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Disclosure of medical errors to patients by medical professionals: a protocol for a qualitative systematic review

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ABSTRACT

Introduction Although the disclosure of medical errors is an integral component of medical ethics, it remains inconsistent in practice worldwide. Despite various explanations of why healthcare professionals reveal their mistakes to patients, comprehensive comparisons and evaluations of this topic remain lacking. The objective of this review is to evaluate the experience of medical error disclosure among medical professionals who have been involved in such errors.

Methods and analysis This work will focus on studies involving medical professionals from various countries who work in hospital settings and have obtained an understanding of and firsthand experience with medical error disclosure. This review will include qualitative studies. Studies published in databases such as PubMed, Embase, EBSCO, OVID, Web of Science, ScienceDirect, China National Knowledge Infrastructure, Wanfang Data and Cochrane Library from 1 January 2000 to 30 April 2024 will be searched as part of this research. Additionally, OpenGrey will be searched manually to obtain supplementary information. The search will be conducted starting in May 2024 and will include both Chinese-language and English-language literature. The systematic review will follow the Joanna Briggs Institute's (JBI) methodology for systematic reviews of qualitative evidence and use the JBI System for the Unified Management, Assessment and Review of Information online program. Study authenticity will be investigated via the Qualitative Research Authenticity Evaluation Tool provided by the JBI Evidence-Based Health Care Centre, and data extraction will be performed via the Qualitative Assessment and Review Instrument data extraction tool. The results will be integrated via a pooled integration methodology and evaluated in terms of reliability via the ConQual qualitative systematic evaluation evidence grading tool.

Ethics and dissemination Ethical approval is not required for the study because the review will be based on pre-existing data available in the literature. The results of this systematic review will be submitted to peer-reviewed journals and presented at relevant conferences.

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STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ A pooled integration methodology will be used.
- ⇒ The ConQual qualitative systematic evaluation evidence grading tool will be used to evaluate reliability.
- ⇒ Throughout the analysis, the research team will consistently follow the principles of interpretive research and base their findings on the original data.
- ⇒ The inclusion criterion used for this systematic review will specify that only publications that have undergone peer review will be considered in this research.
- ⇒ The original studies employed distinct worldviews and methodologies and reported limited information, which can be viewed as a weakness of this review.

INTRODUCTION

The disclosure of medical errors has received universal recognition in the field of medical ethics, leading an increasing number of countries and regions to enact legislation and establish industry standards aimed at promoting the disclosure of medical errors to patients.[1–3] However, public discourse concerning the universality of medical error disclosure among healthcare professionals, institutions and relevant government agencies remains lacking, entailing that the occurrence, reporting, handling and disclosure of errors within medical institutions remain limited.[4–6]

A previous survey revealed that the majority of patients, their families and the general public expect hospitals to disclose medical errors.[5 7 8] Moreover, most doctors, nurses and hospital administrators act in accordance with the guidelines of professional ethics by acknowledging the importance of disclosing medical errors to patients.[9–11] Evidence has suggested that such disclosure does not increase the number of doctor–patient disputes, lawsuits or compensation claims.[12–14] However, not all hospitals disclose every medical error encountered in these environments, and only a small number of patients are informed about the errors that they experience.[15 16] Consequently, a significant disparity can be observed between people's expectations of such disclosure and the actual situation, which represents a complex challenge that is difficult to overcome.

As a result of medical errors, patients' rights to health, information and choice may be directly compromised; in this context, patients are the primary victims.[17] The healthcare professionals and institutions involved in these incidents are also affected as secondary and tertiary victims.[17–19] While relevant actors have already obtained a comprehensive understanding of the harm associated with error events, safeguarding patient rights remains the foremost priority for hospital management.[20] Medical institutions should promptly address and intervene following the occurrence of an error with the goal of preventing or mitigating any resulting harm while ensuring patient safety. The use of incident reporting, causal analysis and improvement measures to rectify loopholes in relevant systems can help prevent similar incidents from occurring in the future, thereby ensuring patient safety.[21 22]

