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Provision and Access to Nutrition Information among Teenage Mothers in Africa: A Systematic Review

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Systematic Review

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Abstract

Background

provision and access to quality nutrition information is a vital ingredient for improving the health outcomes of teenage mothers and their children. However, teenage mothers in Africa face various challenges in accessing and utilizing such information due to socio-economic and cultural barriers.

Methods

The systematic review synthesized the existing literature in relation to the provision and access of nutrition information among teenage mothers in Africa. Guided by PRISMA standards, the review identified relevant peer-reviewed articles published between 2018 and 2024 from databases such as PubMed, Wiley and Google scholar.

Results

The findings revealed that teenage mothers often have limited access to nutrition information. Emphasising that, even when the information is available, its access and use is constrained by factors such as low literacy levels, poverty, weak health systems, cultural misconceptions, misinformation, and lack of communication channels tailored to young people.

Conclusion

The review underscores an urgent need for nutrition information dissemination strategies that are both youth-friendly and culturally appropriate to enhance information provision, access and use. Strengthening and integration of youth friendly health services, supporting further research, and employing peer educators and community health workers can significantly enhance provision, access and use of nutrition information among teenage mothers.

INTRODUCTION

The right to access information is recognized as a global development priority, as it supports transparency, accountability, good governance, and empowers communities in making informed decisions (UNDP, 2015).

Teenage pregnancy poses significant health risks, including malnutrition, which can have long-term effects on both mothers and their infants (UNICEF, 2017). Provision and access to timely, accurate, and appropriate nutrition information is essential aspect in mitigation of malnutrition and ensuring the well-being of mothers and children (FAO et al., 2024).

The United Kingdom and Netherlands have demonstrated how well-coordinated maternal nutrition campaigns can significantly improve the health and nutrition well-being of young mothers and their children (UNICEF, 2020). However, despite these successes, many regions, particularly in Africa continue to face substantial gaps in the provision, accessibility and effective use of essential nutrition information (IFPRI., 2024).

The African Union's Agenda (2063) underscores the importance of adolescent nutrition and highlights the need to empower teenage mothers through improved access to relevant health information. Despite this commitment, teenage pregnancy remains a major public health challenge across the African continent. Inadequate access to reliable and timely nutrition information often results in poor dietary practices and contributes to high rates of low birth weight, stunting, and maternal complications (UNICEF, 2022).

In west Africa, it was established that various factors contributed the nutrition challenges faced by teenage mothers, including limited knowledge about food choices, infant feeding, and poor health-seeking practices (Fadare et al., 2019). Similarly, the lack of accessible and tailored nutrition information for teenage mothers may accelerate malnutrition of both mothers and children (Kyamwine et al., 2021).

Uganda mirrors these challenges. With a teenage pregnancy prevalence of 24% among girls aged 15–19 years, the country continues to face high levels of acute malnutrition reaching up to 10% among children aged 0–5 years in regions such as Karamoja and West Nile (UBOS, 2023). Despite ongoing efforts to address maternal and child nutrition, there remains limited consolidated evidence on how teenage mothers, one of the most nutritionally vulnerable groups access and utilize nutrition information across the African context. This systematic review therefore, seeks to address this critical gap by synthesizing the available empirical studies on the provision, access and utilization of nutrition information among teenage mothers in Africa.

METHODS

This systematic review was conducted in accordance with the preferred reporting items for systematic reviews and meta-analysis (PRISMA) 2020 guidelines. The review aimed to synthesize existing literature on the provision and access to nutrition information among teenage mothers in Africa.

Data Sources and Search Strategy

The main sources of data for this systematic review included PubMed, Wiley online library, and Google Scholar. A comprehensive and systematic search strategy was employed to identify relevant studies that examined access and utilization of nutrition information among teenage mothers in Africa. The search process followed PRISMA (2020) guidelines to ensure methodological rigor, transparency, and reproducibility. The researchers also employed the Boolean operators (AND, OR) to broaden or narrow the search scope.

The core search terms and the Boolean operators employed across the selected databases were as illustrated below:

("Teenage mothers" OR "adolescent mothers") AND ("nutrition information" OR "dietary information") AND ("provision" OR "access" OR "utilization" OR "use") AND ("Africa" OR "Sub-Saharan Africa" OR "East Africa" OR "West Africa" OR "South Africa").

