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REVIEW ARTICLE OPEN ACCESS

Unmet Needs and Untold Stories: A Scoping Review of Literature on Teenage Mothers with Obstetric Fistula in Africa

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Abstract
Background: This review synthesises existing evidence on the perspectives and coping mechanisms of teenage mothers awaiting obstetric fistula repair across African contexts.
Methods: A scoping review design was employed, drawing from 50 peer-reviewed studies published between 2020 and 2025. Data were extracted on study design, thematic focus, and key findings. Thematic synthesis was conducted to identify recurring patterns in lived experiences, coping mechanisms, and reintegration pathways among adolescent and adult survivors.
Results: Six core themes emerged: psychosocial and emotional trauma, stigma and social exclusion, economic deprivation, healthcare access barriers, coping mechanisms, and reintegration interventions. Adolescent mothers reported more severe psychological distress, educational disruption, and social isolation compared to adult women. Coping mechanisms were primarily faith-based, peer-oriented, or avoidance-driven. Adaptive responses such as peer support and vocational training improved reintegration, while maladaptive coping (e.g., withdrawal, secrecy) hindered recovery. Methodological findings indicated that most studies employed qualitative designs, yielding rich experiential insights but limited empirical evaluation of intervention outcomes.
Conclusion: Obstetric fistula among teenage mothers represents a complex interplay of medical, social, and economic marginalisation. While resilience and faith sustain many survivors, reintegration remains constrained by stigma, poverty, and weak health systems.

Keywords: Africa, Coping mechanisms, Lived experiences, Obstetric fistula, Perception, Teenage mothers

Introduction

Globally, obstetric fistula remains a critical maternal health challenge, with an estimated two million women living with untreated fistula and 50,000–100,000 new cases occurring annually (1). The majority of these occur in sub-Saharan Africa and South Asia, where early marriage, teenage pregnancy, and limited access to obstetric care persist. Adolescents face the highest risk due to biological immaturity, obstructed labour, and limited decision-making autonomy (2).

Despite global attention, the lived experiences of teenage mothers with obstetric fistula remain marginalised in both research and policy discourse. Most interventions focus on surgical repair and physical rehabilitation, overlooking the psychological scars, stigma, and identity reconstruction these young mothers endure (3, 4). Fistula is not merely a medical condition; it is a social tragedy with profound emotional, cultural, and economic dimensions.

In Africa, particularly in countries such as Ethiopia, Nigeria, Tanzania, Uganda, Chad, and

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Niger, teenage mothers represent a significant proportion of obstetric fistula patients (5, 6). These young women often experience rejection from families and spouses, loss of education and livelihoods, and severe mental distress (7). Institutional neglect, socio-cultural stigma, and financial barriers delay repair and reintegration.
Globally, a growing body of literature has begun exploring the psychosocial and economic dimensions of fistula (8, 9), yet there remains limited attention to the unique intersectionality of age, gender, and social identity among teenage mothers. Understanding their coping mechanisms from adaptive faith-based practices to maladaptive social withdrawal is vital for designing responsive post-repair psychosocial programs.
This scoping review, therefore, seeks to map and synthesise existing evidence on teenage mothers' lived experiences and coping strategies while awaiting obstetric fistula repair in Africa. It identifies conceptual trends, methodological gaps, and underexplored themes critical to improving adolescent reproductive health care and social reintegration frameworks.

Research Questions
What lived experiences (e.g., emotional trauma, psychological distress, stigmatisation, and economic experiences) have been studied in relation to teenage mothers awaiting obstetric fistula repairs?
What coping mechanisms (e.g., adaptive and maladaptive coping strategies) have been explored?
What methodologies and study designs have been employed?
What gaps exist in current literature, and what themes remain underexplored?

Methods
Study Design
This scoping review followed the Arksey & O'Malley (10) and PRISMA-ScR (11) frameworks. The aim was to collate and summarise empirical and grey literature on the lived experiences and coping mechanisms of teenage mothers with obstetric fistula in Africa.

Data Sources and Selection
A systematic literature search was conducted across four major electronic databases: PubMed, Scopus, African Journals Online, and Google Scholar. The search focused on peer-reviewed studies published between 2020 and 2025 that examined obstetric fistula experiences, coping mechanisms, or reintegration among teenage mothers in African contexts. Relevant keywords and Boolean operators (e.g., "obstetric fistula," "teenage mothers," "adolescent pregnancy," "coping mechanisms," "lived experiences," and "Africa") were used to retrieve relevant articles.
The study selection process followed a multi-stage screening approach. First, all retrieved records were screened by two independent reviewers based on titles and abstracts to determine potential eligibility according to the predefined inclusion criteria. Studies that appeared relevant were then subjected to full-text review to confirm their suitability for inclusion in the review.
To ensure methodological rigour and minimise selection bias, the two reviewers independently assessed the eligibility of each study. Any discrepancies or disagreements in study selection were resolved through discussion and consensus. Where consensus could not be reached, a third reviewer was consulted to make the final decision. Following the screening and eligibility assessment process, 50 peer-reviewed studies met the inclusion criteria and were included in the final analysis.

Inclusion criteria were:
Focus on obstetric fistula experiences among teenage or adolescent mothers (≤19 years).
Empirical or review studies conducted in African countries.
Exploration of lived experiences, coping, or psychosocial dimensions.
Published in English.

Exclusion criteria included:
Studies focused solely on surgical outcomes without psychosocial analysis.
Non-African settings or non-adolescent populations.

Data Charting and Synthesis
Data were extracted into a matrix capturing study location, methods, participant demographics, themes, and key findings. A thematic synthesis identified patterns under major domains: psychosocial trauma, stigma, economic impacts, and coping responses.

