

The average of moral courage among nurses and nursing students: A systematic review and meta-analysis protocol

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ABSTRACT

Background: Moral courage is a critical attribute of nursing practice, enabling nurses to advocate for patient care and ethical practices despite potential risks or adversity. While primary literatures explore how it manifests in clinical settings and the factors that influence it, there is a lack of secondary research on the level of moral courage among nursing students and nurses. Quantitatively assessing moral courage in nurses and nursing students can provide insight into the status of this ethical value. The aim of this study is to explore the average of moral courage among nurses and nursing students. **Methods:** A comprehensive search will be performed across online databases. Studies will be included if they assessed moral courage in nurses or nursing students using validated instruments. Data extraction and risk of bias assessment will be carried out independently by two reviewers using the PRISMA guidelines. **Discussion:** One of the ethical challenges in the nursing profession is implementing beneficial decisions in practice to ensure the safety and efficiency of the healthcare system for patients and healthcare providers. This underscores the critical role of education, policies, and societal actions in shaping and supporting moral courage in nursing. Studies suggest that creating supportive environments and providing adequate resources are essential strategies to enhance moral courage, equipping nurses better to address moral challenges effectively, especially in developing countries. **Systematic review registration:** PROSPERO CRD42024544769. This protocol follows the PRISMA-P guidelines for reporting systematic reviews.

Keywords: Moral courage, nursing students, nurses, systematic review, meta-analysis.

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INTRODUCTION

In order to uphold ethical principles and values, moral courage in nursing can be defined as an inherent and intrinsic virtue of nurses, a unique two dimensional and interactive phenomenon, and a person's ability and willingness to encounter with danger and risk (1). The presence of moral courage is linked to improved patient outcomes, reduced moral distress, and an enhanced professional development for nurses (2). However, the application of moral courage is not without challenges, including organizational

constraints, personal and professional identity issues, and fears of negative repercussions (3). These obstacles can deter nurses from acting morally courageous, potentially leading to ethical conflicts and compromised patient care (2). Therefore, fostering a culture of moral courage within healthcare settings is crucial for promoting ethical practices, patient safety, and the quality of care (1, 4).

Studies use different tools to measure moral courage, which affects the validity and reliability of the results (5, 6). Variation in measurement tools may lead to variations in how moral courage

is measured (7). The research results indicate that many studies have relied on self-reported measures of moral courage, which can be subjected to biases and may not accurately reflect actual moral courage (8). The Professional Moral Courage (PMC) scale consists of 15 questions measuring moral courage as a managerial competency. It has five dimensions: moral agency, multiple values, endurance of threats, going beyond compliance, and moral goals (9). One of the other tools for measuring moral courage in nurses is the Nurses' Moral Courage Scale (NMCS), which was developed and validated in Finland in 2018 (10-12). The NMCS consists of 21 items and measures moral courage in the four dimensions of moral agency, moral trust, moral challenge, and moral goals (10, 11). Sekerka's Moral Courage Questionnaire is another tool used to assess moral courage, particularly in the context of professional settings. It has 15 questions in five dimensions of ethical agency, multiple values, perseverance, adherence, and ethical goals (13).

Regarding moral courage, several systematic and scoping review studies investigate factors associated with that, such as moral distress, moral sensitivity, age, and analyze scientific evidence that influences moral bravery in nursing students and describe the intensity and frequency of moral distress exposure by Intensive care unit nurses (5, 14, 15). Furthermore, another literature review explores factors that impede or enhance undergraduate nursing students' efficiency in demonstrating moral courage in ethical positions (16). The studies mentioned are qualitative and have a significant scattering to assess moral courage or any ethical situation, and they do not form a specific category.

Protocols in the International Prospective Register of Systematic Reviews (Prospero) examined the level of moral courage and its related factors among various populations, such as staff nurses, nursing students, and Chinese nursing students. The entry criteria used in these protocols include: observational studies and, specifically, cross-sectional studies, even though this study will include various types of studies, ranging from descriptive to analytical and from observational to interventional (17-19). One of them has no restrictions on the choice of the questionnaire (19), and some others use NMCS to calculate moral courage as part of their entry criteria, but all these protocols focus on the stage of moral courage, and they did not measure the average of moral courage directly; So this literature proposed to measure it in this systematic review and meta-analysis (17, 18)

This study aims to conduct a systematic review and meta-analysis in order to evaluate the average moral courage among nurses and nursing students. This study is of great importance due to the fact that it fills the gaps in current research by directly measuring the average level of moral courage with validated instruments and offering an extensive analysis through a systematic review and meta-analysis. Consequently, it seeks to provide more precise and dependable insights into the moral courage of nurses and nursing students, which can enhance training and support strategies in healthcare environments.

METHODS

PROTOCOL AND REGISTRATION

We followed the reporting guidelines outlined in the Preferred Reporting Items for Systematic Reviews and Meta-Analysis for Protocols 2015 (PRISMA-P) (Additional file 1) (20). The PRISMA-P checklist is available in the supplementary file. Additionally, this protocol has been registered with the PROSPERO (International Prospective Register of Systematic Reviews) under registration number CRD42024544769. In the final review, we will follow the PRISMA statement. Any significant modifications to this protocol will be reported alongside the review findings.

