

Research Brief

HARNESSING COMMUNITY HEALTH WORKERS TO IMPROVE ADOLESCENT HEALTH AND WELL-BEING IN AFRICA

Evidence and recommendations



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EXECUTIVE SUMMARY

Community health workers (CHWs) bring exceptional opportunities to broaden effective support for adolescent's health and well-being across Africa. However, there is an important need to review the existing evidence to inform future planning, training and provision for CHW services.

This systematic review examines the state of evidence on CHW engagement with adolescents, highlighting design features, effective interventions, and what adolescents value most. We screened, in total, 5,003 studies published after 2014, identifying for inclusion 48 quantitative, 10 qualitative, and two mixed-methods studies. Interventions focused on both peer (≤ 24 years) and adult (> 24 years) CHWs.

The quantitative literature shows that peer CHWs typically worked in urban and rural contexts, and received training lasting one day to two weeks, while adult CHWs more often underwent training of more than a week and primarily served rural settings. Most interventions were delivered by lay-peer CHWs, who were mainly supported by non-governmental organizations (NGOs), while adult CHWs were supported by a mix of government and NGOs.

The strongest evidence for CHW effectiveness was in mental health, where group-based therapies reduced post-traumatic stress (PTS) and depression symptoms among trauma-affected adolescents. Promising evidence also exists for HIV health outcomes.

Qualitative findings emphasized the value of peer CHW programmes in building trust, reducing stigma, and improving access to sexual and reproductive health (SRH) services. Adolescents reported feeling more comfortable with peers who normalized health concerns and provided discreet, youth-friendly support. Peers also helped empower adolescents emotionally.

Adult CHWs were appreciated for linking adolescents to services and offering structural support, though they often lacked training tailored to adolescent needs. Concerns around

confidentiality, especially during home visits, and gender dynamics influenced the effectiveness of both male and female adult CHWs.

CHWs provide an essential service, particularly in contexts with limited economic and human resources for professional health workforces. Combining the quantitative and qualitative findings, some clear recommendations arose from our review to enhance CHW-led programmes targeting adolescent health in Africa. These recommendations are to:

- 1. Expand CHW programmes in areas with reliable evidence.** For example, CHWs can deliver low-intensity psychological interventions that effectively improve adolescent mental health. Adolescents reported that adult and peer CHWs of the same sex can increase acceptability.
- 2. Strengthen integration of CHWs into formal systems.** Integrating CHWs into national systems offers significant potential for scaling interventions. Stakeholder engagement, needs assessments, and evaluating CHWs' capacity are crucial to ensure effective and sustainable programmes.
- 3. Promote gender-responsive approaches for stronger engagement.** Gender dynamics influence how adolescents engage with CHWs. Programmes should equip CHWs to navigate these dynamics and build trust with adolescent girls and boys to improve engagement and outcomes.
- 4. Expand the evidence base on effectiveness for adolescent well-being.** More research, including high-quality evaluations and gender-disaggregated data, is needed to assess CHWs' heterogeneous impacts on adolescent girls and boys for a broad range of adolescent health outcomes. Understanding the lived experiences of adolescents will also help align interventions with their priorities.