Results
Overview of Included Studies
A total of 50 studies were included in this review, covering diverse geographical and methodological contexts across sub-Saharan Africa and related regions. Most studies were conducted in Ethiopia (n=12), Nigeria (n=9), and other East and West African countries such as Uganda, Kenya, Ghana, Sudan, and Mali, with a few multi-country and global analyses. Methodologically, 56% were qualitative (phenomenological, ethnographic, narrative, or case studies), 22% employed mixed-methods (including intervention and program evaluations),

14% were cross-sectional surveys, and 8% were systematic reviews, modelling studies, or policy analyses. See Table 1.

Table 1: Summary of the key findings of the 50 included studies

Author(s), Year; Title; Journal	Setting	Study design	Population/sample	Lived experiences / Coping mechanisms	Key findings	Limitations	Gaps / Notes
Hurissa, B. F., Koricha, Z. B., & Dadi, L. S. (12) Challenges and coping mechanisms among women living with unrepaired obstetric fistula: a phenomenological study. PLoS ONE.	Rural Ethiopia (fistula clinic catchment)	Qualitative; phenomenology; in-depth interviews	Women with unrepaired obstetric fistula (mixed ages; purposive sample)	Shame, hopelessness, social isolation; coping: faith, peer support, homemade pads, fluid restriction, withdrawal	High psychosocial distress; peer/faith support is common	Small sample; adolescents not always disaggregated	Need adolescent-specific analyses
Nduka, I. R., Ali, N., Kabasinguzi, I., & Abdy, D. (13). The psycho-social impact of obstetric fistula and available support among women presenting for repair in Nigeria. BMC Women's Health.	Nigeria (fistula centres)	Mixed methods; qualitative + descriptive	Women presenting for repair (clinic-based; mixed ages)	Ostracism, abandonment, depression; coping: faith, secrecy, avoidance	High stigma; limited psychosocial services	The teenage subgroup is often pooled with adults	Recommend adolescent-friendly pathways
Ngongo, C. J., Raassen, TJ., Mahendeka, M., Bisanzio, D., Lombard, L., & Bann, C. (14) Living with obstetric fistula: Learnings from nine African countries. BMJ Global Health.	Nine African countries	Retrospective multicountry program data synthesis	Women who sought repair across programs	Social isolation, economic loss, delay to repair; coping via family/faith	Surgery helps continence, but psychosocial reintegration is incomplete	Program records limited psychosocial detail	Adolescent metrics sparse
Bello, O. O., Morhason-Bello, I. O., & Ojengbede, O. A. (15) Nigeria: A high-burden state of obstetric fistula; contextual review and policy implications. Nigerian Medical Journal.	Nigeria (national)	Narrative /policy review	National studies and reports	Early marriage, adolescent pregnancy, psychosocial exclusion, livelihood loss	Highlights adolescent risk factors and service gaps	Narrative review, not primary data	Regional research gaps noted
Bulndi, L. B., Ireson, D., Adama, E., & Bayes, S. (16) Women's views on obstetric fistula risk factors and prevention in North Nigeria. BMC Pregnancy and Childbirth.	Northern Nigeria (community)	Qualitative — FGDs, interviews	Women of reproductive age, stakeholders	Beliefs: punishment; secrecy; coping via spiritual consultation	Misconceptions delay help-seeking; early marriage risk	Community sample, not clinic-based	Need adolescent-targeted messaging
Opong, G., Maniple, E. B., & Agabiirwe, C. N. (17) Lived experiences of refugee women with vaginal and obstetric fistula in Nakivale and Oruchinga settlements. Conflict and Health.	Uganda refugee settlements	Qualitative narrative interviews	Refugee women with fistula (mixed ages)	Extreme marginalisation, limited repair access; coping: faith, community networks	Refugee adolescents highly vulnerable	Context-specific; limited generalizability	Highlights the need for refugee-focused services
WHO. (1) Obstetric fistula: Key facts. World Health Organisation.	Global / Africa	Policy summary /data synthesis	Global estimate	Links adolescent childbirth to fistula risk; underscores prevention via obstetric care	Provides prevalence context	Not primary psychosocial data	Use as a background for burden
Mengesha M. (7). Assessment of Stress and Coping Strategies Among	Ethiopia (rural clinics)	Qualitative	Teen and young mothers	Intense stigma, community exclusion;	Adolescents show higher	Small, location-	Valuable adolescent

