of the COVID-19 pandemic on nurses' mental health and wellbeing from a nursing perspective is critical to best inform strategies toward health promotion and healing for all nurses. Trauma-informed care (TIC) is based on a framework that recognizes people's lived experiences and expands across more areas in health care institutions. The researcher's unpublished concept analysis on moral injury in nursing in the context of COVID-19 provided foundational information to guide the development of future interventions. Moreover, as the pandemic recedes, the qualitative study's findings will further inform and guide education, prevention, and nursing research, contributing proactively to reducing the adverse effects of moral injury. More profound research is needed to explore moral injury in nursing further and inform peer-to-peer support programs at an institutional level.

21.
Roth, S. L. (2022). Measuring and Characterizing Moral Injury in Vulnerable Populations. Psychology, McMaster University. **e Doctor of Philosophy**, http://hdl.handle.net/11375/27838

     Moral injury is a relatively new psychological syndrome characterized by profound emotional, cognitive, and social pain following perceived moral violations. Though often overlapping, moral violations can involve either the perpetration of a moral transgression (via action or inaction) or the experience of a moral betrayal by a trusted other. In each case, symptoms of moral injury may include guilt, shame, anger, loss of trust and meaning, and social withdrawal. To date, the study of moral injury has remained nearly exclusive to the military arena. In turn, the aim of this thesis is to highlight the relevance of moral injury to other populations vulnerable to its effects. These include: 1) justice-involved individuals found Not Criminally Responsible on Account of Mental Disorder who may experience moral injury after regaining insight into their offending behaviour; and 2) Public Safety Personnel who are often exposed to morally ambiguous situations while under high levels of social responsibility. To appreciate the impact of moral injury for these populations, adequate tools must first be developed to measure and assess it. The three studies included in this dissertation outline the key steps to instrument development using a mixed-method approach: first, a qualitative investigation with justice-involved individuals explores the unique emotional consequences following a criminal offence that will inform subsequent phases of instrument development; second, quantitative inquiries are taken to construct, evaluate, and employ a new moral injury assessment for Public Safety Personnel to uncover important causes and consequences of moral injury in this group. This dissertation serves as a strong indicator that moral injury is a unique and costly health outcome relevant across societal groups.

22.

Ter Heide, F. J. J., et al. (2022). "Development of an online supportive treatment module for moral injury in military veterans and police officers." <u>Frontiers in psychiatry Frontiers Research Foundation</u> **13**: 890858. https://dx.doi.org/10.3389/fpsyt.2022.890858

Background: Military members and police officers often operate in high stakes situations and under high levels of physical and psychological stress. Consequently, they may be confronted with morally injurious experiences and develop moral injury. Most treatments for moral injury are cognitive-behavioral, face-to-face treatments, which may be supported by online interventions. Online interventions have shown promise in the treatment of trauma-related psychopathology, but few such interventions for moral injury yet exist.

Objective: To develop and conduct a preliminary evaluation of an online treatment module for moral injury in treatment-seeking military veterans and police officers, to be used in conjunction with regular face-to-face treatment.

Method: An online module was developed based on the moral injury literature, using elements from seven existing treatments. A preliminary evaluation was conducted using both quantitative and qualitative methods, and focusing on perceived feasibility, acceptability and engagement of the module, as well as potential benefits and harms. The concept module was evaluated by 15 assessors, including patient representatives, multidisciplinary caregivers and experts.

Results: The module was rated favorably, with mean evaluation scores ranging from 7.9 to 8.8 on a 10-point scale. Several suggestions for improvement were made, especially concerning privacy issues, safety instructions, patient-therapist collaborations, and role plays, and the module was adapted accordingly.

Conclusion: Using input from literature, patient representatives and experts, we developed an online treatment module for moral injury in military veterans and police officers, to be used in conjunction with face-to-face therapy. Acceptability and feasibility will be further examined in a future pilot study.

23.