MEETING THE HEALTH NEEDS OF A GROWING ADOLESCENT POPULATION

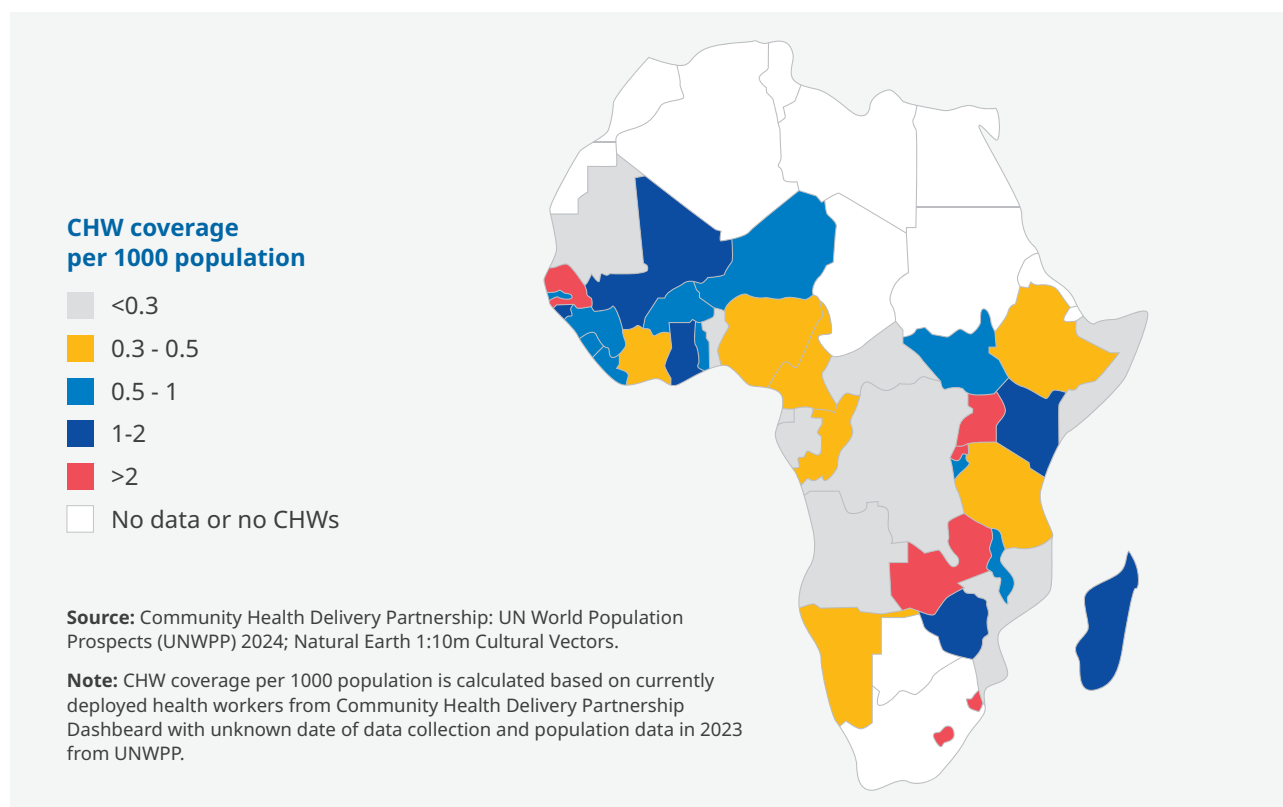
Adolescents represent a crucial segment of the population across African countries, accounting for more than a fifth of the total population. Investing in their health and well-being is critical, yet many of their needs remain unmet, particularly for adolescent girls compared to boys.¹ Reaching adolescents can be challenging due to stigma, rural-urban disparities, gender norms and weak integration of youth-friendly approaches into the health system.

Government-supported CHW programmes are becoming increasingly common across Africa.² Recent CHW coverage ratios per 1000 population (illustrated in [Figure 1](#)) showed substantial variation across countries.³⁻⁵ CHW programmes also vary widely in terms of remuneration, training intensity and the extent to which adolescent health is addressed in

training materials.⁶ While most programmes offer some form of supervision, few explicitly include adolescents in their training manuals. These gaps highlight the need for more standardized, adolescent-responsive CHW programming.

The African Union and national governments prioritize CHWs as frontline agents in advancing universal health coverage and youth engagement. CHWs could play a vital role, often being the first point of contact for adolescents in need of health and social services. However, evidence on the effectiveness of CHW-led interventions for adolescent health in Africa remains limited.⁷ This gap motivated this systematic literature review, which aims to inform more targeted and effective strategies for adolescent responsive CHW programming.

Figure 1. Community health worker coverage per 1000 population in Africa



WHAT WORKS?: HOW CHW INTERVENTIONS CAN BEST REACH ADOLESCENTS

This brief draws on a systematic review of academic literature assessing the evidence on the impact of CHW-led interventions on adolescent health and well-being in sub-Saharan Africa. From an initial screening of 5,003 studies, 48 quantitative papers and 2 mixed-methods papers were identified that provided valuable insights into the design and effectiveness of 26 peer-led, 26 adult-led, and three combined peer-adult CHW-delivered programmes.

In this review, CHWs were defined according to the WHO definition as health workers based in communities conducting outreach beyond primary healthcare facilities or working at peripheral health posts not staffed by doctors or nurses. They received less than two years of formal training.⁸ We further categorized CHWs as adolescent peers if they were aged <24 and the evaluated programme was designed to leverage peer-based principles, otherwise, they were classified as adults. Lay CHWs were individuals with minimal or no formal education who underwent only brief, informal pre-service training (ranging from a few days to several weeks).⁹ They were usually unpaid volunteers or received small allowances and were often employed on a temporary basis.⁹ In contrast, paraprofessional CHWs had some secondary education and received at least 10 days of focused initial training. When information was unavailable, we conservatively classified CHWs as lay workers to avoid overestimation.