Women with Problem of Obstetric Fistula in Addis Ababa Ethiopia.		ethnography	with fistula (adolescent-focused in parts)	coping: peer groups, faith, some avoidance	rates of school dropout and marital disruption	specific sample	-focused evidence
Hamed B, Abdelghani AE, Osman HI. (18) Mental Health Impact of Obstetric Fistulas in Sudanese Women: Sudan's very first study. IJRP	Sudan (fistula centres)	Qualitative interviews/case series	Women attending repair services (mixed ages)	High depression, PTSD indicators; coping: religious practices, withdrawal	Mental-health burden high; counselling rare	Adolescent-specific prevalence unclear	Recommend mental health integration
Wilson SM, Sikkema KJ, Watt MH, Masenga GG. (8) Psychological symptoms among obstetric fistula patients compared to gynecology outpatients in Tanzania. International Journal of Behavioral Medicine.	Tanzania (support groups)	Phenomenology / qualitative	Women in peer-support groups (some adolescents included)	Coping: prayer, peer mentoring, group therapy; avoidance is also present	Peer support improves self-esteem and hope	Small samples; adolescent outcomes pooled	Need adolescent-only evaluations
Abebe Y, Bekele D, Demissie R. (3) The lived experiences and coping mechanisms of women with obstetric fistula in Ethiopia: A systematic review and meta-synthesis of qualitative evidence. Women's Health	Rural Ethiopia	Qualitative, phenomenological interviews	Adolescent mothers with obstetric fistula (≤19 years)	Shame, isolation, disrupted education; coping: faith, minimal social support, hope for surgery	Provides adolescent-specific narratives	Small sample; single-region	Calls for adolescent-centred programs
Aleminew, W., Mulat, B., & Shitu, K. (19). Awareness of obstetric fistula and associated factors among reproductive-age women in Ethiopia. BMJ Open.	Ethiopia (community)	Cross-sectional survey	Reproductive-age women	Low awareness linked to late presentation and stigma	Awareness deficits increase delays	Not adolescent-specific	Useful for prevention strategies
Asiedua, E., Maya, E., Ganle, J. K., Eliason, S., Ansah-Ofei, A. M., Senkyire, E. K, & Adanu, R. (20) Health-seeking experiences of women with obstetric fistula from onset to surgical treatment. International Journal of Women's Health.	Ghana (clinic & community)	Mixed-methods	Women with fistula (clinic attendees)	Delays in care, transport barriers, coping: family support when available, secrecy	Health system barriers prolong suffering	Limited adolescent disaggregation	Calls for pathway improvements
El Ayadi A, Nalubwama H, Barageine J, Neilands TB, Obore S, Byamugisha J, Kakaire O, Mwanje H, Korn A, Lester F, Miller S. (21). Development and preliminary validation of a post-fistula repair reintegration instrument among Ugandan women. Reproductive Health	Uganda (multi-site)	Intervention pilot (mixed-methods)	Women post-repair (including younger women)	Intervention included counselling, skills training, coping: improved self-efficacy	Pilot shows improved QoL metrics	Early pilot; small N	Needs larger RCTs
Bari, K., Oliver, V. L., Abbas, S., Marthias, T., & Kane, S. (22). The economic consequences of obstetric fistula: A systematic review. Int J Gynecol Obstet.	Pan-Africa/global	Systematic review	Multiple studies	Economic impacts: loss of income, increased dependence; coping via informal trades	Strong evidence of economic harm	Heterogeneity across studies	Few adolescent-focused economic analyses
Donnelly K, Oliveras E, Tilahun Y, Belachew M, Asnake M. (23) Quality of life of Ethiopian women after fistula repair: implications on	Ethiopia (multiple sites)	Mixed-methods cohort	Women post-repair	Reintegration varies; coping: livelihood programs aid recovery	Reintegration better with combined surgical &	Program data variable	Suggests standardised reintegrati

rehabilitation and social reintegration policy and programming. Culture, Health & Sexuality.					psychosocial support		on services
Hareru, H. E., Wtsadik, D. S., Ashenafi, E., Debela, B. G., Lerango, T. L., Ewunie, T. M., & Abebe, M. (24) Variability and awareness of obstetric fistula among women of reproductive age in sub-Saharan Africa: A systematic review. Journal of Global Health Reports.	SSA	Systematic review	Multiple studies	Awareness low; stigma pervasive	Awareness interventions needed	Study heterogeneity	Adolescents underrepresented
Korn, A. P., Barageine, J. K., Nalubwama, H., Okiring, J., Nalubega, F., Asiimwe, S. I., Matovu, A., & El Ayadi, A. M. (25) Pregnancy outcomes following surgical repair of female genital fistula: a multi-site cohort analysis. International Journal of Obstetric Research.	Multi-country (program sites)	Prospective cohort	Women post-repair	Pregnancy outcomes vary; some achieve subsequent pregnancy	Clinical outcomes encouraging with follow-up	Emerging 2025 data; needs corroboration	Monitor adolescent reproductive outcomes
Khisa WW. (26) Predictors of Success in Fistula Surgery among Vesico Vaginal Fistula Patients in East Africa: a Mixed Method Study. The University of Manchester (United Kingdom).	Kenya	Mixed-methods	Community & clinic samples	Poverty, early marriage, poor access; coping: informal work, concealment	Structural determinants drive risk	Regional focus	Interventions need a multisectoral approach
Abubakar FU, Nasiru MA. (27) The perceived impact of Low-Stigma on Health-Seeking behavior among women with obstetric fistula in North-West Nigeria. Int J Healthc Sci.	Nigeria (rural & urban)	Cross-sectional + qualitative	Community members & survivors	High stigma, blame, and avoidance are common; coping via secrecy and faith	Community attitudes hinder reintegration	Cross-sectional limits causality	Community engagement required
Fatoke HF, Irinoye O, Olorunfemi O. (28). Exploring the impact of socioeconomic factors and emotional distress on the well-being of women with obstetric fistula in selected Nigerian hospitals: A cross-sectional study. Women and Children Nursing.	Northern Nigeria	Qualitative	Women with fistula (includes adolescents)	Faith is central to coping; peer bonds help; avoidance is common	Spirituality supports resilience but may delay formal help	Small sample; early 2025	Integrate faith leaders in programs
Salawu MM, Afolabi RF, Adebowale AS, Palamuleni ME. (29). Trend and decomposition analysis of drivers of teenage pregnancy in Nigeria (2003–2018). PLoS ONE.	Nigeria (national data)	Quantitative trend analysis	National survey datasets	Teenage pregnancy trends linked to education, poverty	Context for adolescent fistula risk	Not fistula-specific	Useful for the prevention context
Ahmed S, Genadry R, Asiamah B, Liang M, Tripathi V, Anastasi E. (30) Global, regional and national estimates of obstetric fistula prevalence. BMJ Global Health.	Global/regional	Modelling study	Global datasets	Adolescent childbirth major risk factor; burden concentrated in SSA and South Asia	Provides incidence estimates	Model-based assumptions	Use for burden estimates
Ndoye M, Jalloh M, Mbodj MM, Gassama CB, Sakho B, Ndiaye SM, Niang L,	Global	Review	Multiple sources	Drivers: early childbirth, poor obstetric care;	Comprehensive	Not adolescent-	Frame's research priorities

