Review Article

Moral Distress In COVID-19 Front Line Health Care Workers: A Protocol of Systematic Review and Meta-Synthesis of Qualitative Studies

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Abstract:

Background: Literature shows that during the present Covid-19 pandemic, the sense of moral distress among health care workers (HCWs) may be amplified. Moral distress is known as a state of having enough knowledge and skills to manage patients; whilst not being able to properly act due to mental or actual limitations.

Rationale: Even though several investigations have been conducted on moral distress in the COVID-19 period, studies are being conducted with various methods of moral distress assessment, the majority of which are created for moral distress conditions prior to the pandemic's arrival and qualitative studies are better fitting the COVID-19 driven moral and ethical dilemma.

Objective: We aimed at developing a protocol for the review of the qualitative studies about moral distress in the COVID-19 era.

Study design: Protocol of systematic review and meta-synthesis.

Methods: A systematic review of qualitative researches that looks at moral distress in HCWs involved with patients with COVID-19 would be performed based on the Preferred Reporting Items for Systematic review and Meta-Analysis Protocols (PRISMA-P) and Consolidated Criteria for Reporting Qualitative Studies (COREQ) criteria. MEDLINE and PsycINFO, EMBASE, SCOPUS, and Web of Science databases would be searched with a combination of relevant keywords. CASP checklist would be used to assess the quality of qualitative research. The meta-aggregation method would be used with the ConQual approach to synthesis the data.

Results and conclusion: Results of this study would be published in a peer-reviewed journal.

Keywords: Moral Injury, Moral Distress, COVID-19, Emergency Department

Introduction

The COVID-19 has been identified as a major public health problem worldwide for last two years. Unbridled spread of COVID-19 and adverse severe outcomes of COVID-19, lack of effective medical treatment and ultimately mortality from this disease are the most important factors that have emerged new situations for both patients and medical staff (1,2). The accelerating global spread of COVID-19 has made a sense of imbalance in the system of medical staff-patient relations. Health care workers

(HCWs) including physicians and nurses are at the front line of confrontation, especially in Emergency departments (ED) (3,4). Certainly, in such high-risk situations, medical staff are required to protect the rights of the patient and prevent their selves from being harmed due to infection (5). Also, During the crisis of pandemic in peaks of disease spread, HCWs may face many problems such as insufficient control over the transmission chain and increased number of infected cases and consequent crowdedness of EDs, lack of equipment and medical space, lack of ICU beds, and etc. (6). These situations may lead to Moral distress. The concept of moral distress was first proposed by Jameton and then explored by many researchers. The noteworthy point in the definition is that the person has the ability and knowledge to help the patient, but is unable to do so due to mental or actual limitations (7,8). Moral distress is one of the ethical challenges in the health care profession and is known as a phenomenon that prevents the proper moral functioning of individuals, despite having the necessary knowledge (9). This can lead to many personal and professional consequences, such as physical and mental problems for HCWs, leaving the job and professional dissatisfaction, as well as physical damage to patients (10).

Rationalization of study:

Despite the fact that the study of moral distress in COVID-19 era has been performed by multiple pieces of research, studies are being conducted with different tools that most are designed for moral distress situations before the pandemic appearance, at different time intervals and also in different settings and sections, this phenomenon has not been studied and the results are not conclusive for emphasize the importance of addressing this moral dilemma. Among the tools used to assess moral distress are the Jameton (1993) and Corelli (2007, 2001) questionnaires (7,11), each of which differs in number and type of options; Measures the

frequency, severity, and effect of moral distress simultaneously. Most studies on moral distress in COVID-19 are complaining about the impossibility of a practical conclusion and generalization of results (12-14). To express these moral dilemmas in a more detailed manner, some qualitative studies have been performed; whilst no integrative summary of the results of these studies is available. In this study, we use meta-synthesis methods to draw more concentrated results for moral distress circumstances among HCWs facing COVID-19 patients. There are several methods for researching and recognizing reality and social phenomena in the field of humanities and medicine. A meta-synthesis method is a qualitative approach suitable for management studies. Meta-synthesis is a relatively new qualitative method that is used to integrate qualitative studies with the aim of developing a theoretical model and can explain the findings of different studies on the same subject.

Methods

We will perform a comprehensive review of qualitative research that looks at moral distress in HCWs involved with patients with COVID-19. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses Protocols (PRISMA-P) criteria will be followed in this protocol along with criteria of comprehensive reporting of qualitative studies Consolidated criteria for reporting qualitative research (COREQ) (15). The searches were started on 3 December 2021 and primary search was completed on 17 December 2021.

Formulating Study Question

This step includes determining the purpose with a research question and a theoretical framework. The scope of the research should be such that it fully covers the dimensions of the phenomenon under study and is sufficiently specific. The chosen topic for meta-synthesis should have sufficient scientific value and applications for knowledge and theory development or performance improvement.

Among the available search tools for study question conceptualization, PICO, PICOS and SPIDER were available that SPIDER was best fitting with our study (16). SPIDER provides a methodical approach to finding qualitative and mixed-methods researches. The SPIDER tool, which is based on the same concepts as the PICO tool, aids rigor in research by outlining important features of non-quantitative research questions (17). The PICO tool has been modified into the SPIDER tool with following questions:

Sample (S): HCWs of Emergency Department (ED), including physicians, nurses, emergency medical personnel, and students at ED, during COVID-19 pandemic.