Inclusion and Exclusion Criteria

The inclusion criteria based on; studies focusing on teenage mothers (aged 10–19 years) in regard to the provision and access to nutrition information. The studies included were peer reviewed articles and government and non-government reports published between 2018 and 2024. In addition, the studies must have been published in English and done within African Countries.

The exclusion criteria entailed studies not focused on; teenage mothers, nutrition information provision and access, and those conducted before 2018. In addition, studies conducted outside Africa, non-English publications, and non-empirical studies were automatically excluded.

Study Selection and Data Collection Process

The retrieved studies were exported to EndNote reference management tool for duplicate removal, screening, and assessment. The titles and abstracts of the articles were independently evaluated for eligibility. The authors also independently examined the full text of the selected studies, and any disagreements were resolved through discussions.

The extracted data included the author's name(s), year of publication, study title, study approach, sample, and country where the study was conducted as reflected in (Table 1).

RESULTS

The search yielded a total of 145 studies retrieved from PubMed (45), Wiley (37), and Google Scholar (63). After removing 42 duplicate records, 103 unique studies renamed title and abstract screening. Of these, 51 studies were excluded because they did not directly address the focus of this review. The full texts of the remaining 52 articles were carefully assessed for eligibility. Ultimately, 10 studies met the inclusion criteria and were included in this systematic review. The selected studies were from Uganda, Kenya, Ethiopia, Nigeria, Ghana, South Africa, and Mozambique as reflected in Table 1.

This review revealed inadequate access and utilisation of nutrition information among teenage mothers in Africa. Various factors contribute to this challenge, including low educational attainment, socio-economic constraints, and deeply rooted cultural norms that influence maternal and infant nutrition

decisions. The review underscored urgent need to strengthen youth-friendly nutrition information services tailored to the unique needs of teenage mothers.

Table 1
Characteristics of the Articles Included in the Review

Author and year of publication	Study Title	Research Approach	Sample size	Country
Musinguzi et al. (2024)	Dietary diversity, under nutrition, and predictors among pregnant adolescents and young women attending Gulu University teaching hospitals in northern Uganda	Quantitative	329	Uganda
Nabugoomu et al. (2018)	Needs and Barriers of Teen Mothers in Rural Eastern Uganda: Stakeholders' Perceptions Regarding Maternal/Child Nutrition and Health	Qualitative	101	Uganda
Okeyo et al. (2019)	Nutritional service needs of pregnant and lactating adolescent girls in Trans-Mara East Sub-County, Narok County: focus on access and utilization of nutritional advice and services	Mixed Method	292	Kenya
Tesfaye et al. (2024)	Nutritional knowledge, nutritional status and associated factors among pregnant adolescents in the West Arsi Zone, central Ethiopia	Mixed Method	339	Ethiopia
Sosanya et al. (2024)	A Mobile Gaming App to Train Teenage Mothers on Appropriate Child Feeding Practices: Development and Validation Study	Mixed Method	139	Nigeria
Ezeabasili (2024a)	Health Information Needs and Risk Health Behaviors of Pregnant Women in Anambra State, Nigeria	Quantitative	898	Nigeria
Fadare et al. (2019)	Mother's nutrition-related knowledge and child nutrition outcomes: Empirical evidence from Nigeria	Quantitative	904	Nigeria
Quaidoo et al. (2018)	Sources of nutrition information and level of nutrition knowledge among young adults in the Accra metropolis	Quantitative	192	Ghana
Jama et al. (2018)	Autonomy and infant feeding decision making among teenage mothers in a rural and urban setting in KwaZulu-Natal, South Africa	Qualitative	54	South Africa
Lusambili et al. (2020)	Nutritional Influences on the Health of Women and Children in Cabo Delgado, Mozambique: A Qualitative Study	Mixed Method	37	Mozambique

DISCUSSION

The review examined provision and access to nutrition information among teenage mothers in Africa. In Uganda, the study revealed high prevalence of under nutrition, with approximately one in eight affected, particularly those lacking adequate information about appropriate feeding during pregnancy (Musinguzi et al., 2024). Beyond information poverty, structural challenges such as poverty, limited family support, and insufficient practical skills further constrained young mothers' ability to maintain adequate nutrition (Nabugoomu et al., 2018). These findings indicate that nutrition challenges among teenage mothers are not merely informational but also rooted in broader socio-economic vulnerabilities.