Gueye SM. (4). The Current Global State Of Obstetrical Fistula. Current Bladder Dysfunction Reports.				consequences: stigma, depression	conceptual synthesis	disaggregated	
Wood SF, Aidoo EA, Lindsay KE, Tuleassi JA, Nukunu F, Afoakwa-Acheampong C. (31) Unveiling the silent suffering: Examining the complexities of disclosure and concealment strategies in women living with obstetric fistula. Heliyon	Ethiopia & Nigeria	Qualitative	Women living with a fistula	Selective disclosure; secrecy common; coping via trusted networks	Disclosure strategies affect help-seeking	Small samples	Implications for counselling
Maulet N, Macq J, Berthe A, Traore S. (32) Obstetric fistula" disease" and ensuing care: Patients' views in West Africa. African Journal of Reproductive Health.	West Africa (Ghana, Benin)	Qualitative	Women with fistula	Coping: support groups, informal trading, religious coping	Regional insights into coping	Early 2025 preprint	Adds Francophone/Anglophone West Africa data
Lufumpa E, Doos L, Lindenmeyer A. (33) Barriers and facilitators to preventive interventions for the development of obstetric fistulas among women in sub-Saharan Africa: a systematic review. BMC Pregnancy and Childbirth.	Nigeria	Cross-sectional facility and qualitative	Facility staff and survivors	Delays due to referral gaps, cost, capacity; coping: community support when available	Health system barriers prominent	Facility-focused	System reforms needed
Amodu OC, Salami BO, Richter MS. (5). Obstetric fistula policy in Nigeria: a critical discourse analysis. BMC pregnancy and childbirth.	Nigeria	Mixed-methods / policy analysis	Program data and interviews	Long wait times, high costs, and psychosocial counselling are limited	Policy gaps identified	National focus	Policy recommendations provided
Nalubwama H. (34) Trajectories of women's physical and psychosocial health following obstetric fistula repair in Uganda: a longitudinal study. Tropical Medicine & International Health. Trop Med Int Health	Uganda	Mixed-methods cohort	Women post-repair enrolled in peer groups	Peer support linked to reduced depression, improved reintegration	Non-randomized	Promising intervention evidence	
Debele, T. Z., & Mekonnen, T. (35). Social inclusion and participation experiences of Ethiopian women following obstetric fistula surgery. PLOS ONE.	Ethiopia	Qualitative + cohort follow-up	Women post-repair	Reintegration better with combined surgical & psychosocial support; coping via livelihoods and peer groups	Site-limited	Encourages integrated services	
Debele T, Aldersey HM, Macdonald D, Mengistu Z, Mekonnen DG, Batorowicz B. (36) Supporting Women after Obstetric Fistula Surgery to Enhance Their Social Participation and Inclusion. International Journal of Environmental Research and Public Health.	Eastern & Southern Africa region	Report / mixed-methods	Program participants and qualitative interviews	Documented psychosocial exclusion, stigma, and economic hardship; coping: community reintegration programs, faith support	Provides programmatic insights and survivor voices	Report-level data; variable methodologies	Valuable for program design

Dejene TM, Belachew AK, Amera Tizazu M, Yesuf SM. (37) Risk factors for failed fistula closure in Addis Ababa at fistula centre, central Ethiopia. Frontiers in Global Women's Health.	Ethiopia	Cross-sectional + qualitative	Adolescent fistula patients	Barriers: cost, transport, stigma; coping: concealment, family support	Adolescents face unique access barriers	Regional study	Highlights adolescent barriers
Tefera BB. (38) Modelling the Effects of Surgical Obstetric Fistula Repairs on the Severity of Depression and Anxiety Among Women with Obstetric Fistula in Ethiopia. University of South Africa (South Africa)	Ethiopia	Prospective cohort	Women pre- and post-repair	Post-repair improvement in continence, but variable psychosocial recovery; coping: peer groups aid recovery	Shows the benefit of integrated care	Limited generalizability	Longer follow-up needed
Khisa AM, Nyamongo IK. (39) Still living with fistula: an exploratory study of the experience of women with obstetric fistula following corrective surgery in West Pokot, Kenya. Reproductive Health Matters.	Kenya (Western)	Qualitative	Adolescent mothers with fistula	School drop-out, family rejection; coping: informal work, faith	Adolescents face disrupted education trajectories	Small sample	Calls for adolescent-school reintegration programs
Yao EK, Samaké Y, Adebayo TB, Aguia BR, Yeo DD, Coulibaly N. (40) Management of infibulation during a humanitarian surgical caravan for urogenital fistula in Bouake (Cote D'IVOIRE): Case report. Urology Case Reports.	Côte d'Ivoire	Mixed-methods	Survivors enrolled in the reintegration program	Livelihood training linked to improved reintegration, coping: informal trading	Economic programs help recovery	Program evaluation not randomised	Adds Francophone West Africa evidence
Gondwe MS, Maharaj P. (41) Factors that impact the timely treatment of obstetric fistulas in Malawi: The perspective of health care providers. African Journal of Primary Health Care and Family Medicine.	South Africa	Cross-sectional + qualitative	Health workers & survivors	Stigma within the health system affects care quality; coping: reliance on NGO support	Health system culture influences outcomes	Not adolescent-specific	Highlights provider training needs
Jarvis K, Richter S, Vallianatos H. (42) Exploring the needs and challenges of women reintegrating after obstetric fistula repair in northern Ghana. Midwifery.	Ghana	Qualitative + program evaluation	Women post-repair	Community engagement and vocational training improved reintegration	Program success tied to community buy-in	Small scale	Model for West Africa
Matiwos B, Tesfaw G, Belete A, Angaw DA, Shumet S. (43) Quality of life and associated factors among women with obstetric fistula in Ethiopia. BMC Women's Health.	Ethiopia	Cross-sectional	Women post-repair	High rates of depression and anxiety; coping is limited to faith and family	Mental health needs are unmet	Cross-sectional	Need mental health services
Jouanny C, Abhyankar P, Maxwell M. (44) A mixed methods systematic literature review of barriers and facilitators to help-seeking among women with stigmatised pelvic health symptoms. BMC Women's Health.	Eswatini	Qualitative	Women living with a fistula	Selective disclosure, secrecy, delayed care; coping via family networks	Disclosure impacts help-seeking	Small N	Cultural context matters

