

# Job satisfaction among midwives in low and middle-income countries: A protocol for systematic review and meta-analysis

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## Abstract

**Objectives:** The main objective of this study is to assess the level of midwives' job satisfaction in low- and middle-income countries.

**Methods:** A comprehensive literature search will be carried out using the following databases: Google Scholar, PubMed/Medline, Embase, CINAHL, SCOPUS, Web of Science, and Science Direct. This systematic review and meta-analysis will be carried out according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. All identified observational studies reporting the level of job satisfaction among midwives in low- and middle-income countries will be considered. The extracted quantitative data will be analyzed using STATA version 17. Heterogeneity among the included studies will be assessed through the  $I^2$  test statistics. Finally, a random-effects meta-analysis model will be computed to estimate the pooled level of job satisfaction among midwives. Furthermore, publication bias will be assessed using a funnel plot and Egger's regression test, and sensitivity analysis will be conducted to evaluate the stability of the overall effects in the presence of outliers. The protocol has been registered in the PROSPERO-International Prospective Register of Systematic Reviews, with the registration number CRD42023400122.

**Conclusion:** This systematic review and meta-analysis will be an important source to identify the level of job satisfaction among midwives working in the health facilities of low- and middle-income countries. Researchers, stakeholders, and healthcare systems also use these and managers to determine why midwives' levels of job satisfaction are high or low compared to other studies in the future.

## Keywords

Job satisfaction, low-income country, lower middle-income country, midwives, professional satisfaction

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## Introduction

Job satisfaction is a key issue for healthcare professionals around the world.<sup>1</sup> Job performance and productivity of human resources depend upon many factors, and job satisfaction is one of the most important factors.<sup>2,3</sup> This is because employees who are satisfied with their jobs feel that their job gives them some positive features such as variety, challenge, good pay and security, autonomy, and pleasant co-workers.<sup>4</sup>

According to Locke (p. 317), job satisfaction is defined as a "pleasurable emotional state of the appraisal of one's job as achieving or facilitating one's job value."<sup>5</sup> So, it is the content experienced by employees at their jobs. It is the positive response employees experience while doing their job. In

general, not everyone can truthfully say that they are satisfied with their job because it depends on psychological, physiological, and environmental circumstances. The theory

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of Herzberg adopts the team of motivators to include experiences of satisfaction. Job satisfaction is one of the most important factors that determines the efficiency and productivity of human resources. As key members of the health system, midwives' job satisfaction contributes to the delivery of high-quality healthcare.<sup>6</sup>

The Sustainable Development Goal (SDG) targets accelerating the decline of maternal and child mortality by 2030.<sup>7</sup> The SDG 3 is targeted at "reducing to a level of less than 70 per 100,000 live births of the global maternal mortality rate, decreasing neonatal mortality to at least 12 per 1000 live births, and under-5 mortality to at least 25 per 1000 live births by stopping preventable deaths of mothers and children under the age of five by 2030."<sup>8,9</sup> One of the indicators of meeting SDG 3 is the proportion of births attended by skilled health personnel.<sup>7</sup> Midwives have been playing a pivotal role in the reduction of maternal and neonatal morbidity and mortality.<sup>10,11</sup> They are key actors in the achievement of the SDG 3.<sup>11,12</sup>

Midwives are the primary source of care and support for mothers and newborns at the most vulnerable time in their lives. Almost every mother's birth experience and all forms of care in between are attended by midwives.<sup>11,12</sup> Midwives can provide 87% of all basic sexual and reproductive, as well as maternal and newborn health services.<sup>11</sup> However, there is an adequate number of midwives to support the health of women and newborn, with 78% of the countries facing serious shortages in the midwifery workforce that can result in unavoidable maternal and newborn mortality.<sup>13</sup> Job satisfaction among midwives has been a primary concern for health service organizations in both developed and developing countries.<sup>14</sup>

Job satisfaction predicts job performance, staff morale, organizational citizenship, quality of care, safety of patients, and stability and effectiveness of an organization.<sup>15</sup> Low job satisfaction may result in increased turnover, tardiness, absenteeism, complaints, and a weak and extravagant health care delivery system. It may also lead to undesirable job performance and poor quality of service to clients.<sup>16,17</sup> High turnover and shortages of midwives are resulting from low job satisfaction.<sup>18</sup> It has been noted that adequate investment in the training, deployment, and retention of quality midwives could prevent more than 60% of maternal and newborn deaths.<sup>19</sup>

Job satisfaction can be affected by both external and internal factors. Job satisfaction among midwives is derived from many interrelated factors and results in unintended output in health care services.<sup>16,20</sup> These unintended outputs may be malpractice, negligence, or medication errors, which are common in clinical practice. Every factor has its own importance, which cannot be neglected. It is well known that the SDG goal of reducing maternal mortality was not achieved as planned, and the level of job satisfaction of midwives may have had an impact on the achievement of the SDG.<sup>18,21</sup>

It's essential to understand the level of job satisfaction among midwives in low- and middle-income countries

(LMIC) compared to high-income countries because the quality of maternal services is low in those areas. As a result, this systematic review and meta-analysis aim to identify the best available evidence to determine the pooled level of satisfaction among midwives in LMIC. The findings of this study will aid in the generation and dissemination of evidence-based information to policymakers, planners, and health service providers about the condition, which will be necessary to design and implement appropriate interventions.