Among the 26 peer CHW-led interventions, 23 were solely led by lay workers, while only two involved only paraprofessional peers. One programme was jointly led by both lay and paraprofessional peer CHWs.¹⁰ By contrast, among 26 adult CHW-led programmes, 16 interventions were led only by paraprofessionals, while ten involved only lay workers. Three programmes were co-led by both peer and adult CHWs.¹¹⁻¹³ The studies were geographically diverse, with 11 of the studies in Western Africa (including eight in Nigeria, two in Niger and one

in Sierra Leone), 18 in Eastern Africa (including seven in Ethiopia, four in Uganda, three in Kenya, two in Tanzania, one in Burundi, one in Sudan), and 17 in Southern Africa (including six in Zimbabwe, four in Zambia, four in Malawi, one in South Africa, one in Mozambique and one in Lesotho). Four studies spanned multiple countries.^{11, 14-16}

Among the evaluated programmes, peer CHWs were active in both urban and rural settings, though slightly more common in urban areas, and predominantly supported by NGOs. They typically received only a few days of training. In contrast, adult CHWs primarily operated in rural areas, often receiving over a week of training and were supported by both government and NGO initiatives. Key design features of evaluated programmes are summarized in **Figure 2**.

The primary focus areas of evaluated programmes are summarized in **Figure 3**. Peer CHW interventions in community settings commonly centred on health education and awareness building, such as the *Mzake* (friend-to-friend) peer group intervention in Malawi.¹⁰ Psychosocial support was exemplified by the Zvandiri programme's peer-led counselling sessions in Zimbabwe and similar peer-led support in Zambia.¹⁷⁻²⁰ Peer CHW interventions also focused on service delivery, engagement and linkages like the Yathu Yathu strategy, which featured community-based youth hubs staffed by peer support workers in Zambia,²¹ and PEBRA in Lesotho, which provided health-based differentiated service delivery using an e-health application.²² In school settings, peer CHWs typically delivered structured education sessions designed to improve knowledge and promote behavioural change. Examples include female peer CHW-led sessions on cervical and breast cancer awareness targeting adolescent girls in Nigeria,^{23, 24} and a behaviour change and health promotion programme focused on dietary diversity in Ethiopia.²⁵

Figure 2. Summary of design features in peer and adult CHW programmes evaluated in the quantitative literature

