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Stated preferences of adolescents and young adults for sexual and reproductive health services in Africa: a systematic review protocol

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ABSTRACT

Background Adolescence and young adulthood are critical life stages with varied healthcare needs. Adolescents and young adults (AYAs) are often confronted with challenges in their sexual and reproductive health (SRH) and rights. Uptake of SRH services among AYAs groups remains limited, especially in resource-limited settings. This could be partly attributed to the existing services not catering for the preferences of AYAs. However, there is no systematic evaluation of research to explore the preferences of AYAs for SRH services in Africa. Therefore, the objective of this systematic review is to assess AYAs's preferences for SRH in Africa.

Methods and analysis The systematic review will follow the recommendations of Preferred Reporting Items for Systematic Reviews and Meta-Analyses 2020. Stated preference studies in the area of SRH services conducted among AYAs will be included. We will search MEDLINE, EMBASE, PsycINFO, CINAHL, Scopus, Global Health and Google Scholar databases. Two independent researchers will screen the articles, and any disagreement will be handled through discussion with the broader research team. The quality of the included papers will be assessed and reported. The preferences for attributes, the most important and least important attributes and preference heterogeneity will be reported. In addition, the preference research gap across African regions and SRH services among AYAs will be reported.

Ethics and dissemination Ethical approval is not required for this protocol. The systematic review findings will be published in a peer-reviewed journal and presented at conferences.

PROSPERO registration number CRD42023386944.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ Comprehensive sexual and reproductive health (SRH) services will be included.
⇒ We will use five databases and complement them with Google Scholar to rigorously search for published and grey literature.
⇒ The study will focus on Africa with the most vulnerable age group (15–24 years).
⇒ We will search studies published after 2010 to investigate the recent preferences of adolescents and young adults regarding SRH services.
⇒ Inability to pool preference estimates, as the coefficients will be in the latent scale.

BACKGROUND

The WHO defines sexual and reproductive health (SRH) as the state of physical, emotional, mental and social well-being about sexuality[1] and all matters related to the reproductive system.[2] Thus, the SRH health services include, but are not limited to, sexual education, family planning and contraception; safe abortion care; sexually transmitted infections (STIs); sexual violence services; fertility care and screening and treatment for cancers of the reproductive system.[3–5]

Adolescence is a critical period of transition from childhood to adulthood.[6] Although there is no universally agreed age range for adolescents, the United Nations and WHO consider adolescents as individuals between the ages of 10 and 19 years.[7] The WHO and other international organisations frequently use the term young adults to refer to the age group from 20 to 24 years.[8 9] Therefore, adolescents and young adults (AYAs) refer to the age range of 10–24 years.[7]

There are over 1.8 billion AYAs in the world,[7] and the majority are from low-income and middle-income regions. Given the high fertility rate in Africa, the population of AYAs is expected to rise from 18% in 2012 to 28% by 2040,[7] while the share of AYAs in Asia and the Pacific will be projected to decrease sharply due to falling fertility.[10] According to the United Nations Population Fund (UNFPA) report, By prioritising investment in AYAs health, especially expanding contraception, sub-Saharan countries can secure a demographic dividend worth up to US$500 billion each year for three decades.[11]

AYAs has various healthcare needs depending on personal development stages and life circumstances. However, the uptake of healthcare services is influenced by various factors, such as social norms, religious practices, cultural traditions and the health services environment.[12] AYAs, especially young women, encounter considerable obstacles regarding their SRH and rights.[13] They are particularly vulnerable to several SRH-related issues, including risky sexual behaviour, unintended pregnancy, unsafe abortions and STIs including HIV/AIDS.[13 14] In low-income and middle-income countries, SRH services have improved over the past decade, but AYAs continue to be underserved.[15] The low utilisation of healthcare services is primarily attributed to a lack of service availability, or when services are available, they are often inadequate in addressing the unique demands of AYAs.[14]

AYAs value healthcare characteristics differently than older people.[16] Their behaviour is characterised by high levels of risk-taking, social interaction, high activity and play behaviour, which could be associated with physical and hormonal changes.[17] Therefore, the provision of SRH services should consider the physiological, cognitive, emotional and social changes that occur during the transition into adulthood.[18]

