ORIGINAL RESEARCH ARTICLE

Adolescent reproductive health care services: knowledge, perspectives, and challenges among service providers in Makurdi, Benue State Nigeria

DOI: 10.29063/ajrh2024/v28i10.13

Samuel J. Ngobua[1], Vivian O. Omuemu[1], Adedapo B.A. Ande[1], Oladipupo S. Olaleye[2], Nyemike S. Awunor[3] and Igbaver I. Ieren [4]*

University of Benin, Edo state, Nigeria;Johns Hopkins Centre for Communication Programs, Nigeria[2]; Delta State University, Abraka, Nigeria[3];Population Health Branch, Saskatchewan Ministry of Health, Canada[4]

***For Correspondence:** Email: *nogbuas@gmail.com, Phone: +2348063218685*

Abstract

Adolescence is a phase of life characterized by several reproductive health challenges that require support to navigate. However, access to adolescent and youth-friendly health service (AYFHS) centers to provide this support is limited. Perspective of healthcare workers (HCW) towards understanding the challenges to service provision has not been systematically documented. This study therefore documents the perspectives of HCWs on the types of services accessed by adolescents, and associated challenges in Makurdi, Benue State, Nigeria. The facility-based descriptive qualitative study used an in-depth interview guide among program officers in the 11 youth-friendly health centers. The interviews were recorded, transcribed, and analyzed thematically. The provision of HIV prevention services and AYFHS was appropriate while adolescents have preferences for facilities where their confidentiality is protected, and other needs are met. Reported challenges were lack of privacy, high cost of transportation to facilities, high staff attrition, poor awareness of the facilities and services, and parental consent. Suggestions for improvement included prolonged retention of youth-friendly trained staff, better client confidentiality, and economic empowerment of the adolescents to access services when needed. While the providers' perspective on AYFHS for adolescents was positive, related challenges were also identified. Government and other stakeholders should collaborate to ensure the right environment for accessibility and utilization of AYFHS. *(Afr J Reprod Health 2024; 28 [10]: 131-140).*

Keywords: Adolescent health, Youth-friendly health services, Reproductive health

Résumé

L'adolescence est une phase de la vie caractérisée par plusieurs défis en matière de santé reproductive qui nécessitent un soutien pour y faire face. Cependant, l'accès aux centres de services de santé adaptés aux adolescents et aux jeunes (AYFHS) pour fournir ce soutien est limité. La perspective des travailleurs de la santé (TS) quant à la compréhension des défis liés à la prestation de services n'a pas été systématiquement documentée. Cette étude documente donc les perspectives des travailleurs de la santé sur les types de services auxquels les adolescents ont accès et les défis associés à Makurdi, dans l'État de Benue, au Nigeria. L'étude qualitative descriptive basée sur les établissements a utilisé un guide d'entretien approfondi parmi les responsables de programme dans les 11 centres de santé adaptés aux jeunes. Les entretiens ont été enregistrés, retranscrits et analysés thématiquement. La fourniture de services de prévention du VIH et d'AYFHS était appropriée alors que les adolescents préfèrent les établissements où leur confidentialité est protégée et où d'autres besoins sont satisfaits. Les défis signalés étaient le manque d'intimité, le coût élevé du transport vers les établissements, une forte attrition du personnel, une mauvaise connaissance des installations et des services et le consentement des parents. Les suggestions d'amélioration comprenaient la rétention prolongée d'un personnel formé et adapté aux jeunes, une meilleure confidentialité des clients et l'autonomisation économique des adolescents pour accéder aux services en cas de besoin. Même si le point de vue des prestataires sur l'AYFHS pour les adolescents était positif, des défis connexes ont également été identifiés. Le gouvernement et les autres parties prenantes devraient collaborer pour garantir un environnement propice à l'accessibilité et à l'utilisation de l'AYFHS. *(Afr J Reprod Health 2024; 28 [10]: 131-140).*

Mots-clés: : Santé des adolescents, Services de santé adaptés aux jeunes, Santé reproductive

Introduction

Adolescence is the phase of life between childhood and adulthood, from ages 10 to 19[1]. The growth in the adolescent population is of significance. As of today, there are about 1.2 billion adolescents worldwide with over 90 percent of them living in low- and middle-income countries, and 125 million living in areas affected by armed conflict[2]. In Nigeria, it was reported that about 33% of the

country's population comprises of persons between aged 10 -24 years[3].