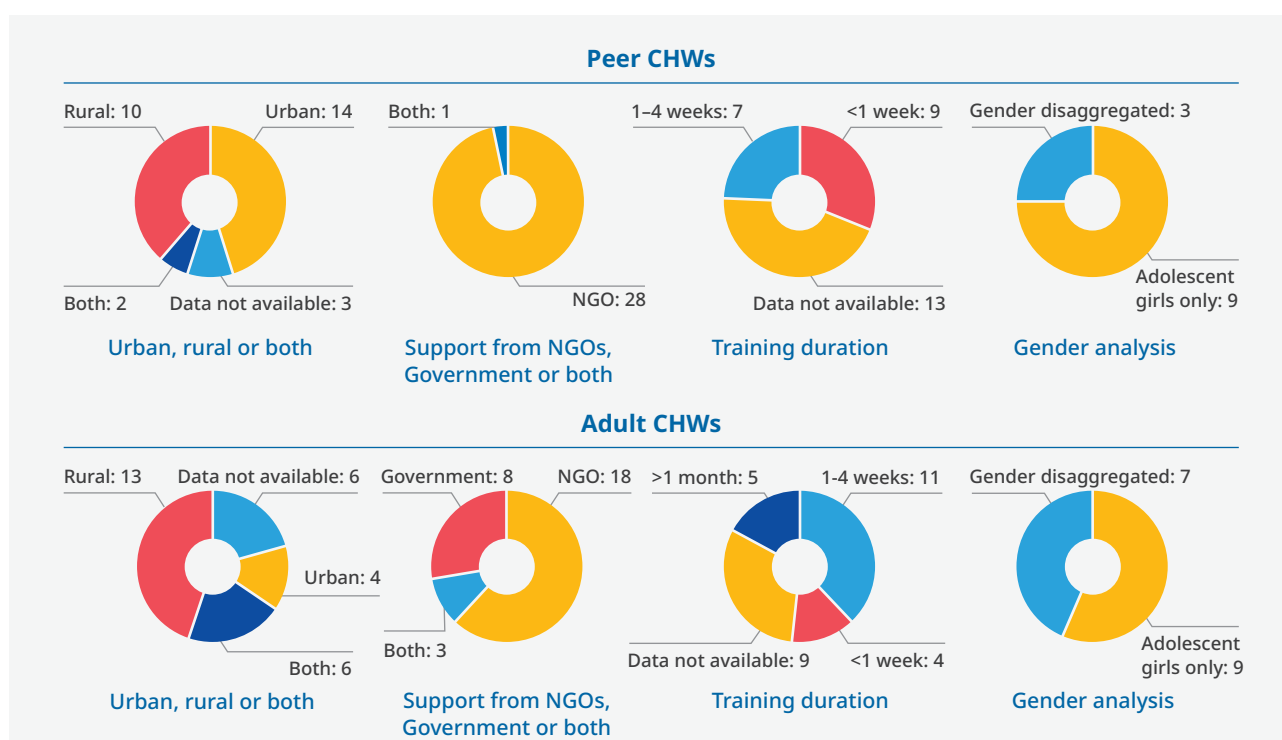
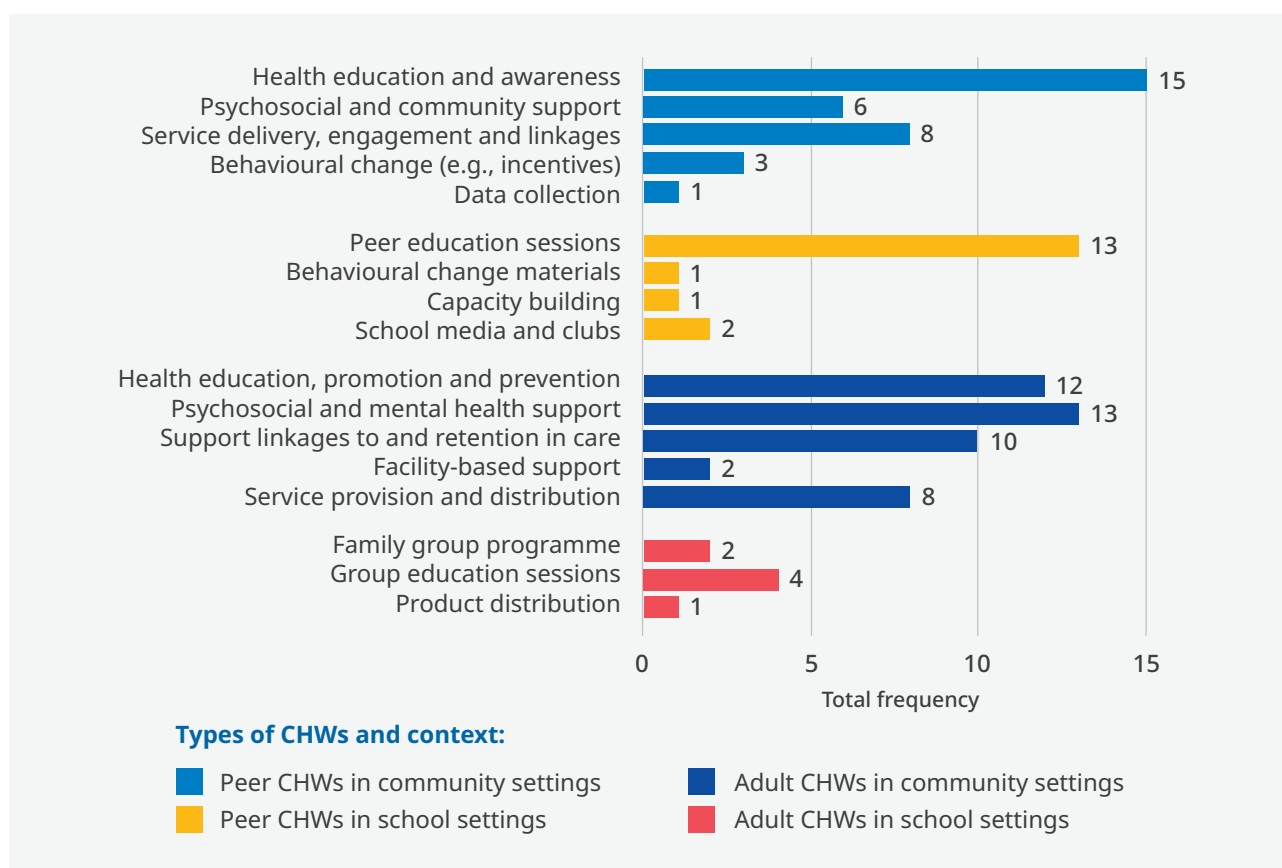