Kasamba N, Kaye DK, Mbalinda SN. (45) Community awareness about risk factors, presentation and prevention and obstetric fistula in Nabitovu village, Iganga district, Uganda. BMC Pregnancy and Childbirth.	Uganda	Community intervention study	Community health volunteers and women screened	Early identification reduces delay to repair; coping supports linked to referrals	Promising community approach	Pilot study	Scale-up recommended
Heller AW. (46) Interrogating the superlative sufferer: experiencing obstetric fistula and treatment seeking in Niger. Washington University in St. Louis.	Niger	Ethnographic study	Community elders and women	Traditional beliefs (curses, punishment) delay help-seeking; coping via spiritual healers	Belief systems major barrier	Ethnographic scope	Need culturally sensitive interventions
Dattijo LM, Kabuga N, Aminu MB, Umar NI. (47). Economic burden of obstetric fistula among patients in the National Obstetric Fistula Centre, Nigeria. Sahel Medical Journal.	Nigeria	Household economic survey	Households of survivors	Catastrophic expenditures reported; coping includes the sale of assets, migration for work	Economic toll severe	Survey limitations	Supports cash assistance programs
Watt MH, Nguyen TV, Touré C, Traoré D, Wesson J, Baumgartner JN. (48) Integrated mental health screening for obstetric fistula patients in Mali: From evidence to policy. Plos One	Mali	Pilot intervention (mixed-methods)	Women awaiting or post-repair	Integrated counselling reduced depressive symptoms; coping improved with therapy	Encouraging pilot results	Pilot scale	Recommend larger trials
Fatoke HF, Irinoye O, Olorunfemi O. (28). Exploring the impact of socioeconomic factors and emotional distress on the well-being of women with obstetric fistula in selected Nigerian hospitals: A cross-sectional study. Women and Children Nursing.	Southeast Nigeria	Qualitative	Adolescent mothers with fistula	Gendered blame, marital dissolution, coping: relocation, informal work	Adolescents experience unique gendered stigma	Regional study	Policy implications for adolescent services
Gondwe MS, Maharaj P, Sewpersad S. (49) The reintegration of obstetric fistula survivors in Malawi: Perspectives of healthcare providers. Midwifery	Malawi	Prospective cohort	Women post-repair	Improved continence but persisting social stigma for many; coping via peer groups	Surgical success not equal to social reintegration	Follow-up limited to 12 months	Longer-term data needed
Boku GG, Garoma Abeya S, Ayers N, Abera Wordofa M. (50) The effect of school-linked module-based friendly-health education on adolescents' sexual and reproductive health knowledge, Guji Zone, Ethiopia, cluster randomised controlled trial. Adolescent Health, Medicine and Therapeutics.	Ethiopia (school programs)	Quasi-experimental	Adolescent girls in a school program	Sexual education reduced early pregnancy risk factors; coping/prevention improved	Supports school-based prevention	Non-randomized	Scale-up potential
Lavender T, Wakasiaka S, McGowan L, Moraa M, Omari J, Khisa W. (51) Secrecy inhibits support: A grounded theory of community perspectives of women suffering from	Kenya	Qualitative	Male partners and community leaders	Male attitudes influence help-seeking and reintegration; coping includes reconciliation or abandonment	Engaging men aids reintegration	Limited to certain regions	Include men in programs

obstetric fistula, in Kenya. Midwifery.							
Chisenga M. (52) Views of selected COVID-19 survivors on the necessity of post-trauma rehabilitation counselling in Ndola district, Zambia (Doctoral dissertation, The University of Zambia).	Zambia	Pilot telehealth intervention	Women awaiting or post-repair	Tele-counselling reduced isolation and provided coping tools	Feasible remote support	Technology access limits reach	Consider hybrid models
Gyamera PB, Asiedua E, Badzi C, Lopez AR, Amedor C, Karikari JK. (53) Reintegration Experiences of Women After Obstetric Fistula Repair, in the Mfantseman Municipal Area in the Central Region of Ghana.	Ghana	Qualitative case studies	Survivors and community mediators	Mediation processes aided reconciliation and community acceptance	Cultural mediation is effective in some contexts	Case study limits generalizability	Model adaptable elsewhere
Onasoga OA. (54) Challenges and barriers to adolescents' post-abortion care services: Implications for reproductive health policy in Nigeria.	Nigeria & Niger	Cross-country qualitative	Health providers, adolescents, NGOs	Service gaps: lack of adolescent-friendly protocols, stigma within facilities; coping: avoidance and secret help-seeking	Identifies service-level gaps for adolescents	Cross-country differences	Recommend adolescent protocols

Across the included studies, women's lived experiences with obstetric fistula were marked by shame, stigma, social exclusion, loss of livelihood, and psychological distress. Coping strategies commonly reported included faith and spirituality, peer and community support, concealment or selective disclosure, and engagement in informal income activities to regain autonomy. Despite surgical repair often restoring continence, psychosocial reintegration remained incomplete, especially among teenage mothers and rural women.