Globally, adolescents are faced with several reproductive health (RH) issues which are evident by the high burden of morbidity on reproductive health-related issues ; most especially in low-resource countries of the world[4]. In 2018, HIV prevalence among adolescents and young people (AYP) in Nigeria increased from 0.2% for adolescents (15-19 years) to 1.3% (95% CI: 1.1-1.5)[5]. Among adolescents aged 15-19, the HIV prevalence for females tripled that of their male counterparts (0.3% vs. 0.1%) and epidemiologic analysis identified Abia, Akwa Ibom, Anambra, Benue, Delta, Enugu, Imo, Lagos, Rivers, and Taraba as 10 states with high HIV burden among AYP) while Benue, Lagos, Rivers, and Akwa Ibom states were the four states with the highest burden.[6] Reported adolescent RH problems include early pregnancy, risk of acquiring sexually transmitted infections (STIs) including human immunodeficiency virus (HIV), nutritional diseases such as anaemia and obesity, injuries due to violence, and non-communicable diseases including mental disorders[2,7]. It has been reported that STIs, including HIV, are global major sexual health issues among adolescents and young adults[8].

Despite the high burden of these RH problems, adolescents' access to health services has been limited due to identified barriers. In Nigeria, some reported barriers include inadequate knowledge about RH and poor attitudes of adolescents towards RHS; parental influence, community and religious norms, financial constraints, and stigma; poor attitudes of service providers and inconvenient health facility opening hours hindered adolescents from utilizing RHS and most prominent was the strong influence of constraint due to a sense of commitment to religious values[9].

The use of adolescent and youth-friendly health facilities (AYFHF) to provide sexual and reproductive health services that meet the needs of adolescents has been recognized as an effective strategy to address the reproductive health challenges of adolescents[10–12]. In Nigeria, the core adolescents and youth-friendly health services (AYFHS) include physical, psycho-social, and mental development, education and management of pubertal concerns, pregnancy prevention (sexual abstinence and contraceptive use), maternal care for pregnant adolescents and youths including specialized care for survivors of female genital mutilation (FGM), HIV and other sexually transmitted infections, sexual violence and injuries, and fistula prevention and management[13,14]. In Plateau State, North Central Nigeria, the most common adolescent sexual and reproductive health services provided include antenatal and delivery care, contraception, post-abortion care, and counselling and testing/treatment for sexually transmitted infections including HIV[15]. Similarly, safe motherhood services and services for prevention and management of STIs and HIV and AIDS have been reported as the sexual and reproductive health services (SRHS) provided for adolescents in Enugu State; South East Nigeria[16].

Provision of SRHS at the youth friendly centres across various settings in sub-Saharan Africa has been affected by challenges. A key reported challenge is the negative attitudes towards young people using contraceptives in sub-Saharan Africa[17]. The same challenge of negative attitude of health workers towards the provision of sexual reproductive health services and HIV prevention services for adolescents have been reported in Ibadan; and Enugu states in Nigeria because, the health workers consider the provision of services to be an act of promoting sexual promiscuity[18,19]. In Cross River state, South-South Nigeria, limited awareness about Reproductive Health services for adolescents have been associated with low utilization of the services by adolescents and young people in semi-urban communities[20].

Despite the critical roles that adolescents and youth friendly health facilities play in addressing the adolescent's reproductive health challenges, there has not been enough work to promote its importance. Also, in settings like Makurdi where they are available, there is not enough awareness among adolescents about their availability. The perspective of service providers to the provision of the services remains a challenge that needs to be documented for effective design of interventions. This study aims to identify the challenges affecting the provision and uptake of AYFHS in Makurdi from the lens of service providers with the review of identifying recommendations to address the identified challenges.

Methods

Settings of the study

This was a facility-based study conducted in Makurdi, the capital city of Benue state in North - Central Nigeria between January and early February 2023. Politically, Benue State has 23 Local Government Areas (LGAs) with 276 political wards and is divided into three senatorial zones with Makurdi situated in Zone B senatorial zone. Makurdi is both an LGA in Benue State and the state capital.