Figure 3. Summary of programme focus among peer and adult CHW programmes, further disaggregated by delivery setting in communities or schools



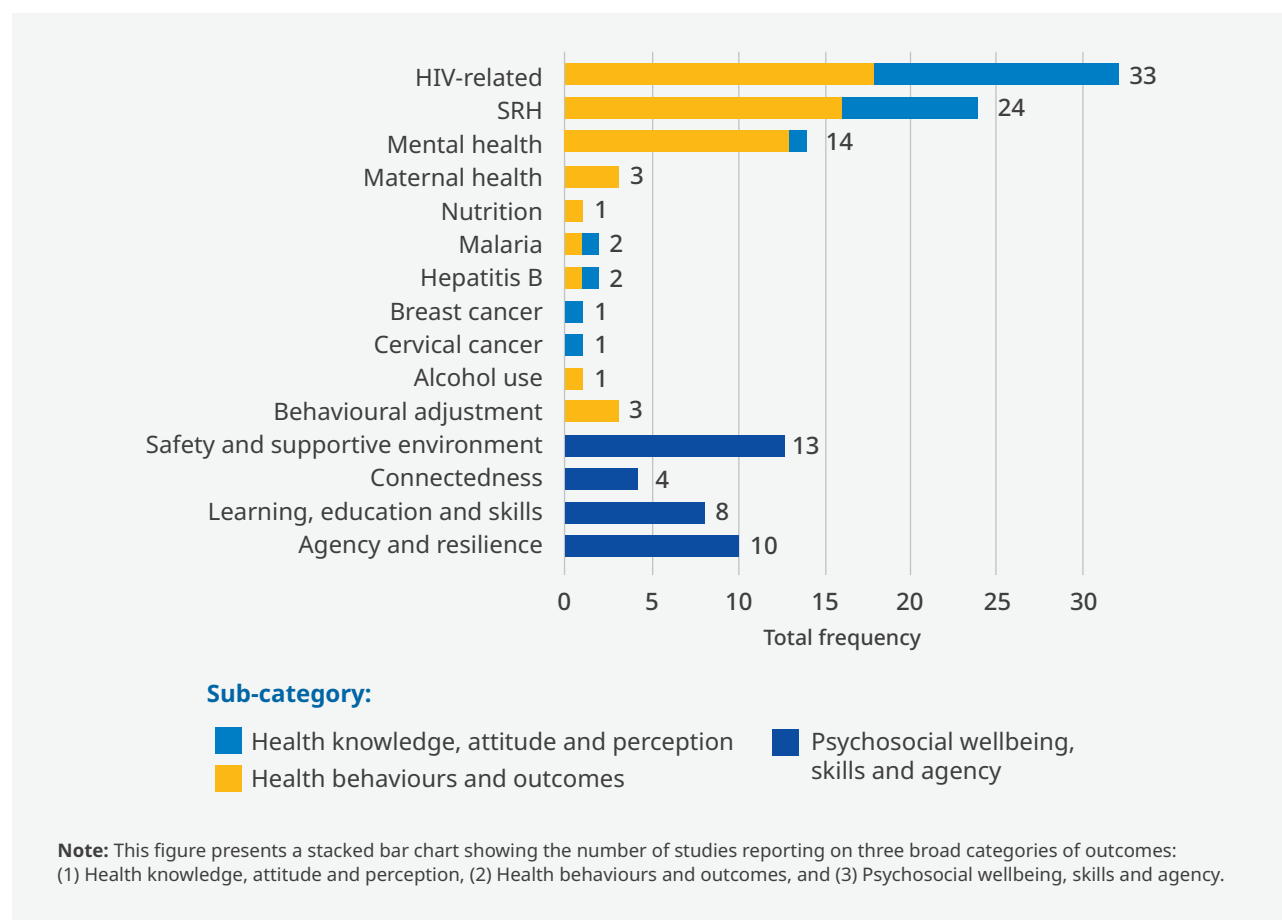
Adult CHW interventions in community settings also covered a broad range of activities. These included the delivery of health education, promotion and prevention messages, as well as psychosocial and mental health support such as cognitive behavioural therapy (CBT)-based interventions in Kenya and Tanzania and psychodrama sessions in Mozambique.^{16, 26–28} Adult CHWs also played a role in facilitating access to care, as seen in the ‘relais communautaires’ model in Niger,²⁹ and provided direct services and social support such as the Health Extension Workers (HEWs) in Ethiopia.^{30–32} For example, HEWs in Ethiopia administered injectable contraceptives while incorporating social marketing strategies as incentives.³² Six studies examined adult CHW-led interventions implemented in school settings including groups of adolescents and their caregivers to address behavioural problems and mental health issues in Uganda,^{33–34} psycho-education group sessions focused on mental well-being of war-affected children in Burundi,³⁵ group education sessions focused

on HIV and sexual health-related topics in Malawi,³⁶ Nigeria¹² and Kenya,³⁷ and sanitary pad distribution in Kenya.³⁷