In Kenya, pregnant and lactating adolescents expressed a strong need for both preventive and curative nutrition information and services, underscoring the importance of youth-responsive health systems (Okeyo et al., 2019). Similarly, In Ethiopia, facts such as education status, antenatal care attendance, and exposure to nutrition education were passively associated with better nutritional knowledge. On the contrary, food insecurity, low levels of nutrition literacy, and limited nutrition education contributed to poorer nutritional outcomes among pregnant adolescents (Tesfaye et al., 2024).

In Nigeria, the review highlighted limited knowledge on effective infant and young child feeding (IYCF) practices among teenage mothers (Sosanya et al., 2024). Maternal knowledge of health and nutrition was identified as a crucial determinant in reducing under nutrition in young children (Fadare et al., 2019). Teenage mothers also indicated the need for practical guidance on balanced diets, food supplements, and healthy weight management (Ezeabasili, 2024b). This highlights the multidimensional nature of nutrition information needs among teenage mothers.

The review also established various sources of nutrition information accessible to teenage mothers such as family members, peers, health professionals, online platforms, and traditional media. Health professionals were widely perceived as the most reliable source of nutrition information (Quaidoo et al., 2018). An indication that teenage mothers may access multifaceted sources of nutrition information.

In South Africa, teenage mothers were found to have very little influence over decisions related to infant feeding, with most choices being made by older family members. Some of the feeding advice shared by family members was inappropriate (Jama et al., 2018). Similarly, in Mozambique, the nutritional choices made by teenage mothers were influenced by a complex mix of socio-cultural, environmental, and economic factors (Lusambili et al., 2020).

Overall, this review underscores a persistent disconnect between the availability of relevant nutrition information and teenage mothers' capacity to access, interpret, and apply it meaningfully.

Structural and socio-economic barriers including limited education, poverty, food insecurity, and weak health systems remain major obstacles. Even where nutrition information is readily accessible, effective utilization is impeded by trust issues, digital divide, misinformation, and entrenched cultural norms.

The review also revealed a significant research gap. Despite Africa comprising 54 countries, only a small number of eligible studies met the inclusion criteria. This limited evidence base indicates that nutrition

information provision and access among teenage mothers remain underexplored in many African contexts. The future research should therefore prioritise context-specific, interdisciplinary approaches that integrate health, information science, and socio-cultural perspectives to better address the needs of this vulnerable population

RECOMMENDATIONS

Based on the study findings, we suggest various interventions that may be adopted by the governments, partners and institutions to enhance provision and access to nutrition information among teenage mothers in Africa:

Improving youth-friendly health services. The heath centres and partners need to enhance youth-friendly health services by establishing dedicated adolescent-responsive spaces within the health centres where teenage mothers can comfortably seek guidance, counselling, and nutrition support without stigma.

Engage peer educators and community health workers to disseminate nutrition information. This would ensure that relevant nutrition information is disseminated to teenage mothers in a timely fashion.

Integration of nutrition education into school curriculum. This would equip the adolescent with essential knowledge and practical skills on maternal, infant and young child nutrition.

Increase budget allocations. The governments and partners are encouraged to increase budget allocations for maternal and adolescent nutrition programs, with emphasis on rural and marginalized communities where access to information and health services remains limited.

Promotion of research and innovation. Universities and research institutions ought to promote further research to generate evidence-based, and context-specific solutions to nutrition information provision and access challenges among teenage mothers.

Conclusion

The review underscores an urgent need for nutrition information dissemination strategies that are both youth-friendly and culturally appropriate. Improving and integrating youth-friendly services, promoting more research, and using peer educators and community health workers can greatly enhance provision, access and use of nutrition information among teenage mothers.

Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Data availability declaration

All data generated or analysed during this study are included in this published article, and its supplementary information files.

Competing Interests

The authors declare no conflict of interest.

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Authors' contributions

E.K.O initiated this systematic review, conducted literature search, evaluated and retrieved the related literature. He also synthesized the findings from the included literature and drafted the manuscript. G.M.K reviewed the manuscript and guided on the required improvements. Both authors read and approved the final manuscript.