In the year 2022, Makurdi LGA was estimated to have a population of **438,000,** a **3.79% increase** from 2021[21]. Makurdi is in Zone B senatorial political division of Benue state with 11 political wards[22]. It has two tertiary health facilities; a Federal Medical Center and the state-owned Benue State University Teaching Hospital which is also a training facility for Doctors, Nurses, and other health workers. There is also a state-owned school of Nursing and Midwifery for the training of Nurses and Midwives.

There are 11 Adolescents and Youth Friendly Centers in Makurdi out of which 4 are owned by the government and 7 by non-governmental organizations. The use of the Adolescent and Youth Friendly Service (AYFS) approach has been promoted in some countries e.g., South Africa as a means of standardizing the quality of adolescent health services in the country[23]. WHO defines adolescent youth-friendly health services as those that are accessible, acceptable, equitable, appropriate, and effective in meeting the needs of the adolescents[24]. The Global Consultation on Adolescent Friendly Health Services led by WHO in 2001 recommended that a youth-friendly service core package should not be a fixed menu but instead, each country should develop its own package, negotiating its way through economic, epidemiological, and social constraints, including cultural sensitivities[25].

Adolescent-friendly clinic hours together with youth-friendly health workers are advocated as likely means to encourage adolescents, most especially girls to access sexual and reproductive healthcare services and improve the use thereof [17].

Study design

The study design is qualitative in nature involving use of in-depth interviews with service providers in the adolescent and youth-friendly health facilities in Makurdi.

Data collection instrument and method

Data collection was conducted using an in-depth interview (IDI) guide. The IDI had six questions with other probing questions. This guide was pretested in four primary health care service providers in Gboko, another town with social demographic characteristics similar to Makurdi. The outcome of the pretest was used to modify the tool. Information about the location and contacts of the youth friendly health service providers were collected from the State Ministry of Health. Interviews were scheduled with the respondents a week prior to the interview day. All interviews were recorded using an audio recording application.
The IDI documented the participants' view on the appropriateness of the provision of RH services for adolescents, challenges to accessing such services, and suggestions to improve access and utilization of the services by adolescents.

Data collection

Data collection was done between the third and fourth week of January 2023 using in-depth interview guides. In-depth interviews were conducted with the focal persons (Officers in – Charge and Project managers) in each of the eleven (11) Youth Friendly Service facilities on their perception and challenges to the provision of HIV prevention services for adolescents.

Two data collectors drawn from the Makurdi chapter of the National Youth Network for HIV/AIDS (NYNETHA) led the data collection exercise. One member served as the lead interviewer and the other as the recorder. NYNETHA is a national adolescent Civil Society Organization (CSO) with a focus on HIV/AIDS intervention among adolescents. The data collectors were selected based on their previous work experience on qualitative data collection on HIV projects, and other reproductive health issues affecting adolescents.

The data collectors were given a 3 – refresher training on qualitative data collection methods. The interviews of the respondent were conducted after hours of operations in their offices at their facilities. Each session was for a duration of 35 to 50 minutes, and they were audio recorded with the permission of the respondents, and transcribed.

Data management and analysis

The data were organized and analyzed using NVivo software, version 12 Plus. A thematic framework approach was used to code and summarize the data. Broader thematic analysis was used to develop themes. Specific quotes and code identifiers were used to anonymize the data. Ellipses were used to shorten quotes, especially when there were duplications in speech, but preserving the content where this was applied. To ensure anonymity and data confidentiality, code identifiers were used.

Ethical considerations

Ethical clearance (NHREC/01/01/2007) for the study was obtained from the Federal Ministry of Health and approval was received from the Department of Public Health, Benue State Ministry of Health. The informed consent of interviewees was gotten before the commencement of all interviews, and they were assured of their confidentiality. They were also informed that their participation was voluntary and were free to withdraw their participation at any stage of the interview process.

Results

Socio-demographic characteristics of the participants

Table 1 shows the socio-demographic information of the participants. Four participants were within the age range of 41-50 years, 3 of them were between the ages of 21 – 30 and 4 between 31 – 40 years. More (6) of the participants were females while 5 were males. Two of the participants were Executive Directors of their private owned organizations and served as the facility focal persons, while 4 were Program Managers of Non-Governmental Organizations who owned One Stop Shops (OSS) in which the adolescents and youth friendly health facilities were integrated and the remaining 5 were Officers in Charge of Public facilities providing the services.