## Review question

The question of this review is: What is the level of job satisfaction among midwives in LMIC? What are the factors associated with job satisfaction among midwives in LMIC?

## Inclusion criteria

Eligibility criteria were summarized using the CoCoPop approach.<sup>22</sup>

*Population (pop):* Studies conducted among midwives who were employed and working in the health facility will be included.

*Condition (Co):* Studies entitled level of job satisfaction and factors associated among midwives will be included.

*Context (Co):* Studies conducted in LMIC will be included.

## Types of studies

Analytical observational studies, including longitudinal cohort studies and analytical cross-sectional studies, will be considered for inclusion. This review will also consider descriptive observational studies, including descriptive cross-sectional studies, for inclusion. Additionally, registry and census data will also be included. Observational study designs that report on prevalence and incidence will also be considered.

## Methods

The proposed systematic review will be conducted in accordance with the Joanna Briggs Institute (JBI) methodology for systematic reviews of prevalence and incidence.<sup>22</sup> The review title has been registered. PROSPERO registration number: CRD42023400122. Selected studies' publication years ranged between March 2014 and 2023 (9 years).

## Search strategy

The search strategy will aim to locate both published and unpublished studies. A three-step search strategy will be utilized in this review. First, an initial limited search of MEDLINE (PubMed) and CINAHL (EBSCO) was

undertaken to identify articles on the topic. The text words 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 for reporting the names of the relevant databases, and information sources (see Appendix 1). The search strategy, including all identified keywords and index terms, will be adapted for each included database and information source. The reference list of all included sources of evidence will be screened for additional studies. Studies published in the English language will be included. A comprehensive literature search will be conducted using the following databases: Google Scholar, PubMed/Medline, Embase, CINHALL, SCOPUS, Web of Science, and Science Direct. Besides, to identify additional relevant articles, a manual search of unpublished studies and gray literature available on the local university institutional repository and Google Scholar will be conducted.

## Study selection

Following the search, all identified citations will be collated and uploaded into the Mendeley desktop reference manager, with duplicates removed. Following a pilot test, titles, and abstracts will then be screened by two or more independent reviewers for assessment against the inclusion criteria for the review. Potentially relevant studies will be retrieved in full, and their citation details imported into the Covidence web-based software. Two or more independent reviewers will assess the full text of selected citations in detail against the inclusion criteria. Reasons for the exclusion of papers in full text that do not meet the inclusion criteria will be recorded and reported in the systematic review. Any disagreements that arise between the reviewers at each stage of the selection process will be resolved through discussion or with an additional reviewer or reviewers.

The results of the search and the study inclusion process will be reported in full in the final systematic review and presented in a Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) updated 2020 checklist flow Diagram 1 displayed below.<sup>23</sup>

## Assessment of methodological quality

Two independent reviewers at the study level will critically appraise eligible studies. Modify as appropriate if appraisal occurs at the outcome level for methodological quality in the review using standardized critical appraisal instruments from JBI for prevalence studies.<sup>23</sup> Authors of papers will be contacted to request missing or additional data for clarification, where required. Any disagreements that arise will be resolved through discussion or with a third reviewer. The results of the critical appraisal will be reported in narrative form and in a table. Following critical appraisal, studies that do not meet a certain quality threshold (50% score) will be

excluded. A JBI score higher than 70% will be classified as having high quality, those with a score between 50% and 70% as having medium quality, and those with a score less than 50% as having low quality. Only high- and medium-quality studies will be included in this meta-analysis. This decision will be based on the number of included articles and the adequacy of the total sample considered.

## Data extraction

Data will be extracted from studies included in the review by two independent reviewers using the standardized data extraction tool for prevalence and incidence available in Covidence software. The data extracted will include author(s), publication year, study year, country, study design, sampling method, total sample, and number of satisfied population members (*n*). Any disagreements that arise between the reviewers will be resolved through discussion or with a third reviewer. Authors of papers will be contacted to request missing or additional data, where required.

