

## REVIEW ARTICLE

# Views of Service Providers and Adolescents on Use of Sexual and Reproductive Health Services by Adolescents: A Systematic Review

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## Abstract

This review examines the literature on adolescents' and providers' views on access and use of Sexual and Reproductive Health (SRH) information and services. The SRH services referred to in this study were predominantly family planning services, STI treatment including HIV testing and counselling services. The study design was a systematic review of empirical studies. Twenty-five databases were searched using a well-defined search strategy and Boolean operators. A total of 45 studies were included in the review, and the findings were reported thematically under four emerging themes. The review showed that adolescents and sexual health service providers had differing views on barriers and enablers to adolescent access to SRH services and often had contradictory views on key markers of youth-friendly services, service preferences, barriers and enablers of service use. While service providers perceived physical and financial barriers as fundamental, adolescents identified barriers emanating from providers' attitude as the key hindrance to their access and use of services. The review also revealed that the unprofessional attitudes of some service providers limit adolescents' access to SRH services. These findings serve as evidence to policy actors at all levels to consider attitudinal qualities of service providers when planning and designing sexual health services for adolescents. (*Afr J Reprod Health 2019; 23[2]: 134-147*).

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**Keywords:** Young people, Service provider's attitude, Sexual health needs, views and perceptions, Youth friendly services; Barriers; facilitators; service use; Africa

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## Résumé

Cette revue examine la documentation sur les opinions des adolescents et des prestataires de services sur l'accès et l'utilisation des informations sur la santé sexuelle et de la reproduction (SSR). Les services de santé sexuelle et de reproduction mentionnés dans cette étude étaient principalement les services de la planification familiale, du traitement des IST, y compris le dépistage du VIH et les services de conseil. La conception de l'étude consistait en un compte-rendu systématique d'études empiriques. Vingt-cinq bases de données ont été explorées à l'aide d'une stratégie de recherche bien définie et d'opérateurs booléens. Au total, 45 études ont été incluses dans le compte-rendu et les résultats ont été présentés de manière thématique sous quatre thèmes émergents. Le compte-rendu a montré que les adolescents et les prestataires de services de santé sexuelle avaient des opinions divergentes sur les obstacles et les facilitateurs à l'accès des adolescents aux services de santé sexuelle et de la reproduction et qu'ils avaient souvent des opinions contradictoires sur les indicateurs clés des services adaptés aux jeunes, les préférences de service, les obstacles et les facilitateurs de l'utilisation des services. Alors que les fournisseurs de services considéraient les obstacles physiques et financiers comme fondamentaux, les adolescents ont identifié les obstacles résultant de leur attitude comme étant le principal obstacle à leur accès et à leur utilisation des services. Le rapport a également révélé que l'attitude non professionnelle de certains prestataires de services limitait l'accès des adolescents aux services de SSR. Ces résultats servent de preuves aux acteurs politiques à tous les niveaux pour prendre en compte les qualités d'attitude des fournisseurs de services lors de la planification et de la conception des services de santé sexuelle pour les adolescents. (*Afr J Reprod Health 2019; 23[2]: 134-147*).

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**Mots-clés:** Jeunes, attitude du prestataire de services, besoins en matière de santé sexuelle, opinions et perceptions, services adaptés aux besoins des jeunes, obstacles, les facilitateurs, utilisation du service, Afrique

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## Introduction

Despite the significant strides in recent times to widen access and use of sexual and reproductive health services for 1.2 billion adolescents globally, an overwhelming majority of adolescents are not reached<sup>1-2</sup>. The 4<sup>th</sup> International Conference on Population and Development (ICPD) in Cairo in 1994 acknowledged the need for adolescents' right to safe, affordable, accurate contraceptive services, non-judgmental counselling, and safe abortion<sup>2-4</sup>. This commitment was further reiterated in Ecuador in 2014 with attention drawn to gender disparity and upholding the right of adolescents to access comprehensive SRH information and services<sup>3-4</sup>. However, after two decades of ICPD programme of action, regrettably, this commitment remains unfulfilled in many parts of the world as 16 million girls aged 15–19 still give birth globally each year. Ninety-five percent of these births occur in low and middle-income countries (LMICs); with sub-Saharan Africa accounting for more than 50%<sup>3</sup>. Most of these pregnancies are unintended, and many end up in abortion<sup>3</sup>. Globally, 23 million adolescent women aged 15-19 have an unmet need for modern contraceptives (7.7million in sub-Saharan Africa) and are at high risk of unplanned pregnancy<sup>4</sup>. Among an estimated 22 million unsafe abortions that occur globally every year, 15% occur among young girls 15-19, and 26% occur in those aged 20-24<sup>5</sup>. Fifteen percent of women living with HIV are aged 15–24, of whom 80% live in sub-Saharan Africa<sup>6</sup>.