Three programmes integrated both peer and adult CHWs.^{11–13} One such example is Ethiopia’s Smart Start initiative, which paired adult HEWs with peer Smart Start Navigators to deliver adolescent-responsive services.¹¹ Another example is Zimbabwe’s mental health support group co-delivered by paraprofessional CHWs and lay peer educators to mitigate social isolation and stigma of adolescent motherhood.¹³

The identified evidence spanned 15 outcome domains, highlighting the broad potential of CHW-led interventions to support diverse aspects of adolescent health and well-being. Within these domains, studies focused on three key sub-categories, which were i) health knowledge, attitude and perceptions, ii) health behaviours and outcomes, and iii) psychosocial wellbeing, skills and agency, summarized in **Figure 4**.

Figure 4. Distribution of outcome domains across CHW-led adolescent health interventions, by outcome type



Among the reviewed interventions, ten reported gender-disaggregated outcomes, while 16 focused solely on adolescent girls. The studies with disaggregated outcomes reveal several noteworthy patterns. A 12-month HIV self-testing campaign led to improvement in lifetime HIV testing for both sexes, with stronger effects among boys.³⁸ In Ethiopia, female HEWs reduced child marriage and early pregnancy among girls, reflecting their dual role as health educators and trusted role models for adolescents and families.³⁰

Most girl-focused interventions addressed gendered topics with implications for girls' health such as sexual and reproductive health, breast and cervical cancer, maternal care and adolescent motherhood, and generally reported positive outcomes. Notably, no intervention in the reviewed set focused exclusively on adolescent boys, indicating a clear gap in programming and research.

The strength and coherence of evidence varied across outcome areas. Mental health emerged as the area with the most consistent and comprehensive evidence, enabling meaningful synthesis. In domains such as HIV and sexual and reproductive health, the available volume of evidence enabled synthesis across some outcomes. For areas like social support, the available studies were more diverse in approach and measurement, making synthesis difficult despite a reasonable amount of evidence base. Finally, for other outcome domains there were too few studies to support any synthesis.

We found strong evidence that task-shifting trauma-informed CBT to lay CHWs, typically delivered over 10 to 16 sessions, can effectively reduce PTS with moderate certainty of evidence and depressive symptoms with low certainty of evidence among diverse adolescent populations, including adolescent mothers, war-affected youth and adolescents grieving the loss of a caregiver due to HIV/AIDS.^{13, 16, 19, 20, 26, 27, 33} While these interventions have demonstrated effectiveness, outcomes vary by context and trauma type, and none have yet been integrated into national health systems.

The second promising evidence base concerned HIV-related health outcomes. CHW-led interventions, particularly the peer CHW-led Zvandiri programme in Zimbabwe,¹⁷ demonstrated encouraging effects on HIV viral load suppression, though the certainty of evidence was low. Surprisingly, there were no conclusive findings regarding CHWs in improving adolescents' HIV knowledge, which may reflect methodological limitations, or ceiling effects given already high baseline knowledge levels. Further high-quality research is needed to determine whether the positive results on viral load suppression can be replicated in other diverse settings and how CHWs can achieve further gains in adolescents' HIV knowledge across Sub-Saharan Africa.

In other outcome domains, such as social support, nutrition or breast and cervical cancer knowledge, the evidence base was either limited to one or two studies per domain, or available studies were more diverse in approach and measurement, making synthesis difficult. Mixed evidence was found for sexual and reproductive health outcomes. Most existing research focuses on demand generation through knowledge and awareness, while supply-side barriers, such as adolescent-friendly service provision and contraceptive availability, and structural factors, including social norms and relationship power dynamics, remain inadequately addressed. This underscores the need for greater programming and research efforts on interventions targeting these gaps.



LISTENING TO ADOLESCENTS: WHAT MATTERS MOST TO THEM

In addition to evaluating programme effectiveness, we reviewed the qualitative literature to understand adolescents' experiences, perceptions and priorities regarding CHW interventions. Of 5,003 studies screened, 10 qualitative and two mixed-methods studies were identified as relevant: six focused on peer-led models, three on adult CHWs, and three on a combination of both.