Preference is the order in which people rank alternatives per their relative utility. The preference arises from the respondent's value, taste and experience, which results in optimal choice.[19–21] The use of stated preference methods in healthcare evaluation is increasingly widespread.[22–25] This method is favoured for eliciting preferences when directly observing real-life behaviours is difficult. Given the sensitivity of SRH services for young people, stated preference methods can effectively estimate preferences and the trade-offs between various attributes. It uses hypothetical situations to enable researchers to control the way preferences are elicited. Techniques, such as ranking, rating and choice designs, are used to measure preferences for attributes of an intervention or through the direct elicitation of monetary valuations for the intervention.[26]

The WHO promotes a shared decision-making approach where service users are involved as partners in health-related decisions.[18] Accounting for AYAs preferences and perspectives in policy decisions could facilitate better policy adoption and translation,[26 27] thereby informing the efficient allocation of resources to provide SRH services. Moreover, SRH service catering to the needs of youths could foster services' acceptability and improve SRH service uptake.[26] Recently, notable preference studies have been conducted in the area of HIV testing, treatment, prevention, family planning and general SRH services among AYAs in Africa.[28–32] However, the collective preference of AYAs for SRH service and the extent of heterogeneity in Africa are not well explored.

OBJECTIVES

The general objective of the review is to systematically synthesise the available evidence on the stated preferences research to assess the preferences of AYAs for SRH services in Africa.

Specific objectives

The specific objectives of the review are to:

1. Identify the attributes used to measure the preferences of AYAs for SRH services in Africa.
2. Identify the relative importance of attributes for AYAs to use SRH services in Africa.
3. Mapping of preferences studies on SRH among AYAs based on service type and country.

METHODS

We used the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Protocol checklist when writing our report.[33] The systematic review will follow the PRISMA 2020 reporting guideline.[34] The study protocol is registered at PROSPERO (ID: CRD42023386944).[35]

Eligibility (inclusion and exclusion) criteria

The population, intervention, comparison and outcome approach will be used to select the studies. Studies assessing stated preference of AYAs for SRH services conducted in Africa will be included (table 1).

Population

AYAs aged 10–24 years.

Intervention

Hypothetical scenarios on SRH.

Outcome

The primary outcome is stated preferences for SRH services. In addition, the most important and least important attributes and preference variations (heterogeneity) will be reported. Furthermore, the stated preference research gap among African countries and different SRH services will be reported.

Type of studies

Stated preference studies which use discrete choice experiments (DCEs), best–worst methods and Thurston scaling will be included. These are the common methods for conducting stated preferences studies.

Context

Studies conducted to assess SRH preferences in Africa will be included.

Year and language

Studies published after 2010 that are written in English will be included. Individuals' preferences could be determined by respondents' values, tastes and experiences, and people's preferences could vary over time. Thus, we

Table 1 Eligibility criteria

Eligibility	Inclusion	Exclusion
Population	Adolescents and young adults aged (15–24 years)	Studies conducted among the general population
Intervention/exposure	Studies on sexual and reproductive health services	Maternal health services (antenatal care, delivery and postnatal care)
Comparator/context	Studies conducted in Africa	Studies conducted outside of Africa.
Outcome	► Preferences ► Relative importance of attributes ► Willingness to pay	► Cost-effectiveness ► Prevalence
Study characteristics	Stated preference studies. ► Discrete choice experiments ► Best–worst scaling ► Thurston scaling	► Systematic review ► Commentaries ► Study protocols ► Qualitative studies ► Conference abstracts or proceedings
Language	Studies published in the English language	Studies published other than in the English language
Year	Studies published in 2010 and later	Studies published before 2010

aimed to include studies with recent data on the preferences of AYAs for SRH services in Africa.

Studies with overlapping age categories will be excluded unless they provide a separate subgroup analysis specifically for AYAs.

Information source

Database and search strategy

Major electronic databases such as MEDLINE, EMBASE, PsycINFO, CINAHL, Scopus and Global Health will be searched for published articles through Ovid and EBSCO. In addition, a Google Scholar search targeting the first 100 results will be included to identify grey literature. The first 100 papers from a title search from a preidentified five papers[28–32] will be conducted.