## Data synthesis

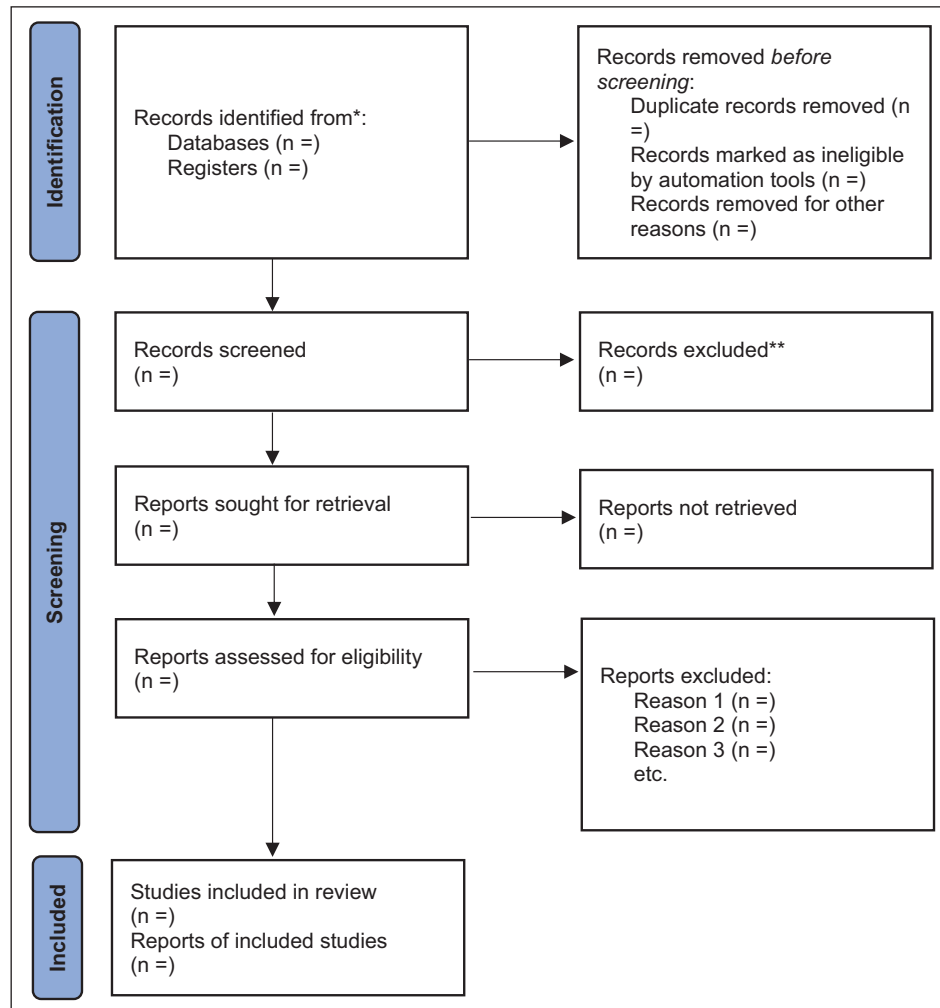
Studies will, where possible, be pooled in a statistical meta-analysis using JBI SUMARI. Effect sizes will be expressed as a proportion with 95% confidence intervals around the summary estimate. Modify as appropriate and report any methods required to prepare the data collected from studies for presentation or synthesis, such as the handling of missing summary statistics or data conversion. Statistical analyses will be performed using a random-effects model using the double-arcsine transformation approach.

## Discussion

Subgroup analyses will be conducted where there is sufficient data to investigate the factors associated with the job satisfaction of midwives. Sensitivity analyses will be conducted to test decisions made regarding adding text as appropriate. Heterogeneity will be assessed statistically using  $I^2$  tests.<sup>24</sup> A funnel plot will be generated in STATA version 17 to assess publication bias if there are 10 or more studies included in a meta-analysis. Statistical tests for funnel plot asymmetry (Egger test, Begg test, Harbord test) will be performed where appropriate. Where meta-analysis is not possible, a narrative synthesis method will be used.<sup>24</sup> Findings will be presented in narrative form, including tables and figures to aid in data presentation, where appropriate.

## Conclusion

This systematic review and meta-analysis will be an important source to identify the level of job satisfaction among



**Diagram 1.** \*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).

\*\*If automation tools were used, indicate how many records a human excluded and how many were excluded by automation tools.

Source: Page et al.<sup>23</sup>

midwives working in the health facilities of low and middle-income countries. This is also used by researchers, stakeholders, healthcare systems, and managers to escalate why midwives' level of job satisfaction becomes high or low compared to other studies in the future.

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### Author contributions

Introduction: BH, RT. Methods: JT, RT, TO, and HA. Registration: RT. Search terms: RT, BH, JT, HA, AT, and TO. Original draft: RT, AT, and JT. Review and editing: BH, RT, HA, and TO. Approval: all authors reviewed and approved.

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### Ethics approval

Not applicable.

### Informed consent

Not applicable.

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## Supplemental material

Supplemental material for this article is available online.

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