A number of global health initiatives (Family Planning 2020 and the UN's global Strategy for women's, children and adolescents' health etc.) have advocated meeting young women's and adolescents' needs for modern contraception, especially in low-income countries<sup>7-8</sup>. This is with the recognition that addressing the unmet needs of young adolescent women would help reduce unwanted pregnancy by 6 million, avert 2.1 million unplanned births, 3.2 million abortions, and 5,600 maternal deaths<sup>4</sup>. The 25<sup>th</sup> anniversary of the ICPD programme of action emphasis on the universal health coverage including that of adolescents with a focus on age-disaggregated data in the Sustainable

Development Goals (SDGs) and targets<sup>4</sup>. Amidst increasing attention to meeting the needs of sexually active adolescents, understanding the challenges young adolescent boys and girls face in accessing services is crucial in universal access to SRH services<sup>9-10</sup> as pockets of evidence from LMICs indicate that many countries have yet to make significant progress in enabling adolescents' access to SRH services<sup>11</sup>.

The systematic review presented here is different from the previous systematic reviews which focused on interventions to reduce unintended pregnancy among adolescents<sup>12</sup> and barriers to young people's use and non-use of school-based sexual health services in developed countries<sup>13</sup>. The latter is limited in scope for two reasons: (i) it appraised only studies conducted in high-income countries leaving out studies conducted in LMICs countries where adolescents are disproportionately affected; and (ii) it examined the reasons why young people are not using school-based SRH services with no attention to community-based and clinic-based SRH services. Hence, the reason for the current review and synthesis to examine empirical literature on both adolescents and service providers, with three key objectives: (i) to assess the views of adolescents on their use of SRH services; (ii) to examine the factors impeding and enabling adolescent service use; and (iii) to identify service providers views and where it differs from that of adolescents and its determinants.

## Methods

The review was conceptualized and carried out in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analysis statement-PRISMA<sup>14</sup>. The methods of screening, inclusion and exclusion criteria and analysis were developed following the above protocol.

### *Inclusion and exclusion criteria*

We reviewed peer-reviewed journal articles, with empirical data reporting findings on the preferences, perceptions and views of adolescents and health professionals on access and use of SRH services in both high and low-income countries.

We included peer-reviewed articles without date restriction as we wanted to make sure relevant studies were not left out. Only primary studies published in English were eligible for the review. Most of the reviewed articles focused on adolescents aged 10-19. However, we included studies that targeted young people aged 20-24 as well.

### ***Search strategy and study identification***

A comprehensive search was undertaken to identify relevant literature on this subject up to April 2017. We searched the following databases: CINAHL, PsycINFO, PUBMED, EBSCOhost, LILACs, EMBASE, CENTRAL, Academic search premier, Central Web of Science, MEDLINE, SCOPUS, ProQuest, Sage, Biomed, Cochrane Database, and Centre for Review and Dissemination (York). Other repositories searched included: IBBS (International Bibliography of social sciences), OpenDOAR, Ethos (British Library), Network digital library of Thesis and Dissertation, ZETOC (Global Research Publication), and JournalTOCs. We also conducted a thorough hand search in some relevant departmental websites such as: WHO, The National Institute for Health and Care Excellence (NICE), National Institute for Health Research (NIHR), Economic and Social Research Council (ESRC) database, UNFPA, Guttmacher Institute, Population Council, Family Health International, National Agency for the Control of AIDS Nigeria (NACA), and Department of Health. The reference list of included studies was also crosschecked to make sure important studies were not left out. We used Google scholar to search for additional information. We used comprehensive list of key words grouped into five: Sexual and reproductive health (sexual health services OR Sexuality education OR Genitourinary medicine health OR Reproductive Health services OR Sexual health information etc.); AND Adolescent (young people OR young adults OR Teenagers OR youth OR children etc.); AND Family planning (Abortion OR contraceptive OR HIV/STI OR birth control OR condom etc.); AND Service providers (professional OR caregivers OR primary

healthcare professionals OR school nurses etc.); AND Views (perceptions OR experiences OR feelings OR attitude OR opinion). The keywords were applied systematically with clear phrases, truncation, wildcard and alternative spellings using Boolean operators. The complete list is available upon request.

