

Impact of Maternal Work Condition on Early Infant Feeding Practices in Sub-Saharan Africa. A Systematic Review

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ADMINISTRATIVE INFORMATION

Support - None.**Review Stage at time of this submission** - The review has not yet started.**Conflicts of interest** - None declared.**INPLASY registration number:** INPLASY2024120060**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 15 December 2024 and was last updated on 15 December 2024.

INTRODUCTION

Review question / Objective Review questions: Among mothers in sub-Saharan Africa, how do maternal work conditions impact or influence early infant feeding practices? Or Do maternal work conditions impact early infant feeding practices of mothers in sub-Saharan Africa? Objectives: To investigate how various factors, such as family income and work conditions, may adversely affect early infant feeding practices among working women and self-employed women in sub-Saharan Africa.

Rationale The persistent challenge of promoting optimal infant feeding practices in sub-Saharan Africa is a complex issue that requires a comprehensive understanding of various factors [1-5].

Infant feeding practices from birth to 24 months in different countries of SSA vary widely [6]. Early infant feeding practices are crucial determinants of child well-being, especially in sub-Saharan Africa

where infant mortality and morbidity rates continue to be exceptionally high [7].

Maternal work conditions in sub-Saharan Africa can significantly impact the early feeding practices of infants.[8] [9].

The recent rise in maternal employment in the region has highlighted the need to examine the impact of work conditions on early infant feeding practices, particularly among working mothers. It was demonstrated in four West African countries that the early introduction of complementary food was related to the mother and father's occupation [10]. This practice is associated with poor nutritional status and low psychomotor development of infants [11]. Previous systematic review has focused on the impact of paid employment on exclusive breastfeeding between 0-6 months, while ignoring feeding practices thereafter [12].

These gaps in knowledge indicate the need for further investigation to better understand how work conditions can either facilitate or hinder infant feeding practices in sub-Saharan Africa. Therefore,

the primary aim of this review is to enhance our understanding of how maternal work conditions (formal and informal) influence early infant feeding practices among mothers in sub-Saharan Africa. The results of this study could have important implications for public health interventions and policies that aim to promote exclusive breastfeeding and nutritionally balanced complementary feeding in this region, ultimately contributing to improved infant health outcomes.

Condition being studied Impact of maternal work condition on early infant feeding practices on sub-saharan african.

METHODS

Search strategy Published literature will be searched in PubMed, the Cochrane Library, CINAHL and EMBASE databases, as well as African Journals Online and African Index Medicus. The reference lists of articles identified from the review will be checked for relevant articles. Grey literature would be sought from sources such as Grey Literature Database, Science Citation Index, Conference Proceedings Citation Index (CPCI), and through personal contact. To avoid publication bias, no language restrictions will be applied in the search. and trial registers including ICTRP and clinicaltrials.gov will be sought for ongoing trials related to this review.

Only studies done in sub-Saharan Africa will be retrieved. Studies published within the last 15 years (2009-2024) will be considered for the review. The search terms highlighted above will be used in this study. Boolean operators such as AND, OR and NOT will be used to combine the search terms in the databases accordingly. For example:

- a. "Mothers" OR "Women" OR "Female caregivers" OR "Infants" OR "Babies" OR "Children" OR "Sub-Saharan Africa" OR "Africa South of the Sahara" OR "East Africa" OR "West Africa" OR "Central Africa" OR "Southern Africa"
- b. "Work conditions" OR "Employment" OR "Occupation" OR "Working hours" OR "Shift work" OR "Workload" OR "Maternity leave" OR "Parental leave" OR "Work environment" OR "Workplace" OR "Formal sector" OR "Informal sector" OR "Self-employment"
- c. "Infant feeding" OR "Breastfeeding" OR "Exclusive breastfeeding" OR "Formula feeding" OR "Bottle feeding" OR "Complementary feeding" OR "Introduction of solid foods" OR "Early feeding practices" OR "Child nutrition" OR "Feeding behaviour"

The details of the search strategies that will be used in the database and the excluded database will be presented using the PRISMA.

Participant or population Mothers with infants in sub-Sahara Africa.

Intervention Maternal work conditions (work environment, employment type, hours).

Comparator No intervention; Usual care; self-employed Women.

Study designs to be included Qualitative, quantitative, or mixed-method studies, peer-reviewed journal articles, conference papers, or reports published.

Eligibility criteria Only studies published in english; studies published within past 15 years; studies on maternal work conditions; studies with mothers and infants residing in sub-Saharan Africa.

Information sources

PubMed
The Cochrane Library
CINAHL
EMBASE
African Journals Online (AJOL)
African Index Medicus.

Main outcome(s) Studies evaluating or discussing the influence of maternal work conditions on early feeding practices, including:

Duration of exclusive breastfeeding.
Transition to formula feeding or complementary feeding.
Positive or negative impacts on feeding practices.

Quality assessment / Risk of bias analysis

PubMed
The Cochrane Library
CINAHL
EMBASE
African Journals Online (AJOL)
African Index Medicus.

Strategy of data synthesis Both quantitative and qualitative findings will be systematically combined to provide a comprehensive overview of the impact of maternal work conditions. Themes from qualitative studies (e.g., barriers to breastfeeding, workplace support) will be categorized and aligned with quantitative data on feeding practices and outcomes.

Subgroup analysis Employment Type:

Formal sector vs. informal sector vs. self-employment.

Analyze differences in feeding practices (e.g., exclusive breastfeeding, complementary feeding).

Work Hours and Shifts:

Mothers working full-time vs. part-time.

Day shifts vs. night shifts and their impact on feeding practices.

Maternal Socioeconomic Status:

Low-income vs. middle-income mothers.

Investigate how economic disparities influence infant feeding choices.

Geographical Region:

West Africa, East Africa, Central Africa, Southern Africa.

Explore regional differences in cultural practices and their interaction with work conditions.

Infant Age Group:

Early infancy (0–6 months) vs. later infancy (6–24 months).

Compare the prevalence of exclusive breastfeeding and complementary feeding across these stages.

Access to Maternity Leave:

Mothers with paid maternity leave vs. those without.

Assess the role of maternity leave policies on breastfeeding initiation and duration.

Sensitivity analysis Inclusion Criteria Variations:

Analyze the impact of including/excluding studies with high risk of bias as determined by the ROBIS and CASP tools.

Reassess outcomes with studies having clear definitions of work conditions and feeding practices.

Study Design Impact:

Examine differences in outcomes when restricting the analysis to randomized controlled trials vs. observational studies.

Publication Year Restriction:

Reanalyze data by excluding studies published before 2015 to focus on more recent evidence.

Data Handling Approaches:

Evaluate the effect of imputing missing data vs. excluding studies with incomplete datasets.

Language Inclusion:

Assess whether excluding studies in languages other than English significantly changes the results.

Geographic Specificity:

Compare results when including all sub-Saharan African countries vs. focusing on specific regions with higher representation in the dataset.

Language restriction All studies published in english.

Country(ies) involved Nigeria - Obafemi Awolowo University.

Keywords Infant Feeding practices; Work condition; Maternal :Sub-Saharan Africa.

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