Search strategy

The search term was refined into four main group concepts ('preference', 'youths or 'young adults' or 'adolescents', 'Sexual and Reproductive Health' and 'Africa'). Keywords and subject heading searches will be conducted. A Boolean, truncation, wildcards and proximity operations will be used to have a targeted search (see online supplemental file 1).

Selection process

All search results from databases and Google Scholar will be exported to EndNote to identify and remove duplications. Subsequently, the articles will be transferred to Rayyan[36] (web-based screening tool) for initial screening by title and abstract. During this phase, two independent investigators (MBA and DGB) will screen the articles. Any disagreements will be resolved through discussion and in consultation with a third reviewer (GAT).

In the second phase, all selected studies will be exported to EndNote for a full-text review. MBA and DGB will independently conduct the full-text screening. GAT, RN, GFP and JD will randomly verify 20% sample of the full-text screening process.

Data extraction process

Data extraction will be conducted by MBA. GAT, RN, JD and GFP will check the data extraction. Disagreements will be solved by discussion. An email will be sent to the corresponding author if additional data are needed. The outcome of the email communication will be reported.

The extraction form includes study characteristics, participant characteristics, attribute development process, attribute and level used, experimental design type, analysis used, type of service and preference of AYAs for SRH services. The tool was developed by considering previous systematic reviews of DCEs[37 38] and discussion with the investigators (MBA, GAT, RN, JD and GFP). Excel will be used for data extraction (see online supplemental file 2).

Study risk-of-bias assessment

The conjoint analysis checklist by International Society for Pharmacoeconomics and Outcome Research (ISPOR)[26] and PREFS (Purpose, Respondent sampling, Explanation of preference assesment, Finding, and Significance testing) checklists will be used to check the quality of included studies. The ISPOR checklist comprised 10 sections: (1) research question, (2) attributes and levels, (3) construction of choice tasks, (4) experimental design, (5) preference elicitation, (6) instrument design, (7) data collection, (8) statistical analysis, (9) results and conclusion and (10) study presentation.[26] The PREFS checklist consisted of five components: (1) the study's purpose, (2) respondents' characteristics, (3) explanations of the methods, (4) findings and (5) the study's significance.[39] The quality assessment will be conducted by two independent investigators (MBA and DGB). Any disagreements

will be resolved by discussion with the research team (GAT, RN, JD or GFP).

Data synthesis

The Davidian framework for quality of healthcare (structure, process and finality)[40] will be used to thematically analyse the included studies.[37] Structure refers to the physical and organisational infrastructure, such as facilities, equipment and human resources. The process encompasses the methods and procedures of care delivery, including the interactions between healthcare providers and patients, such as diagnosis and treatment. Outcome focuses on the results of healthcare services, including patient health status and satisfaction.[40] Attributes with a greater magnitude of coefficient differences among their levels are considered the most important. Similarly, attributes with low magnitude of their levels difference considered as the least important attributes for AYAs to influence healthcare uptake. From our preliminary search, we anticipate that there will be limited studies and hence there is no plan for subgroup analysis. If the data allows us, we aim to undertake subgroup analysis with different regions.

Ethics and dissemination

Ethical approval is not required for this study, as it involves a review of published and grey literature. The findings from the systematic review will be disseminated through publication and presentation at international conferences. These results will be valuable for local and global policymakers in designing and implementing SRH services in Africa.

Patient and public involvement

No patient involved.

DISCUSSION

There has been limited evidence on the preference of AYAs in SRH services, which could lead to low utilisation. However, there is limited evidence on AYAs preference for SRH services in Africa. Therefore, this review aims to provide valuable insights to policymakers, enabling them to consider AYAs preferences when designing SRH services in Africa. Thus, it is expected that utilisation rates will improve, ultimately contributing to the reduction of HIV/AIDS, teenage pregnancy, unsafe abortion and other SRH challenges faced by adolescents.

We will identify the most preferred and least preferred characteristics in SRH service by AYAs. The evidence could be used by policymakers such as the African Union, ministries and intergovernmental organisations to prioritise interventions to meet the expectations of AYAs in Africa. In addition, the willingness to pay and uptake rate of SRH services will be explored. Therefore, we will propose the most preferred intervention for AYAs when it comes to SRH to improve their service use. Nevertheless, the level of quality and service coverage of the included studies could affect the result of the systematic review.

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