### ***Data collation, extraction and appraisal tools***

The data extraction spreadsheet was created using Microsoft Excel to record systematically all relevant studies identified. An initial account was created in EBSCO Host and Web of Science, which enabled studies to be temporarily stored during the search process and was further transferred to RefWorks reference manager. All studies relevant to the review were exported finally to Microsoft Word. The data extraction headings included were author name, year of publication, study location, aim and objectives of the study, study design, and findings. The lead reviewer screened each title, extracted data and assessed the quality of all included studies. The extracted sheet was finally cross-checked by the second reviewer and inconsistencies were resolved by consultation with the third author.

### ***Quality assessment***

The included studies were appraised critically for methodological quality and rigour using a universal appraisal tool adapted from existing ones<sup>15-16</sup> (See Table 1). We used the modified appraisal tool to critically assess the trustworthiness and relevance of the published papers with a keen focus on the study design, recruitment strategy, sampling method, ethical consideration, data analysis and findings.

### ***Data and thematic analysis***

The findings of the review were synthesised thematically. This was due to the varied nature of the primary studies; making it difficult for meta-analysis. The themes were developed following the six phases of thematic analysis<sup>17</sup>. This was first done by actively reading each article to make sense of the content of each paper. This was

**Table 1:** Quality appraisal indicators

Is there a clear statement of the aims and a research question?
Is the research approach/design appropriate?
Is the research design defensible?
Have ethical issues been taken into consideration?
Is the sampling strategy appropriate to address the Authors name, country?
Are the method of data collection appropriate and clearly explained?
Is the description of the data analysis sufficiently rigorous and comprehensively described?
Is there a clear description of the findings and results?
Are the findings of the study generalizable or transferable to a wider population?
How important are these findings to policy and practice?

\*All criteria fulfilled = High quality=1

Six and above criteria fulfilled =Adequate=2

Less than six criteria fulfilled = Limited=3

followed by assigning an initial code to features of the article that appeared relevant. Similar codes were grouped together to form a theme. The themes were checked for accuracy, and finally, four themes emerged from the exercise.

## Results

A total of 2184 studies were identified through database search plus an additional 71 studies from other sources. The PRISMA flow chart in Figure 1 provides details of the selection process. A total of 45 studies were finally included in the review. Nineteen studies were conducted in Africa, 8 in Asia, and 18 in Europe and America. Table 2 summarises the papers included in the review with the authors' name, country, sample and research design. The findings and the emerging themes were not included but were captured in the synthesis.

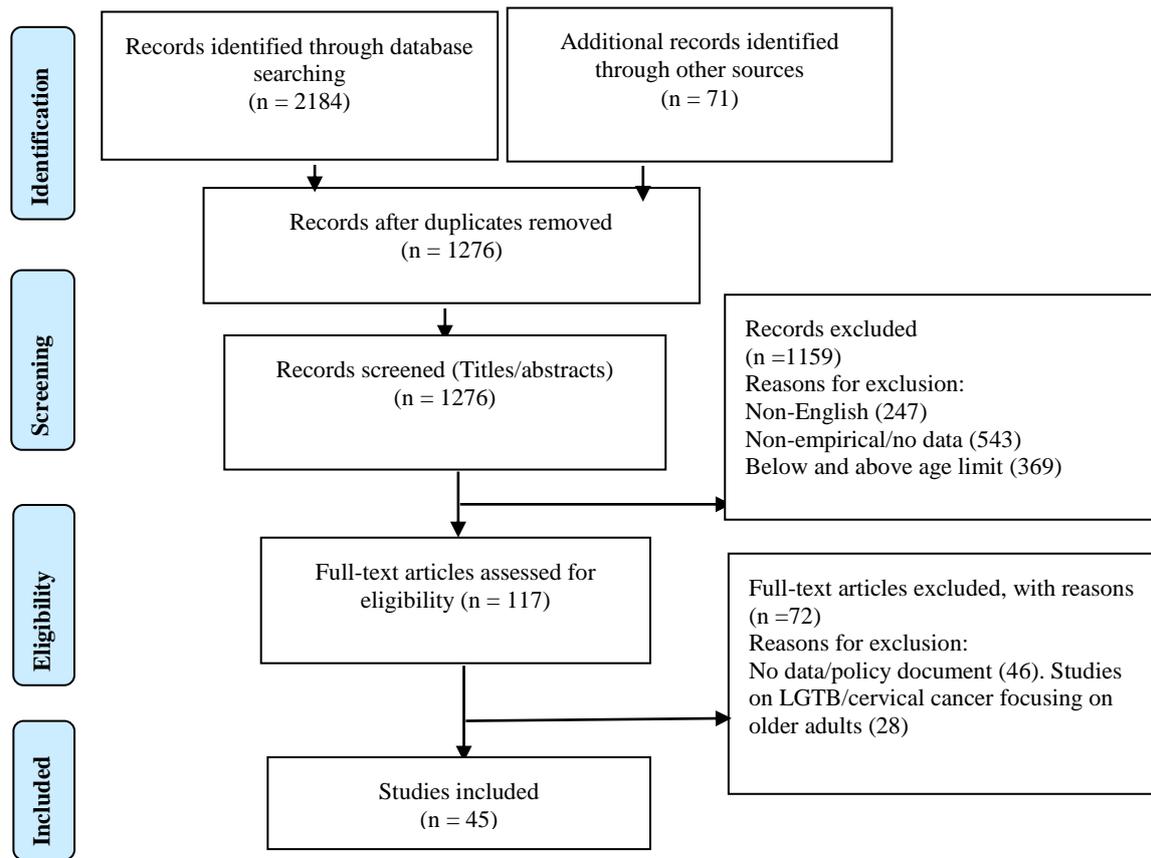
### *Quality assessment and methodological quality of the studies*