However, the integration of error disclosure into daily management systems as a norm, such as by informing patients about errors that have occurred, explaining the causal relationship between such errors and health outcomes, providing apologies, and negotiating compensation, remains insufficient.[7 23] A common belief holds that hospitals are compelled to disclose errors due to public pressure, patient complaints or lawsuits. Prejudice and a lack of understanding of medical error disclosure prevail among the general public, patients, medical professionals and hospital administrators. These issues are further complicated by differences in economic levels, social and cultural development, and the state of legal systems across different regions.[24] Despite the publication of frameworks, standards and implementation plans for error disclosure in various countries and institutions, cognitive barriers persist, hindering progress in this area.[3 25 26]

Medical error disclosure is not only an ethical practice within the field of medicine but also a moral obligation in society that encompasses the fundamental right to life as well as other rights and interests on the part of all individuals who have been affected by such incidents.[24 27 28] Thus, it is imperative to understand the perceptions, attitudes and experiences of various stakeholders regarding medical error disclosure. Truth disclosure does not focus solely on protecting the rights of patients when errors have been made; it also entails promoting the recovery of medical professionals from the negative impacts of such events.[29] Disclosure leads to interpersonal conflicts, misunderstandings, harm, emotional barriers, trust crises, moral dilemmas and other issues. Providing emotional support programmes and encouraging good team cooperation for disclosure are important approaches in this context.[30 31] A substantial body of research has already provided a solid foundation for attempts to integrate various perspectives drawn from different countries and cultural contexts,[11 32–38] thereby facilitating the implementation of medical error disclosure practices based on a comprehensive analysis.

This review aims to evaluate the views, perspectives and experiences of medical professionals who disclose the medical errors they have made to patients. The subsequent step in our plan involves collected input regarding medical error disclosure from other stakeholders, including patients. A preliminary search of PROSPERO, PubMed, Cochrane Database of Systematic Reviews and Joanna Briggs Institute (JBI) Evidence Synthesis was conducted; only one systematic review based on a quantitative investigation reported that healthcare students and young professionals have negative perceptions of open disclosure,[39] and no current or ongoing systematic reviews on the topic were identified.

METHODS AND ANALYSIS

The proposed systematic review will be conducted in accordance with the JBI methodology for systematic reviews of qualitative evidence. The systematic review protocol adheres to the Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols checklist. The systematic meta-synthesis will be reported in accordance with the ENTREQ (enhancing transparency in reporting the synthesis of qualitative research) guidelines, and a research protocol registered on 31 January 2024 on PROSPERO will serve as a foundation for the review process. Ethical approval is not required because this study relies on pre-existing data available in the literature. The review commenced on 1 May 2024 and is expected to conclude by 31 August 2024.

Review question

This review will focus on medical error disclosure to patients in hospitals by medical professionals. It will explore medical professionals' perceptions and attitudes towards the disclosure of errors, the methods of communication that they use and their experiences with and expectations of support.

Eligibility criteria

Sample

We will include the following medical professionals: physicians, nurses, pharmacists, dentists, nutritionists, physical therapists and supervisors. We will exclude studies that were not conducted in hospital settings.

Phenomena of interest

This review will consider studies that explore medical error disclosure to patients by hospitals. We will include studies that discuss medical professionals' perceptions of, attitudes towards and experiences with disclosing medical errors to patients. We will include the following error conditions: patient safety events, adverse events, medical errors, near misses and medical negligence.

Design and research type

This review will consider interpretive studies that focus on experiences of medical error disclosure, including all qualitative studies, such as research on phenomenology, grounded theory, ethnography, action research and feminist research. Quantitative studies, mixed studies, editorials, systematic reviews and opinion papers will be excluded from the review. Dissertations will be included, whereas other types of publications, such as posters, book chapters and reports, will be excluded. The study will encompass a wide range of geographical locations and will not impose limitations on the basis of specific racial-based or gender-based interests. Medical professionals, including doctors and nurses from diverse countries who work in hospital settings, will be included. Given that the majority of qualitative studies on medical errors were published after 2000, this study will restrict the initial year of the search to 2000.