Van Denend, J., et al. (2022). "Moral Injury in the Context of Substance Use Disorders: a Narrative Review." <u>Current Treatment Options in Psychiatry</u>: 1-10. 10.1007/s40501-022-00280-4

The rate of annual drug overdose deaths in the USA recently topped 100,000 (CDC/National Center for Health Statistics 2021), an illustration of the critical need to prevent and treat substance use disorders (SUDs). As a complex, chronic medical condition, substance use treatment requires psychological, emotional, and spiritual interventions along with medical care. The recently developed concept of moral injury has been increasingly studied and applied to military service members who experience conflict between the expectations or survival needs of combat and their moral values. This review explores whether moral injury, along with the related emotional, psychological, and spiritual symptoms, can also develop in the context of SUDs. This review identified 5 manuscripts related to moral injury arising in a substance use context. These studies were small in sample size and qualitative in nature but did indicate the presence of moral injury within the context of substance use. Further studies are needed to better understand and treat moral injury related to SUDs. A conceptualization of how moral injury may arise in the context of substance use is presented here. It is suggested that the activation of the primitive dopaminergic reward system causes a potential conflict between the experienced need for the addictive substance and a person's moral code or values. The moral injury resulting from this collision may impact treatment and recovery.

24.

van Minnen, A., et al. (2022). "Initial development of perpetrator confrontation using deepfake technology in victims with sexual violence-related PTSD and moral injury." Frontiers in psychiatry Frontiers Research Foundation **13**: 882957. https://dx.doi.org/10.3389/fpsyt.2022.882957

Background: Interventions aimed at easing negative moral (social) emotions and restoring social bonds - such as amend-making and forgiving-have a prominent role in the treatment of moral injury. As real-life contact between persons involved in prior morally injurious situations is not always possible or desirable, virtual reality may offer opportunities for such interventions in a safe and focused way.

Objective: To explore the effects of the use of deepfake technology in the treatment of patients suffering from PTSD and moral injury as a result of being forced by persons in authority to undergo and commit sexual violence (so-called betrayal trauma).

Methods: Two women who had experienced sexual violence underwent one session of confrontation with the perpetrator using deepfake technology. The women could talk via ZOOM with the perpetrator, whose picture was converted in moving images using deepfake technology. A therapist answered the questions of the women in the role of the perpetrator. Outcome measures were positive and negative emotions, dominance in relation to perpetrator, self-blame, self-forgiveness, and PTSD-symptom severity.

Results: Both participants were positive about the intervention. Although they knew it was fake, the deepfaked perpetrator seemed very real to them. They both reported more positive and less negative emotions, dominance in relation to the perpetrator and self-forgiveness, and less self-blame and PTSD-symptoms after the intervention.

Conclusion: Victim-perpetrator confrontation using deepfake technology is a promising intervention to influence moral injury-related symptoms in victims of sexual violence. Deepfake technology may also show promise in simulating other interactions between persons involved in morally injurious events.

25.

Williamson, V., et al. (2022). "Veterinary professionals' experiences of moral injury: A qualitative study." Veterinary Record: e2181. 10.1002/vetr.2181

BACKGROUND: Exposure to potentially morally injurious events (PMIE) has been found to be associated with negative mental health outcomes. Veterinary professionals (VPs) often experience challenging workplace events, but whether they experience PMIEs and the impact of exposure on their wellbeing is poorly understood. The objective of the study was to explore UK VPs experiences of PMIEs, the impact of PMIEs on VPs' wellbeing and beliefs about factors that influence VPs' exposure to PMIEs. METHODS: Ten VPs were recruited. Semi-structured interviews were carried out, and data were analysed using thematic analysis. RESULTS: VPs were found to experience PMIEs, including transgressive acts of commission or omission (e.g., being involved in or witnessing convenience euthanasia) or betrayal by trusted colleagues (e.g., bullying). Experiences of PMIEs evoked considerable psychological distress, including guilt, shame and loss of confidence in one's abilities. Several risk factors for experiencing psychological distress following a PMIE were described. CONCLUSIONS: This study provides some of the first evidence that VPs may be vulnerable to moral injury and illustrates the impact that PMIEs may have on VPs' wellbeing. LIMITATIONS: Future studies are needed to design and evaluate effective pathways for the prevention of and intervention for VPs who experience moral injury.