The studies presented in Table 2 have varied methodological quality. All the studies had clear aims, objectives and well-justified rationale. Forty-one studies defined their research design except<sup>18-21</sup>. Thirty-eight studies described their sample size and participants' recruitment strategy, though two studies adopted a sampling strategy which was deemed inappropriate in relation to the

study aims and objectives<sup>22,23</sup>. For example one of the studies recruited participants using random sampling technique<sup>22</sup>. This is arguably inappropriate for a qualitative study though commonly used in a quantitative study. This is because qualitative study aimed at purposively recruiting participants with rich information on topic of interest.

Seven studies did not report their study sampling strategy, and as a result, the findings obtained cannot fully be considered reliable as the sampling strategy is not known<sup>20,22,24-28</sup>. Five quantitative studies<sup>21,29-30</sup> and five qualitative and mixed method studies<sup>33-37</sup> reported small sample size with no clear justification. This has implication for the transferability of the findings to the wider population.

Furthermore, all the studies used appropriate data collection tools, which were well explained except two studies that did not discuss and justify their data collection method<sup>35,38</sup>. This has implication for the findings generated. The data analysis process of six studies was not sufficiently rigorous, and there was no statement describing how valid and reliable the measures were<sup>39-44</sup>. Thirty-three studies gave a clear statement of ethical clearance and how anonymity, confidentiality and consent were gained among the gatekeepers and participants. However, thirteen studies did not give an account of the ethical approval and how the participants were protected during the research process. All the studies



**Figure 1:** PRISMA Flow Diagram showing study selection process

**Table 2:** Study characteristics and results

Authors	Country	Quality*	Sample	Research design
Agampodi <i>et al.</i> (2008)	Sri Lanka	1	32 adolescents age 17-19 (13 male & 19 female).	Qualitative
Alli <i>et al.</i> (2013)	South Africa	3	200 young people & 4 Focus Group Discussions (FGDs) and In-depth Interview (IDIs) with providers	Qualitative
Amuyunzu-Nyamongo <i>et al.</i> (2005)	Sub-Saharan Africa	1	55 FGDs	Qualitative
Bamgbala <i>et al.</i> (2006)	Nigeria	2	187 private practitioners	Quantitative
Bethea <i>et al.</i> (2007)	UK	2	621 General practitioners (GPs)	Quantitative
Biddlecom <i>et al.</i> (2007)	Burkina Faso, Ghana, Malawi and Uganda	1	Adolescents: Burkina Faso=5955, Ghana=4430, Malawi=4031, Uganda=5112	Quantitative
Both and Samuel (2014)	Ethiopia	2	65 young people, 8 service providers	Qualitative
Bourton, (2006).	UK	3	4FGDs	Mixed method
Buseh <i>et al.</i> (2002)	Swaziland	1	941 students	Quantitative
Chambers <i>et al.</i> (2002)	UK	2	56 professionals and 55 young people	Quantitative
Donaldson, <i>et al.</i> (2013)	USA	1	875 & 1026 females & males.	
Donovan, <i>et al.</i> (1997)	UK	2	4481 Adolescents	Quantitative
Ege <i>et al.</i> (2008)	Turkey	3	55 students	Quantitative