Perspective on the provision of adolescent and youth-friendly health services

The common themes generated on the health workers' perspective of the provision of adolescent and youth friendly health services included… non-discrimination, confidentiality, and appropriateness of the services.

knowledge of adolescent and youth-friendly health facilities

Most of the respondents perceived that the adolescent and youth-friendly health facility is a place that could be either private or public where youth and adolescents could receive comprehensive services related to their health including psychological, physical, and social well-being without being discriminated. Explaining what Youth and Adolescents friendly health facilities in the word of one of the participants in a private facility:

"It is an establishment whether government or private that offers services to adolescents using youth-friendly principles. So, it is a place where adolescents and young people can go to and receive help whether health-wise, emotionally, or psychologically, but under the friendly atmosphere, that is non-judgmental."

Another participant in a public facility expressed the opinions as follows:
Adolescents and youths are sensitive, they do not want their parents to be aware of the services they receive.

He went further to describe *as "an environment where the youth can express themselves and then get a better understanding related to the challenges that bore them. Often, these are challenges that they could not relate down to even their parents at home but at the youth-friendly centre, they feel that they have that freedom to express themselves."*

Table 1. Characteristics of the In-depth interview respondents in Makurdi, Benue state, Nigeria

Participants	Age (years)	Designation	Duration of practice (years)	Facility type Public/Private
P1	25	Program Manager	1	Private
P2	28	Program Manager	3	Private
P3	30	Program Manager	5	Private
P4	32	Officer in Charge	6	Public
P5	35	Officer in Charge	12	Public
P6	37	Program Manager	8	Private
P7	37	Officer in charge	13	Public
P8	41	Officer in Charge	19	Public
P9	43	Executive Director	15	Private
P10	48	Officer in - Charge	23	Public
P11	50	Executive Director	15	Private

Appropriateness of services available at adolescent and youth-friendly health facilities

The majority of the participants emphasized that the provision of SRH and HIV services at adolescent and youth-friendly health facilities is appropriate, and it is an action in a positive direction given the reality of the spread of sexually transmitted diseases including HIV and the propensity of young people to experiment with sexual intercourse.
Here is an excerpt from one of the participants in a private facility to support the point:

"The provision of HIV prevention services in these adolescent and youth-friendly centers is adequate in a way, though there is always room for improvement."

Another participant in a public facility expressed the opinion as follows: *"My view is that it helps to reduce the spread of HIV because at their age, they are highly sexually active. So, if we do not prevent it, the spread will be more and so it is appropriate that the services should be offered to the adolescents."*

Another participant in a private facility affirms the point as follows.

"The provision of these HIV services to adolescents and young people is very timely and important both for their lives and for the life of the country. These youths are at a stage of transitioning from adolescence to adulthood and are eager to practice certain things as they grow up. They are interested in knowing about sex and drugs and therefore very adventurous. Since these youth-friendly health centers offer peer education, they are in a better situation to educate adolescents on what to avoid as they are growing up.

Factors that positively influence the utilization of youth-friendly services by adolescents

Most of the participants believed that adolescents and youths who access services at the facilities prefer situations where the facilities are One Stop Shops (OSS) providing a package of free and readily available services. They opined that the youth-friendly centers should be OSS where conscious efforts are made to ensure that adolescents feel comfortable accessing a variety of services at the facilities and, at a time convenient for them. The participants mentioned various reproductive health services provided at the facilities including HIV prevention services such as antenatal care services, peer-to-peer education, family life education, condom distribution, and counselling. They also mentioned psychosocial support and treatment of STIs and urinary tract infections. Skills acquisition, sporting, recreational activities, and outreach services were listed as other services provided at the facilities and when available could improve utilization. To support the point, one of the participants from a public facility expressed the views as follows:

"*Adolescent youth-friendly facilities are places where young people go to access, services ranging from clinical, psychosocial and other services without the health workers being judgmental and the services provided free and at hours convenient for them."*

Some stakeholders opined that the provision of a variety of services such as HIV testing services (HTS), and condom distribution as a one-stop measure in places where they can easily be accessed and at a time convenient for adolescents was another driving force for the utilization of services at the facilities.