Evaluation

This review will consider interpretive studies that focus on experiences of medical error disclosure. In addition to assessing medical professionals' awareness of open disclosure, we will also assess their levels of anxiety, fear, stress, trust, insomnia, perceived support in the context of disclosure and expectations of such support.

Search strategy

The search strategy used in this research aimed to locate published studies. A three-step search strategy was used in this review. First, an initial limited search of the PubMed and EBSCO databases was conducted with the goal of identifying articles on the topic. The text contained in the titles and abstracts of relevant articles and the index terms used to describe the articles were used to develop a full search strategy in terms of reporting the names of the relevant databases/information sources. The search strategy, including all identified keywords and index terms, was adapted for each included database and/or information source. The reference lists of all included sources of evidence were screened with the goal of identifying additional studies. The following electronic databases were used for this search: PubMed, Embase, EBSCO, OVID, Web of Science, ScienceDirect, China National Knowledge Infrastructure, Wanfang Data and Cochrane Library. We searched OpenGrey and conducted manual and supplementary searches. The search was conducted in May 2024 and focused on literature in both Chinese and English that was published from 1 January 2000 to 30 April 2024. The English-language search terms used in this context are presented in online supplemental file 1.

Study selection

Following the search, all identified citations will be collated and uploaded into EndNote V.20 software, and duplicates will be removed. All the references will be output to an XML file. Potentially relevant studies will be retrieved in full, and their citation details will be imported into the JBI System for the Unified Management, Assessment and Review of Information (SUMARI), an online system. Titles and abstracts will be screened by two independent reviewers in light of the inclusion criteria used for this review. Subsequently, the full texts of the studies thus selected will be assessed in detail in light of the inclusion criteria by two or more independent reviewers. The reasons for exclusion of papers whose full text does not meet the inclusion criteria will be recorded and reported as part of the systematic review. Any disagreements that arise between the reviewers at each stage of the selection process will be resolved through discussion or by a third reviewer. The results of the search and the study inclusion process will be reported in full in the final systematic review and presented in the form of a Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow diagram.

Quality appraisal

Eligible studies will be appraised critically by two independent reviewers in terms of their methodological quality by reference to the standard JBI Critical Appraisal Checklist for Qualitative Research, which contains 10 questions, such as 'Is there congruity between the stated philosophical perspective and the research methodology?' This step will be completed with the assistance of JBI SUMARI. The authors of the papers in question will be contacted to request for missing or additional data for clarification when necessary. Any disagreements that arise between the reviewers will be resolved through discussion or by a third reviewer. The results of this critical appraisal will be reported in narrative form as well as in tables. In this step, no study will be excluded.

Data extraction

Data extraction via meta-aggregation is a multiphase process. Data will be extracted from the studies included in the review by two independent reviewers with the assistance of the standardised JBI data extraction tool. The data thus extracted will include specific details about concerning populations, context, culture, geographical location, study methods and phenomena of interest that are relevant to the objective of this review. The findings and their illustrations will be extracted verbatim, entered into JBI SUMARI and assigned a level of credibility. These levels of credibility will be assigned on the basis of the reviewers' perceptions of the degree of support offered by each illustration for the specific finding with which it is associated. The data will be identified as unequivocal (U), credible (C) or not supported (NS). This extraction process will be reviewed by a postgraduate tutor with the goal of minimising errors during the data extraction process. The authors of the included papers will be contacted to request for missing or additional data when necessary.