Erulkar <i>et al.</i> (2005)	Kenya & Zimbabwe	1	1,344 in Kenya, & 539 Zimbabwe	Quantitative
French, (2002).	UK	1	32 young people	Qualitative
Godia, <i>et al</i> (2013)	Kenya	1	19 in-depth interviews and 2 FGDs.	Qualitative
Hebert, <i>et al</i> (2013)	Nigeria	2	59 service providers	Qualitative
Iyer and Aggleton, (2013)	Uganda	2	13 teachers	Qualitative
Jacobson <i>et al.</i> (2001).	UK	2	2265 teenagers & 40 GPs.	Mixed method
Jaruseviciene <i>et al.</i> (2006):	Lithuania	2	20 GPs	Qualitative
Jaruseviciene <i>et al.</i> (2011)	Lithuania	1	607 GPs.	Quantitative
Jaruseviciene <i>et al.</i> (2013).	Bolivia, Ecuador, and Nicaragua.	1	126 healthcare providers	Qualitative
Johansson <i>et al.</i> (2006)	Vietnam	1	8 FGDs	Qualitative
Johnston <i>et al.</i> (2015)	Australia	1	32 providers & 391 young people.	Mixed method
Kennedy <i>et al.</i> (2013)	Vanuatu	1	341 adolescents	Qualitative
Kiapi-Iwa and Hart (2004).	Uganda	2	11 providers & 245 young people.	Mixed method
Klingberg-Allvin <i>et al.</i> (2007)	Vietnam	1	235 midwifery students	Mixed method
Kumi-Kyereme (2014)	Ghana	1	60 IDIs	Qualitative
Lince-Deroche (2015)	South Africa	2	90 women.	Mixed method
Mason (2005)	UK	1	8 service providers	Qualitative
Matich <i>et al.</i> (2015)	Australia	2	Eight FGDs involving 6-10 young people (reference group meetings)	Quantitative
Mngadi <i>et al.</i> (2008)	Swaziland	1	56 healthcare providers	Quantitative
Muntean <i>et al.</i> (2015)	Ethiopia	1	14 key informants	Qualitative
Nair <i>et al.</i> (2013)	India	1	34 in-depth interviews	Qualitative
Nwokolo <i>et al.</i> (2002)	UK	2	744 pupils aged 11–18 years	Quantitative
Omobuwa (2012)	Nigeria	2	392 participants	Quantitative
Parkes <i>et al.</i> (2004)	UK	1	5747 adolescents	Quantitative
Pitts <i>et al.</i> (1996)	UK	2	19 providers.	Qualitative
Rubin <i>et al.</i> (2012)	USA	3	28 providers	Qualitative
Rubin <i>et al.</i> (2013)	USA	1	28 urban family physicians.	Qualitative
New York City.				
Shahhosseini and Abedian (2015)	Iran	2	72 providers & 402 female students	Quantitative
Sychareun (2004)	Laos PDR	1	56 IDIs & 250 surveys with providers	Mixed method
Temin <i>et al.</i> (1999)	Nigeria	2	24 FGDs	Qualitative
Tilahun (2012)	Ethiopia	1	423 providers	Quantitative
Tu <i>et al.</i> (2004)	China	1	1927 providers and 16 FGDs.	Mixed method
Warenius <i>et al.</i> (2006)	Kenya & Zambia	1	820 nurse-midwives	Quantitative

reported their results unambiguously, although only 22 studies acknowledged the weaknesses of their design. Twenty-one studies were identified to be the most rigorous and high quality that met all the key critical appraisal indicators. These are studies with quality indicator 1.

### ***Result description and synthesis***

Four themes emerged from the analysis and synthesis of the data as recorded on adolescent and service providers' views and perception of adolescents' access and use of SRH health services and information.