A participant from a public health facility affirms the above point as follows:

"*You have outreach service information provision. These provide services to young people who are marginalized and might be unable to access some of these services that are far from them. These outreach services are often located in places where people can come together such as shopping malls and places where they can walk in such as hotels, bus garages, and the rest in school. And I want you to know that all these services are provided at hours convenient for them."*

Some of the respondents reasoned that confidentiality of information and services was a major determinant of adolescents accessing services at the facilities and reasoned that once the challenge is improved, it will be an influencer for adolescents to access services at the facilities. Below is an excerpt from a public facility participant about the importance of confidentiality in the provision of AYHS.

"*Honestly, our major challenge here is, you know anything concerning youth-friendly is privacy. They need privacy and as you can see, we have no privacy like that. And youth do not want to come to us when they find out that there are other patients. They feel like maybe, as they come, they will see one of their neighbours or any of the persons they know. So, we need privacy, whereby, they will come without seeing anybody that knows them. So, privacy is the major thing to us."*

Another participant from a public health facility emphasizing more on the importance of confidentiality of services stressed the point as follows:

"*… We have a one-stop shop (OSS) yes OSS we do refer our clients, and most of them are adolescents because most of the time, they find it difficult going to the public facilities to access services, but the OSS is a hidden kind for and the services there are easier and quick. So, the OSS is one of the friendly health facilities for adolescents and youth."*

Challenges related to the provision of adolescent and youth-friendly services.

Several challenges were identified regarding the provision of services to adolescents at the facilities. These include lack of confidentiality of services, prohibitive costs of transportation to service points, insistence on parental consent for those below 18, and high attrition of service providers.

Distance from the health facilities and transportation cost

The prohibitive cost of transportation to the long - distance facilities was identified as a major challenge to accessing services by the end users. This challenge was identified to be more common with public facilities. A participant from a public health facility expressed the problem as follows.

"There are some challenges we are facing that adolescents do not come out en-mass to access the services. Sometimes, some of the challenges are logistic challenges because our package does not cover provision for logistics. So, it becomes difficult for us to provide let us say for example transportation for adolescents who come far [from] our facility. The reason is, our facility is not within the heart of the town, it is a bit isolated. So many people feel free to come here because it is not in a busy or private environment. Most of them feel very safe to come here but at the same time the distance remains a challenge."

High Attrition of trained Staff

Another reported challenge that was of high attrition of staff trained to provide adolescent-friendly services in public facilities due to frequent transfer from adolescent-friendly facilities to non-adolescent facilities where they will not be able to apply their skills. This challenge was more common among public health facilities. A participant from a public health facility expressed the challenge as indicated in the excerpt below:

"And regarding workforce, there is gap in that regards because there is shortage in human

resource. And most times, staff that are being trained in this regard are transferred out in a short interval and when replacements are done, those new intakes will need retraining and most times this is not done. There is a capacity gap in that regard."

Poor awareness

Poor awareness of the existence of youth friendly health facilities and services among adolescents and young people was reported as another challenge. Participants reasoned that though, some adolescents were in need and willing to access the services, but awareness of the existence and types of services provided at the facilities was a challenge. This was a problem common to both the public and private facilities. A participant from a private facility expressed her opinion as follows:"

"I think some of the things that would be done to improve the utilization is to improve awareness creation among adolescents and youth because you see when we train adolescents champions in the community, they grow to overstep that particular age and they sometimes leave that community, so it becomes a challenge. I, therefore, suggest that there should be continuous awareness creation and sensitization in communities and even among stakeholders because the caregivers and the traditional leaders also play a key role in HIV utilization services."

Lack of confidentiality

Lack of confidentiality or inadequate privacy most especially in the public health facilities was identified as another challenge. The concern about confidentiality was less pronounced in private facilities than the public. This was reported as a major barrier affecting the utilization of services by adolescents in the public facilities where the centers were located. Lack of confidentiality was attributed to lack of space to ensure private attention to the adolescents. Participants reasoned that lack of confidentiality will lead to the fear of discrimination and stigmatization.