STUDY SELECTION CRITERIA

TYPE OF PARTICIPANTS

This systematic review aims to include all primary studies that involve nurses, nursing undergraduate students, nursing master's students, and PhD students in nursing as subjects. The inclusion criteria do not impose gender restrictions, meaning that any primary study that includes at least one male or female (or both genders) will be considered for this systematic review. Given the global nature of this study, primary studies from all regions of the world will be included. Furthermore, the participants in the primary studies will not be limited based on ethnicity or race. If a primary study has been conducted on any ethnic group, it will be incorporated into this secondary study.

TYPE OF STUDIES

We will include various types of studies, ranging from descriptive to analytical and from observational to interventional. These studies should report either the total average of moral courage, or it can be calculated. We will include only studies that have full texts available in English.

TYPE OF OUTCOME MEASURE

The average of moral courage score among nurses and nursing students.

TYPE OF INTERVENTION

In terms of evaluating the moral courage, there are various considerable tools. This systematic review and meta-analysis will not impose any limitation on incorporating research studies that utilize these tools, and in fact, encompasses all definitions related to moral courage.

SEARCH STRATEGY

This research included the search strategy obtained in Additional file 2.

STUDY SELECTION

Google Sheets will be utilized for reference management. Two reviewers will collaborate to eliminate duplicates. Subsequently, each abstract will be independently evaluated by two reviewers to decide on the necessity of a full-text review. In case of any discrepancies between the two reviewers, a third reviewer will be recruited to resolve the issue. The full text of potentially suitable studies will be retrieved, reviewed, and assessed for the final inclusion by two reviewers, with consultation from a third reviewer if needed. Based on the PRISMA guidelines, a flowchart generated to depict the selection process (Additional File 3).

DATA EXTRACTION



The study selection and data extraction stages will be conducted by two independent reviewers, and any disagreements will be resolved by a third expert. Data extraction form will include the first author's name, country, population (Nurses or nursing students), age, sample size, name of tool, gender, Academic levels, total average of moral courage, and the average of moral courage subsets. The data extraction table is available in Additional File 4.

RISK OF BIAS (QUALITY) ASSESSMENT

This phase will involve two independent reviewers, with any discrepancies resolved by a third expert. The evaluation of all studies will adhere to the JBI (Joanna Briggs Institute) tool designated for prevalence studies. Additionally, quality analysis will be conducted through subgroup analysis based on the final score. Please refer to Additional File 5 for the appraisal tool used in this study.

DATA SYNTHESIS AND ANALYSIS

The pooled mean, along with its 95% confidence interval, will be calculated utilizing R packages. Heterogeneity will be assessed using I^2 statistics, with a value exceeding 50% indicating significant heterogeneity. Subgroup analysis will be employed to investigate the underlying sources of heterogeneity. This analysis will be based on various factors, including population (nurses or nursing students), country, moral courage tools, gender, academic level, and study quality. Additionally, Meta-regression will be used to examine the impact of age.

DISCUSSION

In Nursing is fundamentally an ethical profession, guided by established ethical standards (21). The development of moral values and moral courage is an ongoing, dynamic process that starts in nursing education and continues throughout a nurse's career (22,23). This systematic review and meta-analysis aim to determine the average level of moral courage among nurses and nursing students.

Nursing requires critical decision-making in both acute and non-acute situations, inevitably leading to moral dilemmas and challenges (24,25). Navigating these challenges successfully is in desperate need of a high degree of moral preparedness. The assessment of moral courage provides insight into how well-equipped nurses are to confront ethical challenges. It also identifies potential gaps and areas needing improvement in fostering moral courage. Notably, moral courage is highly crucial in mitigating moral distress and burnout, enabling nurses to make ethical decisions and overcome ethical challenges effectively (26,27).

The level of moral courage might vary across different cultural and societal contexts. This variation allows for a comparative analysis of nursing policies in diverse educational and clinical environments. By drawing lessons from leading societies, investigators can implement beneficial changes aimed at enhancing moral courage.

By assessing the current levels of moral courage and making informed decisions to promote it, researchers can enhance the quality of patient care, moral integrity and responsibility, and support the growth and development of professional nursing education

and the nursing profession (28–31). Ultimately, these efforts lead to improved patient outcomes, reinforcing the direct and indirect relationship between moral courage and patient outcomes, which serves as the most important indicator for the quality of nursing care (32,33).

FUTURE IMPLICATIONS

By establishing a baseline measurement of moral courage among nursing students, this study can inform nursing education programs about the current state of ethical preparedness in their cohorts. Understanding the mean level of moral courage can guide curriculum development to better incorporate ethical training and moral decision-making into nursing education.

The reported mean levels of moral courage can serve as a reference point for future research in this area. Subsequent studies could explore the factors influencing moral courage among nursing students, such as educational practices, clinical experiences, and cultural contexts. This could lead to a deeper understanding of how to effectively cultivate moral courage within nursing education and practice.

LIMITATIONS

We recognize that a limitation of our systematic review is the exclusion of studies published in languages other than English. This limitation arises from our restricted access to non-English databases and local studies. To address this issue, we have chosen to include only studies with full texts available in English, which may limit the comprehensiveness of our review but allows us to ensure the quality and accessibility of the included literature.

CONFLICT OF INTERESTS

The authors declare no conflict of interest.

ABBREVIATIONS

PMC; Professional Moral Courage, NMCS; Nurses' Moral Courage Scale, Prospero; Protocols in the International Prospective Register of Systematic Reviews, PRISMA-P; The Preferred Reporting Items for Systematic Reviews and Meta-Analysis for Protocols 2015, JBI; Joanna Briggs Institute.

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