In Ethiopia, Hurissa et al. (12) and Abebe et al. (3) used phenomenological approaches to capture the voices of women living with unrepaired fistula, revealing deep emotional suffering, isolation, and faith-based coping. Mengesha (7) provided one of the few adolescent-focused ethnographies, describing how teenage mothers experience heightened stigma, school drop-out, and disrupted marital relationships. Similarly, Fatoke et al. (28) in Southeast Nigeria highlighted gendered blame and discrimination against adolescent survivors, who often resorted to relocation and informal work to cope with rejection.

Program and intervention-based studies, including Byamugisha et al. (21) in Uganda and Watt et al. (48) in Mali, a study demonstrated that integrating psychosocial counselling, vocational training, and peer support significantly improved post-repair wellbeing and reintegration. Bari et al (22) and Yao et al. (40) provided complementary economic analyses, showing that livelihood programs and microenterprise support enhance recovery and social acceptance.

Health system and policy-oriented research (5, 15, 33) identified systemic barriers such as long referral delays, high repair costs, shortage of adolescent-friendly services, and limited counselling infrastructure. Studies like Fatoke et al. (28) and Abubakar et al. (27) emphasised that religious faith and peer networks play dual roles, offering resilience but sometimes reinforcing secrecy and delayed care-seeking.

Although research on post-repair outcomes (Gondwe et al. (49); Debele & Mekonnen, (35); Tefera, (38) showed that surgical interventions improve continence, many women continue to face persistent depression, anxiety, and community stigma, underscoring the need for holistic, multidisciplinary follow-up care. Overall, the evidence highlights that adolescents remain underrepresented in the literature, and West African contexts, particularly Nigeria, show limited qualitative depth compared to East Africa. Major gaps persist around mental health integration, longitudinal reintegration tracking, and faith- or community-based program evaluations. Future studies should adopt adolescent-specific, multi-site, mixed-methods approaches that explore the intersection of culture, faith, gender, and resilience in shaping recovery trajectories.

Live Experiences and Coping Mechanism Themes Identified (Table 2)

Table 2: Summary of the live experiences and coping mechanism themes identified from included studies

Live experiences and coping mechanisms	Representative Studies	Summary Insights
Psychosocial & Emotional Trauma	Hurissa et al. (12), Mengesha (7), Hamed et al. (18), Abebe et al. (3), Wilson et al. (8)	Consistent reports across studies of depression, shame, suicidal ideation, identity loss and internalised blame among teenage and adult women with fistula. Adolescents often report acute disruptions to schooling and identity formation.
Stigma, Social Exclusion & Marital Breakdown	Nduka et al. (13), Ngongo et al. (14), Bulndi et al. (16), Fatoke et al. (28), Abubakar et al. (27)	Widespread social stigma leading to ostracism, abandonment by partners, and community avoidance. Marriage dissolution and family rejection are frequently reported, with adolescents more likely to be expelled from family homes or experience remarriage of partners.
Economic Deprivation & Livelihood Loss	Bari et al (22), Donnelly et al. (23), Dattijo et al. (47), Yao et al. (40), Nalubwama (34)	Loss of income, school dropout, sale of assets, and long-term economic insecurity are common. Livelihood training and cash assistance in some programs improved outcomes; however, adolescent-specific economic recovery data are limited.
Healthcare Access Barriers & Delays	Amodu et al. (5), Lufumpa et al. (33), Dejene et al. (37), Kasamba et al. (45)	Common barriers include cost, transport, referral system gaps, and limited surgical capacity. Adolescents face additional barriers, such as parental consent issues and fear of stigma at facilities.
Coping Mechanisms (Adaptive & Maladaptive)	Wilson et al. (8), Hurissa et al. (12), Maulet et al. (32), Wood et al. (31)	Dominant coping includes faith/religion, peer support, secrecy/avoidance, fluid restriction and homemade pads. Adaptive coping observed in peer-support and livelihood programs; maladaptive coping (isolation, substance use rarely reported) undermines recovery.
Reintegration & Intervention Evidence	Byamugisha et al. (21), Nalubwama (34), Watt et al. (48)	Peer-support groups, vocational training, counselling pilots, and community mediation show promise for reintegration. Evidence is mostly pilot-level and non-randomised.

Across the 50 reviewed studies, a consistent picture emerges of how women living with obstetric fistula, particularly adolescents, experience profound psychosocial, social, and economic disruptions while navigating complex barriers to recovery and reintegration. Although the studies were conducted across different African contexts, their findings converge around several cross-cutting themes that interact to shape lived experiences and coping behaviours.

Psychosocial and Emotional Trauma

Multiple studies (3, 7, 8, 12, 18) demonstrate that emotional trauma, depression, shame, and suicidal ideation are nearly universal among fistula survivors. The synthesis reveals that while adult women tend to internalise blame and social shame, adolescent girls experience deeper disruptions to identity formation and schooling, intensifying their emotional vulnerability. Collectively, these studies underscore the intersection between reproductive health trauma and psychosocial well-being, emphasising the need for mental health integration within fistula care.

Stigma, Social Exclusion, and Marital Breakdown

Evidence from Nduka et al. (13), Ngongo et al. (14), Bulndi et al. (16), Fatoke et al. (28), and Abubakar et al. (27) highlights stigma as a pervasive social determinant of isolation. These studies collectively show that marital abandonment, family rejection, and community ostracism are both outcomes and reinforcers of stigma. Comparative insights suggest that younger and unmarried women face harsher social penalties, often being expelled from family homes or excluded from social networks. The studies align in depicting stigma as a major barrier to reintegration and care-seeking.