Parental consent

It was stated that it is difficult to get consent from parents of persons less than 18 years before taking the service. Asking for parental consent before service could discourage adolescents of less than 18 years from accessing services. A participant from a private facility expressed this as follows*:*

"And I believe the issue of this age of consent for adolescents in accessing these services is actually an issue, but I believe that bottlenecks can be addressed from the national level."

Suggestions to address the reported challenges.

Several recommendations were provided by the participants to the identified challenges. To address the challenge of high attrition of trained staff, participants recommended the recruitment and training of more personnel to cover for those who have left their positions at the facilities where their services are most needed and the formulation of a policy to allow trained staff to remain at the youth-friendly facilities for a specific period before being posted to the other facilities.

To address the challenge of confidentiality participants recommended more spaces for youth-friendly health service clinics and the provision of more youth-friendly health centers with enough space to ensure privacy of services.

Participants also recommended continuous training sensitization at the community level and the creation of youth-friendly health facilities advocates for improved enlightenment among youths and adolescents regarding the availability of services at the facilities.

The provision of stipends or vehicles by the government to enable the adolescents transport themselves to facilities when in need of services was another recommendation to address the challenge of prohibitive cost of transportation. Another recommendation to address this challenge was for the government and other stakeholders to locate the centers in places that adolescents can easily access when in need of the services.

Discussion

Most of the adolescent and youth-friendly service providers interviewed in this study understood the concepts of adolescent and youth-friendly health facilities and what they aim to achieve.

This finding can be attributed to their years spent in practice as the average years in practice by service

providers was about 11 years. Additionally, these service providers are expected to have undergone a series of training prior to undertaking this role in their various responsibilities. The result from an earlier qualitative study in Ghana highlighted the need for service providers to be accommodating, respectful, and non-judgmental to boost the confidence of service seekers; all of which can only be acquired through training and long years of practice in understanding the important role that these safe spaces and services impact the lives of adolescents and young people[26].

The interviewees emphasized the appropriateness and importance of adolescents and youth-friendly services highlighting that targeting these ages for SRHS intervention was critical and these young people transition into adulthood. This position by the service providers is similar to the view of the Government of Nigeria which highlighted the important role that young people play in the growth of the country, and the need for age-appropriate and culturally suitable services to promote the health and wellbeing of young people [16,27]. Similarly, the government of South Africa has made remarkable progress and prioritizes the provision of AYFHS to address the SRH needs of its adolescents[21]. The facilitators of service uptake as identified by the service providers included respect, confidentiality, being non-judgmental, provision of a wide range of services (one-stop shop for AYFHS), and creating awareness about the services available in these facilities by conducting outreaches at locations frequently visited by the adolescents. These attributes have been identified in Nigeria and other countries in the sub-Saharan region as influencers of increased SRH service uptake by young people, and the lack of these attributes would negatively impact the utilization of SRH services[11,15,17,18,26].

In this study, the healthcare workers identified the lack of funds to conduct outreaches or provide transportation support for adolescents seeking services, high staff attrition, lack of confidentiality, sub-optimal awareness, and the need for parental consent to obtain services as major limitations to service uptake by the adolescents. These challenges have been reported by other researchers in different parts of Nigeria to be militating against the SRH service utilization by adolescents and young people [15,16,18]. Parental influence, resource constraints, and stigma had earlier been identified as factors that affect SRH service utilization in the North-western part of Nigeria [9]. In Plateau State, North-central Nigeria results from an earlier study had identified the role of parental consent, the importance of privacy, and confidentiality in enhancing youth responsiveness in the uptake of AYFHS [15]. Cultural concerns including those that fail to recognize the privacy of young people, and view young people seeking services from the point of promiscuity and sexual irresponsibility have also been reported [15,18,28].

To improve the utilization of services by adolescents, the paper recommends that the government and other stakeholders should locate new facilities in places where the adolescents can easily access them. In addition, the adolescents should be empowered by the government through gainful employment to enable them to afford the costs of transportation to long-distance facilities when in need of services. There is also the need for a strong awareness creation to address the gaps of poor knowledge and awareness of the existence of the facilities and services for the end users.