These studies primarily focused on mental health, HIV, sexual and reproductive health, menstrual health and support to adolescent mothers.^{39–43} Synthesizing author conclusions across the studies, four consistent themes for peer CHWs and four insights into adult CHW-adolescent dynamics emerged, as summarized in [Figure 5](#).

Figure 5. Synthesis of conclusions from qualitative studies on peer-led and adult-led CHW interventions





For peer CHWs, the key themes were trust and relatability, stigma reduction, better accessibility, and psychosocial support. Adolescents found peers easier to talk to, fostering trust and engagement in health discussions.^{12, 39, 40, 42, 44, 45} Peer-led interventions effectively reduced stigma around HIV, mental health, and sexual and reproductive health, helping adolescents normalize experiences and encouraged health-seeking behaviour.^{12, 39, 40, 42, 44, 45} Peer support also enhanced access to services by overcoming logistical, social, and psychological barriers, with youth-led outreach and mobile platforms seen as more approachable than traditional health settings.^{12, 28, 44, 45} Peer-led interventions also provided emotional support and helped build resilience and agency among adolescents.^{12, 39, 40, 42, 44–46}

For adult-led interventions, the four insights centred on structural support and acceptability, home-based care, confidentiality concerns, and gendered challenges. While adult CHWs were effective at connecting adolescents to services, limited training on adolescent-specific needs reduced their acceptability.^{28, 43, 45, 47} One study

particularly highlighted the importance and effectiveness of adult counsellors gaining the trust of adolescents.⁴⁵ Home visits were preferred by adult CHWs for understanding adolescents' environments, but adolescents expressed concerns about privacy and confidentiality, especially in small communities.^{41, 47} Gender dynamics also influenced engagement: male CHWs faced challenges connecting with adolescent girls on sexual and reproductive health, while female CHWs reported safety concerns when travelling alone to remote areas.^{41, 43}

In addition to the synthesized findings across studies, a study conducted in Zambia highlighted the effectiveness of a combined peer and adult model for adolescent HIV support.⁴² Adolescents felt more comfortable with peer support, which fostered a safe space for open discussions, while adult counsellors provided the credibility, structure and technical expertise necessary for professional guidance. This integrated approach offers a promising model for improving adolescent support.

POLICY IMPLICATIONS AND EVIDENCE GAPS: CHARTING THE WAY FORWARD

Drawing from the accumulated body of evidence on CHW-led interventions for adolescents highlights their promise, while also pointing to several future directions for strengthening both their impact and the supporting evidence base.

1. Expand CHW programmes in areas with reliable evidence. The strongest evidence for CHW effectiveness lies in low-intensity psychological interventions to improve adolescent mental health. This supports expanding such programmes, particularly for adolescents, facing trauma, social isolation or stigma, such as adolescent mothers. There is also promising evidence for sexual reproductive health, HIV prevention and care, and increasing knowledge about non-communicable diseases, although more research is needed. Adolescents consistently emphasize the value of peer-based models in fostering trust, relatability, and psychosocial support, and highlight the importance of gender-synchronized approaches for sensitive topics. While integrated models combining adult and peer CHWs have shown promise in Ethiopia, Nigeria and Zimbabwe, more high-quality evidence is needed to support conclusive recommendations.

2. Strengthen integration of CHW evidence into formal systems. The potential of lay CHWs in improving adolescent mental health makes a strong case for their integration into national systems. Key steps include engaging stakeholders to ensure alignment with national health strategies and identify areas with high mental health demand. It is also crucial to assess if current CHWs have the necessary capacity in terms of skills and workload to take on these additional responsibilities. Clear role distinctions between “support” and “intervention” should be developed to guide safe and effective practice. Ensuring that both adolescent girls and boys feel safe, understood and supported is vital. In parallel, although not the primary focus of this work, investing in the mental well-being of the

CHW workforce itself is essential to sustain its ability to support others.

3. Promote gender-responsive approaches for stronger engagement. Gender norms shape how adolescents engage with CHWs and affect their access to support. CHW programmes should address these dynamics head-on to increase acceptability, and ensure inclusive, equitable service delivery. Training must go beyond general awareness, equipping CHWs with concrete skills to navigate gender-related challenges, adapt communication styles and build trust with adolescents of all genders, particularly those who are marginalized or underserved.