### ***Barriers to adolescents' access and utilisation of SRH services***

Many studies linked adolescents' non-use of SRH services to social, structural, economic and psychological factors. However, these factors tend to differ from the perspective of adolescent and service providers. Seventeen studies from the review identified social barriers as one of the obstacles to adolescents' access to SRH services. A cross-sectional study that compared the views of sexual health service providers with that of adolescents themselves found that service providers always see confidentiality, lack of awareness of available SRH services, cost of treatment, geographical location, hours of service operation as a hindrance to adolescents' access to sexual health care<sup>40</sup>. More than half of the service providers in the study reported that adolescents were not aware of sexual health services available to them. While this may be true, adolescents, on the contrary, placed greater importance on the personal attributes of service providers. In another study on how teenagers and primary healthcare providers viewed each other, adolescents reported that service providers have no respect for the concerns of adolescents and lack understanding of issues of confidentiality<sup>39</sup>. Surprisingly, SRH service providers do not share the same view. Many service providers hold negative views on adolescent sexual activity, and this deters them from providing appropriate services<sup>22</sup>.

Despite limited sample size, a study carried out in South Africa to determine young women's SRH needs and experiences, found that

providers' unsupportive attitude was the major reason young women in Soweto, South Africa did not want to access abortion and family planning services<sup>33</sup>. Similarly, in a study in Burkina-Faso, Ghana, Malawi, and Uganda, adolescents reported that a good number of sexually active adolescents do not know where to receive contraceptive and STI treatment due to fear, and embarrassment from service providers<sup>45</sup>. Adolescents stated in a qualitative study in the Republic of Vanuatu that providers' unfriendly and judgmental attitude is their major concern when accessing services as they feared service providers would rebuke and make them feel embarrassed<sup>46</sup>. The study further suggested that providing adolescents and young people with free SRH services and delivery of confidential services would help improve young people's access to services. Other studies in Africa and Australia echoed that service providers' characteristics, confidentiality and accurate sexual health information are adolescents most valued markers of quality in SRH services<sup>18,23,34,47</sup>.

Conversely, service providers do not think their attitude interferes with adolescents' use of services. In a study addressing SRH needs of adolescents from the perspective of key informants in Ethiopia, the participants noted limited SRH knowledge, lack of open discussion of sexual matters, low status of women, cultural and logistical barriers, and limited resources for health facilities as factors that impede utilisation of SRH service among adolescents<sup>23</sup>. A similar study in Kerala, India, among service providers identified lack of awareness of parents, stigma to utilise services, economic factors, and non-availability of services as important barriers to adolescents use of SRH services<sup>48</sup>. These studies prove that what service providers consider as hindrances to adolescents' access to services differ from what adolescent feel themselves. Providers in these studies did not recognise their attitude to be interfering with adolescents' access to SRH services. In a mixed method study in Laos People's Democratic Republic (PDR) to explore the attitude of service providers, the study found that service providers place a low priority on adolescent privacy and confidentiality and they tend to attribute difficulties of access and use of SRH services to an adolescent unwillingness to

listen<sup>49</sup>. A study among health workers in Ethiopia found that 30% of health care providers had negative attitudes towards providing SRH services to unmarried adolescents<sup>21</sup>. Midwives and doctors in a qualitative study in Vietnam believed that lack of technical skills, unavailability of standard equipment, inadequate provision of pain killers were the significant barriers to adolescent access to abortion services while aspects of inter-communication skills, confidentiality, confidence and counselling skills were considered less important<sup>50</sup>.

### ***Enablers of adolescents' access and use of SRH services***

In addition to the barriers to service use, we identified adolescents' key enablers of service use from the perspective of adolescents and service providers. In a quantitative study in Kenya and Zimbabwe to assess what characteristics of reproductive health services are most important to adolescents, adolescents rated confidentiality, short waiting time, low cost and friendly staff as key enablers of service use. Interestingly, youth-only service, youth involvement and having young staff were the least desired characteristics<sup>54</sup>. This study showed that adolescents did not prioritise stand-alone youth services such as youth centres, or necessarily need arrangements to youth such as youth involvement. Similarly, other studies argued that young people placed a high value on being able to obtain confidential and accurate sexual health services<sup>47,51</sup>. In a quantitative study to examine teenagers' use of SRH services, proximity to specialist clinics was found to be associated with greater use of SRH services while low spending money and high parental monitoring were associated with less use<sup>55</sup>. Adolescents with better knowledge, who were confident talking about sex and who had discussed contraception with peers were more likely to have used services<sup>55</sup>.