Conclusion

The service providers had a positive perspective toward the provision of sexual and reproductive health services for adolescents. However, various challenges affecting service provision were identified which include a high staff turnover rate, low awareness by the target population about the centres, and age of consent for effective uptake of such services. As suggested by the interviewees in this study, government, and non-governmental bodies should ensure the recruitment and training of healthcare workers to address staff shortages and service-related knowledge gap, improve on awareness creation through advocacy, conduct outreaches in remote/rural areas to address cultural and religious concerns that may negatively impact service uptake among the adolescents.

Limitation and strength

A limitation to this study was the fact that it was conducted solely in Makurdi, the state capital and an urban LGA. Thus, this research does not provide views from providers of adolescent and youth friendly services practicing in the rural areas of the

state. This has an implication on the generalizability of study findings. Another limitation is that the views of the users of the youth-friendly clinics are not included in this assessment as end-users their views about the structure and organization of the clinics are very important. One major strength of the study is that the respondents were the entire population of service providers in adolescent and youth friendly health facilities in Makurdi. The study was conducted in a culturally diverse capital of Benue state, so findings and recommendations from this study could be similar and usefully applied to most parts of the state as well as other states in north-central Nigeria.

Contribution of authors

SJN conceptualized the study, SJN, VOO, and ABAA design the methodology and data collection methods, SJN, OSO, NSA, and III carried out data management including analysis and prepared the first draft of the article. All authors mentioned read, modified, and approved the final version of the manuscript.

References

1. World Health Organization. World Health Organization (WHO) Health Emergency Dashboard. Published 2022. https://extranet.who.int/publicemergency
2. Adolescent development and participation | UNICEF https://www.unicef.org. Adolescence. (Accessed, August 24, 2024).
3. United Nations Population Fund (UNFPA). United Nations World Population Dashboard, Nigeria. Published 2022. https://www.unfpa.org/data/world-population/MM
4. Rose-Clarke K, Bentley A, Marston C and Prost A. Peer-facilitated community-based interventions for adolescent health in low- and middle-income countries: A systematic review. *PLoS One*. 2019;14(1):e0210468. doi:10.1371/journal.pone.0210468
5. Mehta SD and Seeley J. Grand Challenges in Adolescent Sexual and Reproductive Health. *Front Reprod Heal*. 2020;2:2. doi:10.3389/frph.2020.00002
6. FMOH Nigeria. The Federal Republic of Nigeria National Policy on the Health and Development of Adolescents and Young People in Nigeria: 2020-2024. 2019;2024(November 2019):2020-2024. https://scorecard.prb.org/wp-content/uploads/2022/03/National-Adolescent-Health-Policy_Revised_2019_Post-NAHDWG_Post-NDHS_FNL_15Nov2019.pdf
7. Yakubu I and Salisu WJ. Determinants of adolescent pregnancy in sub-Saharan Africa: a systematic review. *Reprod Health*. 2018;15(1):15. doi:10.1186/s12978-018-0460-4
8. Zhang J, Ma B, Han X, Ding S and Li Y. Global, regional, and national burdens of HIV and other sexually transmitted infections in adolescents and young adults aged 10–24 years from 1990 to 2019: a trend analysis based on the Global Burden of Disease Study 2019. *Lancet Child Adolesc Heal*. 2022;6(11):763-776. doi:10.1016/S2352-4642(22)00219-X
9. Nmadu AG, Mohamed S and Usman NO. Barriers to adolescents' access and utilization of reproductive health services in a community in north-western Nigeria: A qualitative exploratory study in primary care. *African J Prim Heal Care \& Fam Med*. 2020;12. https://api.semanticscholar.org/CorpusID:221121792
10. Denno DM, Hoopes AJ and Chandra-Mouli V. Effective Strategies to Provide Adolescent Sexual and Reproductive Health Services and to Increase Demand and Community Support. *J Adolesc Heal*. 2015;56(1, Supplement):S22-S41. doi:https://doi.org/10.1016/j.jadohealth.2014.09.012
11. Ninsiima LR, Chiumia IK and Ndejjo R. Factors influencing access to and utilization of youth-friendly sexual and reproductive health services in sub-Saharan Africa: a systematic review. *Reprod Health*. 2021;18(1):135. doi:10.1186/s12978-021-01183-y
12. Obiezu-Umeh C, Nwaozuru U, Mason S, et al. Implementation Strategies to Enhance Youth-Friendly Sexual and Reproductive Health Services in Sub-Saharan Africa: A Systematic Review. *Front Reprod Heal*. 2021;3:684081. doi:10.3389/frph.2021.684081
13. Arije O, Hlungwani T and Madan J. Key informants' perspectives on policy- and service-level challenges and opportunities for delivering adolescent and youth-friendly health services in public health facilities in a Nigerian setting. *BMC Health Serv Res*. 2022;22(1):1493. doi:10.1186/s12913-022-08860-z
14. Akila D, Oluwasegun A, Bose K, Omotoso O, Adefila A and Mwaikambo L. Improving the Quality of Adolescent and Youth-Friendly Health Services Through Integrated Supportive Supervision in 4 Nigerian States. *Glob Heal Sci Pract*. Published online 2023. doi:10.9745/GHSP-D-22-00169
15. Envuladu EA, Massar K and de Wit J. Healthcare workers' delivery of adolescent responsive sexual and reproductive healthcare services: an assessment in Plateau state, Nigeria. *BMC Womens Health*. 2023;23(1):132. doi:10.1186/s12905-023-02288-1
16. Odo AN, Samuel ES, Nwagu EN, Nnamani PO and Atama CS. Sexual and reproductive health services (SRHS) for adolescents in Enugu state, Nigeria: a mixed methods approach. *BMC Health Serv Res*. 2018;18(1):92. doi:10.1186/s12913-017-2779-x
17. Jonas K, Crutzen R, van den Borne B and Reddy P. Healthcare workers' behaviors and personal