4. Expand the evidence base on effectiveness for adolescent health and well-being. More evidence is needed on CHW impact across adolescent health outcomes. A focused research agenda is needed to assess the effectiveness of both adult- and peer-led models, with an emphasis on high-quality evaluations, such as randomized controlled trials and gender-disaggregated data, and a deeper exploration of gender-synchronised approaches for gendered health areas. Gaining a deeper understanding of adolescents lived experiences, including their perceptions of adult CHWs, is also crucial. Evidence should be framed through a well-being and empowerment lens, reflecting adolescent priorities and rights.

In summary, the growing evidence base for CHW-led adolescent interventions offers valuable lessons and important implications for practice. Effective interventions across multiple adolescent health domains provide useful examples for programme design, while rich qualitative evidence highlights key factors that resonate with adolescents. However, more rigorous research is needed. Continued investment in both research and practice will be essential to refine and expand these approaches, ensuring their effectiveness and sustainability.

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SUPPLEMENTARY TABLE

Supplementary table: Summary of included studies by outcome domain

Outcome domain	Study
Human Immunodeficiency virus (HIV)	Quantitative: Ajuwon et al., 2015; Akuiyibo et al., 2021; Ezelote et al., 2024; Boeke et al., 2018; Ali et al., 2015; Dow et al., 2020; Menna et al., 2015; Ferrand et al., 2017; Hensen et al., 2023; Kopo et al., 2023; Kumbani et al., 2023; Indravudh et al., 2021a; Indravudh et al., 2021b; Timol et al., 2016; Simms et al., 2022; Ndhlovu et al., 2021; Mavhu et al., 2020; Dancy et al., 2015; Willis et al., 2019; Shanaube et al., 2017; Chizoba et al., 2020.
	Qualitative: Atjuna et al., 2021; Bedingar et al., 2024; Stangl et al., 2021; Roberts et al., 2023* *While this paper is presented as a mixed methods study, the analysis primarily relies on qualitative data, complemented by descriptive statistics.
	Mixed methods: Hassan et al., 2014
Sexual and reproductive health (SRH)	Quantitative: Brooks et al., 2019; Akuiyibo et al., 2021; Silverman et al., 2023; Bakesiima et al., 2021; Menna et al., 2015; Rudgard et al., 2021; Wondimagegene et al., 2023; Weidert et al., 2017; Hensen et al., 2023; Timol et al., 2016; Krug et al., 2023; Dancy et al., 2015; Phiri et al., 2024; Fikree et al., 2018; Hensen et al., 2023
	Qualitative: Burke et al., 2024; Kawuma et al., 2024; Tembo et al., 2022
	Mixed methods: Hassan et al., 2014
Mental health	Quantitative: Dow et al., 2020; Ssewamala et al., 2023; O'Donnell et al., 2014; Kopo et al., 2023; Simms et al., 2022; Murray et al., 2015; Tinago et al., 2024; Dorsey et al., 2020; Tol et al., 2014; Brathwaite et al., 2022; Betancourt et al., 2014; Tol et al., 2014; Osborn et al., 2020
	Qualitative: Broström et al., 2021; Garriott et al., 2023
	Mixed methods: Benoni et al., 2024;
Maternal and child health	Quantitative: Edward et al., 2022; Alhassan et al., 2024** **This is a mixed methods paper, but the qualitative section was excluded due to insufficient insights. Only the quantitative section was included in our review.
	Qualitative: Henning et al., 2019
Nutrition	Quantitative: Tamiru et al., 2016

Outcome domain	Study
Malaria	Quantitative: Abamecha et al., 2021; Kebede et al., 2020
Hepatitis B virus	Quantitative: Olaoye et al., 2024
Breast cancer	Quantitative: Sadoh et al., 2021
Cervical cancer	Quantitative: Sadoh et al., 2018
Alcohol use	Quantitative: Rudgard et al., 2021
Behavioural adjustment	Quantitative: Ssewamala et al., 2023; O'Donnell et al., 2014; Brathwaite et al., 2022; Betancourt et al., 2014
Safe and supportive environment	Quantitative: Silverman et al., 2023; Abamecha et al., 2021; Rudgard et al., 2021; Posso et al., 2021; Timol et al., 2016; Tinago et al., 2024; Krug et al., 2023; Brathwaite et al., 2022; Betancourt et al., 2014; Osborn et al., 2020
Connectedness	Quantitative: Timol et al., 2016; Dorsey et al., 2020; Brathwaite et al., 2022
Learning, education and skills	Quantitative: Rudgard et al., 2021; Brathwaite et al., 2022; Betancourt et al., 2014; Osborn et al., 2020
Agency and resilience	Quantitative: Abamecha et al., 2021; Timol et al., 2016; Brathwaite et al., 2022; Willis et al., 2019; Tol et al., 2014