Secondly, adolescents and young people see friendly service provider to be an essential feature of young people's access to services. In a qualitative study among adolescents in rural and urban Vanuatu, adolescents reported a friendly service provider, free or affordable services, reliable commodity supply, confidentiality and

privacy as key features and critical enablers of service use. The need to address socio-cultural norms and community knowledge and attitudes were also highlighted<sup>46</sup>. Also, adolescents in a study in Kenya and Zimbabwe see friendly service providers as an essential feature to young people access to service<sup>54</sup>. Relatedly, in a study on young peoples' perceptions of SRH services in Australia, adolescent and young people noted that young people preferred services where staff were friendly, good listeners and non-judgemental<sup>27</sup>. However, what adolescents and young people considered to be key markers of use of services differed from the service providers perception. In a qualitative study that explored the opinion of primary healthcare physicians about the provision of contraceptives to adolescents, service providers in this study believed that knowledge of adolescents' suitability, clinical environment and contraceptive availability in the clinic were the enablers of service use<sup>41</sup>. Moreover, these were least considered by adolescents as they prioritised providers being friendly, confidential and non-judgmental.

### ***Adolescents' SRH service needs and preferences***

Fourteen studies reported adolescents and young people most preferred places and sources of seeking SRH services. A descriptive cross-sectional study conducted among in-school adolescents in Nigeria found that 37.8% of adolescents preferred seeking SRH services from government hospitals while 28.1% preferred private hospitals<sup>32</sup>. Similar findings were recorded in four African countries (Burkina Faso, Ghana, Malawi and Uganda) where adolescents indicated a strong preference for public clinics with a strong positive perception of confidentiality and treatment with respect<sup>45</sup>. Regarding qualities of service providers, adolescents and young people preferred services where staff are friendly, good listeners and non-judgemental<sup>27</sup>. Adolescents preferred service providers who are specialist in providing SRH services<sup>51-52</sup>. Adolescents and young people detest the involvement of parents in their access to services<sup>51</sup>. With reference to structural factors, a study in the UK revealed that adolescents wanted clinics to run more frequently

and did not mind if they shared a waiting room with adults<sup>28</sup>. Adolescent girls preferred to attend clinics with a friend in a confidential walk-in service. This supports previous studies that reiterated that female adolescents seek help from friends when confronted with sexual health issues<sup>51</sup>. It was also noted that adolescent and young people preferred more creative ways of communicating SRH information, which conflicted with the views of service providers<sup>36</sup>. Mass media campaigns were identified to be the best way to educate young people about STDs and condom use<sup>42</sup>.

Regarding preferred sources of SRH information, mass media, friends, and family were common sources of sexual health information for adolescents. A study among in-school adolescents in South Africa found that 62% of adolescents reported mass media (broadcast and print) as their primary source of HIV/AIDS and sexual risk behaviour information; 13.9% said siblings and friends and 6.3% reported parents<sup>52</sup>. The popularity of mass media was reported in other studies<sup>32,42</sup>. A study in the USA reported that 55% and 59% of sexually experienced female adolescents received birth control and STI/HIV information from parents and teachers while 43% and 66% of their male counterparts received birth control and STI/HIV information from their parents and teachers respectively. Among the three sources examined in this study, healthcare providers were identified as being least involved in the delivery of sexual health information (SHI) content to sexually experienced adolescents<sup>53</sup>. Also, the receipt of SHI varied by gender with more females than males reporting birth control information receipt<sup>53</sup>. Similarly, other studies support the claim that adolescents seek SRH information from mass media, care providers and school teachers<sup>35,47,52</sup>. In Ethiopia, adolescents preferred seeking SRH information from discreet sources like friends, partners, and mass media<sup>34</sup>.

### ***Determinants of providers' attitude in providing youth-friendly services***

Besides the barriers and enablers of SRH service reported above, the determinants of providers' attitude in providing youth-friendly services were

explored. Nine studies found demographic and socio-cultural factors to have an impact on service providers' attitudes on service delivery to adolescents. One study in the UK assessing general practitioners' attitude found that older GPs (aged 49 and over) were less likely than younger GPs (aged under 36 years) to prescribe contraception to adolescents' women aged under 16 years without parental consent<sup>20</sup>. A study in Nigeria on the perception and practices of private medical providers to adolescents SRH highlighted that religious affiliation of the providers influenced their practices<sup>56</sup>. Similarly, in a qualitative study in Kenya, service providers reported being undecided between cultural, religious values and beliefs in offering SRH services to young people<sup>57</sup>. Other studies in Zambia and Kenya found that service providers with more education and married showed more youth-friendly attitudes and willingness to provide services to adolescents<sup>21</sup>. Also, in a quantitative study aimed at examining health care workers' attitudes toward SRH services to unmarried adolescents in Ethiopia, lower education level, being a health extension worker, and lack of training on SRH services were found to be significantly associated with negative attitudes towards the provision of SRH services to adolescents. This is further affirmed in a study in Nigeria which reported that many service providers excluded youth and unmarried individuals from family planning services due to lack of basic skills and knowledge in family planning provisions<sup>58</sup>.