determinants associated with providing adequate sexual and reproductive healthcare services in sub-Saharan Africa: a systematic review. *BMC Pregnancy Childbirth*. 2017;17(1):86. doi:10.1186/s12884-017-1268-x

18. Ahanonu EL. Attitudes of Healthcare Providers towards Providing Contraceptives for Unmarried Adolescents in Ibadan, Nigeria. *J Fam Reprod Heal*. 2014;8(1):33-40.
19. Munachimso E and Uhuegbu M. Perceived socio-cultural factors influencing the utilization of reproductive health services among rural adolescents in the South-east, Nigeria. *J Community Commun Res*. 2022;7(2):286-298. https://jccr.sccdr.org
20. Uka VK, Ekpoanwan EE, Nsemo AD and Etowa JB. Sexual and reproductive health services awareness and utilisation among young people in a semi-Urban community in Cross River State, Nigeria. *Afr J Reprod Health*. 2023;27(5):58-70. doi:10.29063/ajrh2023/v27i5s.8
21. United Nations. Department of Economic and Social Affairs Population Division. World Population Prospectus. 2022
22. Federal Republic of Nigeria, Independent National Electoral Commission (INEC). Directory of Polling Units, Benue State. 2015
23. James S, Pisa PT, Imrie J, et al. Assessment of adolescent and youth friendly services in primary healthcare facilities in two provinces in South Africa. *BMC Health Serv Res*. 2018;18(1):809. doi:10.1186/s12913-018-3623-7
24. World Health Organization. Quality assessment guidebook: a guide to assessing health services for adolescent clients. *Health Serv Res*. 2008;12(1):58-62. https://apps.who.int/iris/bitstream/handle/10665/44240/9789241598859_eng.pdf?sequence=1%0Ahttp://eprints.ioe.ac.uk/1168/
25. World Health Organization. Adolescent friendly health services: An agenda for change. 2011;46(SUPPL.1):1-48. doi:10.4274/tpa.46.20
26. Abuosi AA and Anaba EA. Barriers on access to and use of adolescent health services in Ghana. *J Heal Res*. 2019;33(3):197-207. doi:10.1108/JHR-10-2018-0119
27. Nigeria Ministry of Health. Nigeria National Standards & Minimum Service Package for Adolescent &YouthFriendly Health Services (2018). *Minist Heal*. 2018;(July):2717077. http://www.moh.gov.et/
1. 28. Gausman J, Othman A, Al-Qotob R, et al. Health care professionals' attitudes towards youth-friendly sexual and reproductive health services in Jordan: a cross-sectional study of physicians, midwives, and nurses. *Reprod Health*. 2021;18(1):84. doi:10.1186/s12978-021-01137-4.