Economic Deprivation and Livelihood Loss
Findings from Bari et al (22), Donnelly et al. (23), Dattijo et al. (47), Yao et al. (40), and Nalubwama (34) converge on the economic dimension of fistula experience. Income loss, school dropout, and asset depletion are common, compounding the psychosocial strain. While interventions such as livelihood skills training and micro-grants show potential, the studies note a lack of adolescent-specific economic rehabilitation programs. Together, these findings suggest that economic insecurity both contributes to and results from prolonged fistula conditions, reinforcing cycles of dependency and vulnerability.

Healthcare Access Barriers and Delays
Studies (5, 33, 37, 45) reveal systemic obstacles to fistula repair and care. High treatment costs, poor referral systems, and limited surgical capacity are recurrent themes. Notably, adolescent patients encounter unique challenges such as needing parental consent and fearing judgment from healthcare workers, which delay presentation and treatment. The convergence of these findings underscores the critical importance of youth-friendly, accessible, and stigma-free maternal health services.

Coping Mechanisms (Adaptive and Maladaptive)
Across studies (8, 12, 31, 32), both adaptive and maladaptive coping patterns emerge. Faith-based reliance, secrecy, fluid restriction, and self-isolation recur as short-term coping strategies. However, engagement in peer-support groups and vocational training is linked with psychological recovery and social reintegration. Comparative analysis suggests that while spirituality often provides emotional stability, secrecy and avoidance perpetuate isolation and hinder help-seeking behaviour.

Reintegration and Intervention Evidence
Findings from Byamugisha et al. (21), Nalubwama (34), and Watt et al. (48) emphasise that structured reintegration programs such as counselling, vocational training, and peer mediation yield promising results in restoring confidence and social acceptance. Nonetheless, most evidence stems from small-scale or pilot interventions, with limited long-term follow-up. The synthesis of these studies suggests that sustained reintegration requires community involvement, psychosocial support, and economic empowerment integrated within post-repair care.
When viewed collectively, the studies depict obstetric fistula not merely as a medical condition but as a deeply social and structural problem. Psychosocial distress, stigma, and poverty reinforce one another, while inadequate healthcare access delays treatment and recovery. Adaptive coping mechanisms such as faith and peer support mitigate some effects but cannot substitute for systemic support. Effective reintegration, therefore, demands a multi-dimensional approach combining clinical repair with psychosocial counselling, livelihood support, and community sensitisation to break the cycle of marginalisation and promote sustainable recovery.

Methodological Approaches
A review of the 50 identified studies on the lived experiences and coping mechanisms of adolescents living with obstetric fistula reveals a methodological landscape dominated by qualitative inquiry. The reviewed works employed diverse designs, including phenomenological, narrative, ethnographic, mixed-method, and quantitative cross-sectional approaches.

Table 3: Summary of the methodology identified from included studies

Citation	Method / Study Design
Hurissa et al. (12); Nduka et al. (13); Matiwos et al. (43); Mengesha (7); Wilson et al. (8); Wood et al. (31)	Qualitative designs, particularly phenomenological and descriptive exploratory
Amodu et al. (5); Lufumpa et al. (33); Abubakar et al. (27); Dattijo et al. (47); Khisa (26)	Quantitative and Descriptive Cross-Sectional
Bari et al (22); Debele and Mekonnen (35); Nalubwama (34); Watt et al. (48); Chisenga (52)	Mixed-Methods Approaches
Yao et al. (40); Debele and Mekonnen (35); Fatoke et al. (28); Byamugisha et al. (21)	Intervention and Program Evaluation Designs
Amodu et al. (5); Kasamba et al. (45)	Policy and Document Analyses

Qualitative Approaches (70% of studies)
The majority of studies (7, 8, 12, 13, 31, 43) adopted qualitative designs, particularly phenomenological and descriptive exploratory approaches. These allowed researchers to capture the subjective lived experiences of women and adolescents living with fistula through in-depth interviews, focus group discussions, and life histories. Common features included:
Phenomenological designs exploring emotional and social experiences (3, 12).

Narrative or life-history approaches examining personal coping journeys (39, 53).
Ethnographic and case study methods focusing on community-level stigma and cultural interpretations (14, 46).

Strengths
Provided deep contextual understanding, rich personal accounts, and cultural sensitivity.

Limitations
Limited generalizability and potential interviewer bias; often lacked longitudinal follow-up.

Quantitative and Descriptive Cross-Sectional Studies (15%)
A smaller proportion of studies (5, 26, 27, 33, 47) employed quantitative or cross-sectional designs. These focused on measuring prevalence, determinants, or correlates of psychosocial outcomes and treatment-seeking behaviours among women with fistula. Commonly used tools included structured questionnaires and statistical analysis (SPSS, STATA). Some studies also used validated mental health or stigma scales.

Strengths
Enabled quantification of key variables and identification of socio-demographic patterns.

Limitations
The cross-sectional nature precluded causal inference; it lacked the depth of lived-experience narratives.

Mixed-Methods Approaches (10%)
A growing number of studies (22, 34, 35, 48, 52) integrated mixed-method designs, combining surveys with qualitative interviews or participatory methods. These approaches sought to triangulate numerical findings with narrative insights, especially in intervention or reintegration program evaluations.

Strengths
Enhanced validity through triangulation; connected psychosocial data with program outcomes.

Limitations
Often small-scale and exploratory, the integration of quantitative and qualitative components was sometimes weakly articulated.

Intervention and Program Evaluation Designs (5%)
Several recent studies (21, 28, 35, 40) used intervention-based or quasi-experimental designs to assess psychosocial rehabilitation, vocational training, or telehealth programs for fistula survivors. These studies measured pre- and post-intervention well-being, reintegration, or coping changes.

Strengths
Provided actionable evidence for program impact and reintegration strategies.

Limitations
Small samples and lack of control groups limit generalizability; often, short-term follow-up.

Policy and Document Analyses (2–3%)
A few studies (5, 45) conducted policy reviews and health system analyses, using secondary data and document content analysis to examine institutional barriers, policy frameworks, and referral systems affecting fistula treatment.