26.
Zahiriharsini, A., et al. (2022). "Associations between psychosocial stressors at work and moral injury in frontline healthcare workers and leaders facing the COVID-19 pandemic in Quebec, Canada: A cross-sectional study." Journal of Psychiatric Research **155**: 269-278. https://doi.org/10.1016/j.jpsychires.2022.09.006

  Healthcare workers (HCWs) on the frontline of the COVID-19 pandemic exhibit a high prevalence of depression and psychological distress. Moral injury (MI) can lead to such mental health problems. MI occurs when perpetrating, failing to prevent, or bearing witness to acts that transgress deeply held moral beliefs and expectations. Since the start of the pandemic, psychosocial stressors at work (PSWs) might have been exacerbated, which might in turn have led to an increased risk of MI in HCWs. However, research into the associations between PSWs and MI is lacking. Considering these stressors are frequent and most of them are modifiable occupational risk factors, they may constitute promising prevention targets. This study aims to evaluate the associations between a set of PSWs and MI in HCWs during the third wave of the COVID-19 pandemic in Quebec, Canada. Furthermore, our study aims to explore potential differences between urban and non-urban regions. The sample of this study consisted of 572 HCWs and leaders from the Quebec province. Prevalence ratios (PR) of MI and their 95% confidence intervals (CI) were modelled using robust Poisson regressions. Several covariates were considered, including age, sex, gender, socio-economic indicators, and lifestyle factors. Results indicated HCWs exposed to PSWs were 2.22–5.58 times more likely to experience MI. Low ethical culture had the strongest association (PR: 5.58, 95% CI: 1.34–23.27), followed by low reward (PR: 4.43, 95% CI: 2.14–9.16) and high emotional demands (PR: 4.32, 95% CI: 1.89–9.88). Identifying predictors of MI could contribute to the reduction of mental health problems and the implementation of targeted interventions in urban and non-urban areas.

27.
Zerach, G. and Y. Levi-Belz (2022). "Moral Injury, Depression and Anxiety among Israeli Health and Social Care Workers During the COVID-19 Pandemic: The Moderating Role of Thwarted Belongingness." European Psychiatry **65**(S1): S533-S533. 10.1192/j.eurpsy.2022.1361

  IntroductionThe COVID-19 pandemic can affect the mental health of health and social care workers (HSCWs) who are frontline workers in this continuous crisis. Following exposure to potentially morally injurious events (PMIEs) that undermine deeply held moral beliefs and expectations, HSCWs might experience moral injury (MI) and deleterious psychiatric consequences such as depression and anxiety symptoms.Objectives To examine associations between exposure to PMIEs, MI symptoms, depression, and anxiety symptoms. We also aim to assess the moderating role of thwarted belongingness in these associations.MethodsA sample of 243 Israeli HSCWs completed online validated self-report questionnaires in a cross-sectional designed survey in February and March 2021.ResultsAbout one-third (33.6%) of the sample met the criteria for major depressive disorder, 21.5% met the criteria for generalized anxiety disorder, and 19.1 % reported comorbidity of depression and anxiety. A moderated-mediation model shows that high thwarted belongingness intensified the relations between exposure to PMIEs and MI symptoms, and between MI symptoms and depression and anxiety symptoms. Importantly, the indirect effect of exposure to PMIEs on both depression and anxiety symptoms via MI symptoms existed only among those with high levels of thwarted belongingness.ConclusionsThe study's findings highlight the mental burden of HSCWs during the

COVID-19 pandemic and the contribution of MI to possible mental health consequences. Clinicians should be aware of the importance of high thwarted belongingness in depression and anxiety sequelae of exposure to PMIEs among HSCWs.DisclosureNo significant relationships.