

Left Behind: The Unmet Need for Breast Cancer Research in Mississippi

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ADMINISTRATIVE INFORMATION

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Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 14 March 2025 and was last updated on 14 March 2025.

INTRODUCTION

Review question / Objective This systematic review aims to synthesize existing literature on breast cancer in Mississippi, aggregating all available evidence to provide a comprehensive understanding of breast cancer trends and challenges in the state.

Rationale Despite having the highest breast cancer mortality rates in the nation, Mississippi remains understudied in breast cancer research, resulting in critical knowledge gaps in understanding the current landscape and addressing this pressing issue. While national studies highlighted racial and socioeconomic disparities, they often fail to capture the unique social, economic, and healthcare challenges faced by the local population. Therefore, this systematic review seeks to bridge these gaps by synthesizing existing literature over a 25-year period to explore the state-specific dynamics of breast cancer.

Condition being studied Breast cancer.

METHODS

Search strategy A comprehensive literature search was conducted using two electronic databases: PubMed and Google Scholar. The search strategy involved combinations of the following keywords: "breast cancer", "breast tumor", "Mississippi", and "women". Individual keywords and their combinations were entered using AND and OR operators. We combined Mississippi-specific search terms with "neoplasms" OR "cancer" to identify articles focused on multiple cancer sites, including breast cancer. The specified timeframe was consistently applied across all databases. The bibliographic references from the identified publications were manually searched to identify additional relevant papers.

Participant or population Breast cancer research in Mississippi published between January 1, 2000, and December 31, 2024.

Intervention Not applicable.

Comparator Not applicable.

Study designs to be included Observational and experimental studies.

Eligibility criteria The inclusion criteria for this study were studies focused on breast cancer in Mississippi and published between January 1, 2000, and December 31, 2024. Conference abstracts, dissertations, non-peer-reviewed papers, opinion pieces not published in peer-reviewed journals, and studies that did not specify Mississippi as the study location or did not include Mississippi-specific data were excluded.

Information sources A comprehensive literature search was conducted using two electronic databases: PubMed and Google Scholar. The bibliographic references from the identified publications were manually searched to identify additional relevant papers.

Main outcome(s) Breast cancer epidemiology and disparities in Mississippi.

Quality assessment / Risk of bias analysis The Joanna Briggs Institute (JBI) checklists for respective study designs were used to conduct the quality appraisal of the included studies.

Strategy of data synthesis The data extracted from the included studies were analyzed using a narrative synthesis approach. This method involved organizing and summarizing findings to identify patterns, themes, and relationships across the studies. The synthesis focused on key aspects such as population characteristics, study design, outcomes, and disparities in breast cancer epidemiology within Mississippi.

Subgroup analysis Not applicable.

Sensitivity analysis Not applicable.

Country(ies) involved United States of America.

Keywords Breast cancer, Mississippi, Disparities.

Contributions of each author

Author 1 - Rifath Ara Alam Barsha - R.A.A.B. designed the study, extracted the data, conducted the analysis, prepared the initial draft of the manuscript, and contributed to the review and editing of the manuscript.

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Author 2 - Jasmine Miller-Kleinhenz - J.M.K. conceptualized and designed the study, reviewed

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