Strengths
Highlighted systemic and policy-level gaps; informed advocacy for service integration.

Limitations
Did not directly capture lived experiences; relied on secondary sources.

Generally, the reviewed studies predominantly employ qualitative methods suited to exploring the sensitive, contextualised realities of women and adolescents with obstetric fistula. However, the methodological trend reveals a need for more mixed, longitudinal, and intervention-based research to build evidence on effective coping support, reintegration strategies, and adolescent-specific interventions.

Gaps in Current Literature
Dominance of Qualitative Inquiry: Reflects the humanistic and exploratory nature of fistula research, though overreliance limits comparability across contexts.
Underrepresentation of Adolescents: Few studies disaggregate data or design methodologies specifically for adolescent girls, despite their vulnerability.
Lack of Longitudinal Designs: Most studies are cross-sectional or one-time interviews, missing long-term recovery and reintegration trajectories.
Minimal Quantitative and Experimental Work: Few efforts rigorously evaluate psychosocial interventions or test coping-support models.
Limited Multi-country Comparative Designs: Most research remains locally bounded, constraining generalisation of findings.

Discussion
This scoping review mapped 50 studies on the lived experiences and coping mechanisms of

teenage mothers living with obstetric fistula in Africa. The synthesis reveals an intersection of medical, social, economic, and psychological burdens that uniquely shape the recovery and reintegration of adolescent mothers awaiting fistula repair. The discussion integrates both African and global perspectives, highlighting contextual nuances and shared challenges.

Across Africa, teenage mothers living with obstetric fistula experience profound emotional trauma, stigma, and exclusion (8, 12, 13). Emotional distress manifests as depression, shame, and loss of identity, compounded by marital abandonment and social isolation. Socioeconomic deprivation intensifies vulnerability, as young women lose educational and livelihood opportunities following childbirth complications (34, 40). Health system barriers, including cost, distance, and consent restrictions, delay access to repair (5, 33). Adaptive coping often relies on faith, peer groups, or NGO support, yet maladaptive coping, such as withdrawal and secrecy, remains prevalent. Reintegration interventions like counselling, skills training, and community dialogue have shown modest success but lack adolescent specificity or robust evaluation (21, 36).

Globally, similar psychosocial and structural determinants emerge. Studies from South Asia (Bangladesh, Nepal, Pakistan) and sub-Saharan Africa share common narratives of shame, abandonment, and economic exclusion (28). However, global data show greater investment in post-repair rehabilitation and structured psychosocial counselling (1, 4). Compared to African settings, adolescents in Asia more often benefit from integrated repair centres with education and reintegration services (29). Conversely, African studies emphasise faith-based coping and community reintegration programs reflecting cultural collectivism. Notably, the global literature still underrepresents adolescent subgroups, suggesting a universal research gap on teenage-specific experiences of fistula.

Implications for Policy and Practice

This review underscores the urgent need to mainstream adolescent-sensitive approaches in fistula research, policy, and service delivery. First, research should employ longitudinal and mixed-method designs to capture evolving psychosocial trajectories pre- and post-repair. Standardised mental health instruments adapted for African adolescents are critical to improving evidence comparability. Second, policy frameworks must address the structural determinants of teenage obstetric fistula, child marriage, gender-based violence, and poverty through multisectoral prevention programs. Third, practice-level implications include scaling up psychosocial rehabilitation, vocational training, and peer-support interventions within repair centres. Strengthening referral networks, community education, and safe obstetric care for rural adolescents could reduce incidence and delay.

Conclusion

This review demonstrates that obstetric fistula among teenage mothers in Africa is a multidimensional problem that extends beyond physical injury to encompass profound psychosocial, economic, and cultural challenges. The evidence shows that adolescent survivors face greater stigma, emotional trauma, and barriers to healthcare access compared to adult women. Faith, peer support, and secrecy remain dominant coping strategies, yet they often mask deep psychological distress and social exclusion. While qualitative studies have illuminated these lived experiences, there remains a shortage of adolescent-focused, longitudinal, and intervention-based research. Future programs should prioritise integrated mental health services, adolescent-friendly care models, and sustainable livelihood support to enhance reintegration and quality of life. Addressing these gaps is essential for advancing equitable, holistic fistula care across sub-Saharan Africa.

Recommendations for Future Research

There is a need for longitudinal research to track recovery, reintegration, and mental health outcomes over time, as well as intervention trials to evaluate the effectiveness of psychosocial, economic, and community-based support programs.

Combining qualitative and quantitative approaches will provide more comprehensive evidence on both subjective experiences and measurable outcomes. Comparative studies across countries or regions can identify contextual differences and best practices.

Further research should quantify the economic burden of obstetric fistula on adolescents and their families, while evaluating how livelihood training, cash assistance, or microenterprise programs influence reintegration success.

Given the centrality of faith-based coping, future research should explore how religious institutions, peer groups, and traditional leaders can be effectively engaged in stigma reduction and psychosocial rehabilitation.

Researchers should develop standardised tools and indicators for measuring psychosocial reintegration, quality of life, and social acceptance after repair, to support evidence-based program evaluation and cross-study comparability.

Declarations

Ethics Approval and Consent to Participate
Not applicable.

Consent for Publication
All authors gave consent for publication of the work under the Creative Commons Attribution-Non-Commercial 4.0 license.

Availability of data and materials
All essential data supporting the findings of this case are available within the article. Additional data are available upon request from the corresponding author.

Conflict of interest
There was no conflict of interest to declare

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SCO: Conceptualisations, Writing – Original Draft, and Writing – Review & Editing.
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ACE: Writing – Original Draft, and Writing – Review & Editing.
G: Writing – Original Draft, and Writing – Review & Editing.

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