In addition, social factors affect service providers' decision in the delivery of sexual health services to adolescents. This was revealed in a study in Turkey, which found that 87.3% of midwifery students in Turkey believed a girl should be a virgin when she is married, and 50.9% believed abortion was morally wrong and 23.6% thought only married couples should be informed of contraceptive methods. Here the respondents were influenced by social-value judgments<sup>29</sup>. Furthermore, ethical dilemma, moral doubts and cultural factors influence the decision of professionals in delivering sexual health services to adolescents<sup>30,56,59</sup>.

## Discussion

This systematic review aimed to examine empirical evidence on adolescents' and service providers' views and perceptions on adolescents' access and use of SRH information and services. To the best of our knowledge, this is the first systematic review to synthesise empirical evidence on the views and perceptions of services providers on adolescents use of SRH services. Four core themes emerged from the review that put the study into perspective. The review showed that adolescents and service providers had differing views on what prevents and enables adolescents' use of SRH services. The result of the review showed that barriers emanating from providers' attitudes were the key hindrances to adolescent use of services as reported in 17 studies. This is against other forms of barriers perceived by service providers such as lack of knowledge and finances. While service providers perceived the clinical environment, knowledge of services and service availability as key enablers of SRH service use, adolescents, on the contrary, attributed key enablers of service use to providers being friendly, confidential, and non-judgmental. The findings in this study align with previous evidence that affirms that unfriendliness of service providers towards adolescents is a key hindrance to adolescents' use of services<sup>5,61</sup>. The World Health Organisation (WHO) review on universal access showed that actions to make SRH services user-friendly and welcoming had led to an increase in the use of services by adolescents<sup>3</sup>.

In relation to service preference and needs, the findings of the review show adolescents' great affinity for specialist services from providers who work in government clinics or primary care settings. This evidence is supported by a study in India which found that young people preferred SRH services from trained medical personnel and community health centres<sup>60</sup>. Also, media and friends were common sources of adolescents' sexual health information. This substantiates the reason why health providers' unprofessional attitude should be examined critically and prioritised as adolescents are more likely to seek services through them<sup>33,39,51</sup>.

Furthermore, the determinants of providers' attitude in providing adolescent SRH services were more linked to social, cultural and demographic factors. The review revealed that confidentiality of service, affordability, and friendly staff are key markers of adolescent's access to sexual health services.

## Limitations

Our systematic review draws on the limitations that some of the primary studies included in the review had. These include some methodological flaws which might impact on the findings of the systematic review. However, many of the papers included in the study met all, if not most, of the appraisal indicators making the results valid. Second, the scope of review was limited to studies published in English. There is no doubt that there might be relevant studies published in other languages which were not included. Lastly, the nature of evidence from the selected studies that included information on both adolescents and providers yields more limited evidence than when drawing from studies that include on either perspective.

## Conclusion

This systematic review provides evidence-based information that would help to improve and advance public health practice locally and international. It showed what adolescents and young people expect from sexual health services are different from what service providers currently offer. It adds to the international public health literature by revealing the key hindrances and markers of adolescent access and use of SRH services and showed where the opinion of adolescents differs from that of service providers. It emphasises the need to educate and train health service providers to be more youth-friendly in their service delivery and for public health policy actors at local, national and international level to prioritise attitudinal qualities of service providers such as their value system and beliefs when designing sexual health services as this would help improve adolescent SRH service uptake.

## Implication for further study

Most synthesised studies are among older adolescents and young people (aged 15-24). There is a need to assess the needs and expectations of young adolescents aged 10-14 as evidence has shown that the experience of this group in accessing services differ from the older population. Further studies are also needed to investigate the reasons why adolescents prefer seeking sexual health information from clinics, government hospitals, and specialist service providers, rather than other sexual health service providers.

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## Ethical Approval

This article does not involve any studies with human participants or animals performed by any of the authors.

## Conflict of Interest

The authors have declared no conflict of interest.

## Contribution of Authors

FO conceived, designed, selected articles and analysed the data. FO and MH appraised the quality of the articles with input from MM. FO drafted the first manuscript. MH and MM reviewed and contributed to the manuscript. All authors read and approved the final version of the manuscript.

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