Synthesis

Qualitative research findings will be pooled via JBI SUMARI based on the meta-aggregation approach. We will employ a three-step process to synthesise the findings. First, we will extract all the findings from all the papers included in this research through an accompanying illustration and determine the level of credibility associated with each finding. Each of the findings thus extracted will be assigned to one of the following three levels: credible, unequivocal or not supported. The authors will develop categories for findings that are sufficiently similar; each such category will include at least two findings. Finally, the authors will develop one or more synthesised findings pertaining to at least two categories. The results of the original studies, including themes, explanations of the topic, participants' words and illustrations, and tables, will be viewed as 'findings' in this review. These findings will be identified by reading the text repeatedly and selecting themes exclusively from the results sections. We will not perform original coding. The categories will be developed on the basis of similarity in wording through a process that involves assembling the findings and categorising them on the basis of their similarity in meaning. The descriptions of the categories and the synthesised findings will be generated through consensus among the members of the review group, and the accompanying descriptions will then be created and finalised. When textual pooling is not possible, the findings will be presented in narrative form. Only unequivocal and credible findings will be included in the synthesis.

Assessing confidence in the findings

We will use the JBI ConQual tool to assess the confidence of each finding thus synthesised. Dependability and credibility are two elements that influence the confidence of synthesised qualitative findings. The confidence level of the synthesised findings will initially be assumed to be high and then downgraded on the basis of the results of the dependability and credibility assessments. Finally, each synthesised finding will be rated as high, moderate, low or very low in terms of confidence.

Dependability will be established by examining the quality of the original studies included in this research in light of a set of critical appraisal questions, which can be used to calculate the integer of the mean value of the dependability score for each synthesised finding. The ranking for each synthesised finding moves up or down (or remains the same) depending on the dependability score in the following manner: in situations featuring four to five 'yes' responses, the paper remains unchanged; in those featuring two to three 'yes' responses, the ranking moves down one level; and in those featuring zero to one 'yes' response, the ranking moves down two levels.

The level of credibility exhibited by the synthesised findings will be assessed by cross-checking how many findings of each type are included in the categories associated with the synthesised findings. Credibility will be evaluated in terms of the goodness of fit between the author's interpretation and the original data. The level of credibility will be determined as part of the data extraction step and assigned a label of unequivocal, credible or not supported.[40] The ranking process will be implemented in accordance with the following scoring rubric for each synthesised finding. All unequivocal findings will remain unchanged. In situations involving a mix of unequivocal/equivocal findings, the synthesised finding can be downgraded by one (−1). In cases featuring equivocal findings, the synthesised finding can be downgraded two times (−2). Equivocal/unsupported findings can be downgraded three times (−3), and non-supported findings can be downgraded four times (−4).

Implications and limitations

This study will compare the roles of nurses, doctors and supervisors in the process of medical error disclosure and their need for support with the goals of helping determine who should participate in the process of truth disclosure and identifying ways of providing different types of support. The findings of this research will offer valuable insights for research, policy-making and the practical implementation of strategies aimed at addressing disparities among individuals' perceptions, anticipations and realities with respect to medical error disclosure effectively. All studies will be included in the quality appraisal step, including lower-quality studies, which could affect the quality of the evidence generated through this analysis. Furthermore, the studies to be included in this research were conducted on the basis of diverse philosophical foundations and methodologies, resulting in some degree of heterogeneity among studies. The information presented in these reports was limited to certain topics, which may make integration more difficult. Throughout the analysis process, the research team will consistently follow the principles of interpretive research and base their findings on the original data.

ETHICS AND DISSEMINATION

The present meta-aggregation study does not require ethical approval because it relies on pre-existing data available in the literature. However, utmost fidelity to the original data is ensured to maintain integrity. The findings of this review will be disseminated through publication in a peer-reviewed journal.

Contributors GC and RH conceived and designed the study. GC wrote the manuscript. GC and HX collaborated on the development of the search strategy. GC, RH and HX commented on the manuscript. RH is the study guarantor. GC and RH oversaw the project and received a research grant to pay for the publication of the open-access article.

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Disclaimer The research design and implementation schedule underwent thorough review and monitoring by the funding agency; however, the organisation that provided project support did not interfere with or impact the results of this research.

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not required.

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