Phenomenon of Interest (PI): Moral Distress in HCW of ED during the COVID-19 pandemic.

Design (D): Systematic review of qualitative research.

Evaluation (E): All outcomes of interest related to bioethical issues, moral status, moral injury, moral distress assessed by qualitative researches and mixed method studies would be included.

Research Type (R): qualitative and mixed method studies.

Eligibility criteria:

Research studies would be considered whether they are qualitative studies involving HCWs of ED who handle COVID-19 patients and have been using qualitative methods for data collection and analysis. Mixed method studies would be qualified if the qualitative and quantitative data are analyzed separately. All included studies will be characterizing the different aspects of the moral distress in COVID-19 management. Studies at settings of ICU or COVID-19 wards would not be included to centralize study focus on ED. non-English articles would not be considered. Letters, Commentaries, Narrative Review studies, Systematic review studies, and quantitative studies would not be included.

Sources:

MEDLINE and PsycINFO, EMBASE, SCOPUS, and Web of Science databases would be quarried. Up until 2019, the search will be conducted using explosions and combinations of key search terms of [moral distress OR moral injury OR ethic] AND [COVID-19 OR SARS-COV-2 OR pandemic] AND [emergency department OR nurse OR physician OR students]. A PRISMA flow chart would be utilized to visualize the study selection process. The findings would be transferred to an excel spreadsheet. Following removing duplicated search results, two researchers (NK,NH) would independently perform initial title screening. After that, titles and abstracts of remaining records would be evaluated for collection of potentially relevant studies. Then, full-text review would be conducted to find papers that meet eligibility criteria. Final results of the independent researchers would be merged based on their discussions and if an agreement cannot be established, a debate with a third reviewer would be performed to address the issue (LD).

Quality assessment:

The Critical Appraisal Skills Programme (CASP) checklist is a tool commonly used to assess the quality of early qualitative research studies (18). CAPS is a 10-item tool that helps the researcher determine the accuracy, validity, and importance of qualitative research studies. These questions focus on the following: 1. Research objectives, Research objectives, sampling method, Data collection, Reflexivity (including the relationship between the researcher and the participants), Ethical considerations, Accuracy of data analysis, clear expression of the findings, the value of research.

Data extraction

A checklist based on the COREQ [Personal characteristics of the research team: interviewer, credentials, occupation, experience, and training; Relationship with participants (establishing a relationship, participant familiarity of the

interviewer, and interviewer traits); Grounded theory, discourse analysis, ethnography, phenomenology, and content analysis are examples of theoretical frameworks. Methods of participant selection; Data collection settings; Data collection techniques (includes inquiries related to the interview guide, repeat interviews, sound recording, field notes, length, data saturation, and returned transcripts); and questions of findings and analysis] would be used along with all themes, subthemes and supplemented quotations. The completed data extraction forms will be checked for consistency and integrity. Each published report's themes and subthemes will be extracted, independently checked by the pairs of reviewers, and uploaded to an Excel spreadsheet. To eliminate ambiguity, the items will be grouped together and duplicates will be removed.

Risk of bias

Our checklist of CASP checklist would also be implicated for bias assessment (19).

Data synthesis

Combining qualitative evidence to examine research questions is being conducted by precise qualitative methods to combine existing qualitative studies to create more meaning through an interpretive process (20,21). The main goal of a qualitative meta-analysis is knowledge production. From this perspective, goals for qualitative meta-analysis research are proposed to be: 1) theory construction, 2) Theory description, and 3) theory development According to Sherry et al., qualitative meta-synthesis should be used to construct more abstract theories, to describe theories more accurately (theory explanation), and to provide a more general overview of a theory development field) (21, 22).

Synthesis is a collective set of qualitative or ethnographic researches to identify common themes or to compare and contrast different groups on a general theme, providing deeper insights that may be available in a single study. The qualitative hybrid approach is not only important for recognizing multiple research studies, but also has the ability to identify gaps and inefficiencies in research content and can add depth of dimension and interpretation to qualitative studies (20-23).

We choose aggregative methodologies to attempt to uncover practice and policy applications. the aggregative method tends to use realist or pragmatist epistemological frameworks in order to provide a complete summary of previous work in a descriptive way. There is no re-interpretation of data (23).

Meta-aggregation method

In this method, the Dependability and Credibility of each subtheme would be evaluated to establish a ConQual score, as shown in table 1.

Table 1. ConQual approach questions

Dependability:
1. Is the research approach consistent with the study topic or objectives?
2. Is there a match between the study approach and the data collection methods?
3. Is there a match between the study approach and the data visualization and analysis?
4. Is there a remark that situates the researcher in terms of culture or theory?
5. Is the researcher's effect on the research, and vice versa, taken into account?
Credibility:
Unequivocal: results backed by an example that is beyond reasonable dispute and so unchallengeable).
Equivocal (findings supported by an example that has no obvious relationship with them and hence can be questioned).
Unsupported: the data does not support the results.

The synthesized finding is graded based on the aggregated degree of dependability when the five criteria for dependability are not fulfilled throughout the included research. Downgrading may occur if not all of the findings included in a synthesized finding are judged unambiguous (24). Based on similar previous study by Arnold, we predict about 10 studies to make reliable evidence available in meta-synthesis (25).

Dissemination plan of study

We would report our systematic review progress at PROSPERO registry, planned to submit in January 2022.

Results:

We will report the results of the systematic review and submit the work to a peer-reviewed journal.

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