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Not applicable.

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Figures

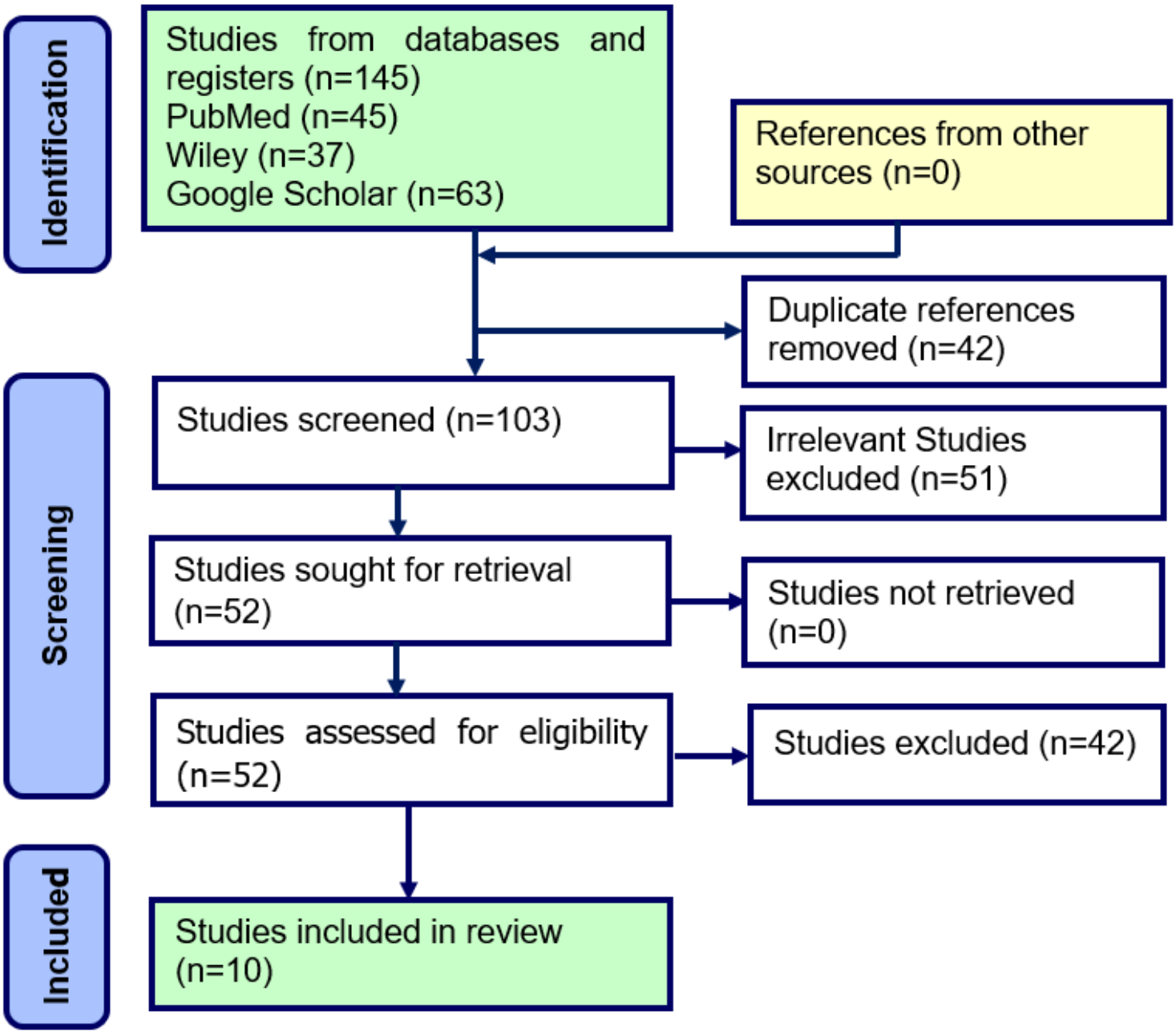


Figure 1

Flow diagram showing how the studies were identified and selected in the current systematic review in accordance to PRISMA 2020 guideline (Rethlefsen & Page, 2022). As illustrated in figure 1, out of 145 studies retrieved, only 10 studies met the inclusion criteria.