

ORIGINAL RESEARCH ARTICLE

Perceptions of risk and preference for abortion service providers by female high school students in Ibadan, Nigeria

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Abstract

In low- and middle-income countries, over half of the unintended pregnancies of teenage females result in abortions. A sizable portion of these abortions is unsafe. This study explores abortion-seeking pathways and perceptions of abortion provider preference among female adolescents in Ibadan Metropolis, Nigeria. Twenty-eight students from four high schools participated in three focus group discussions (FGDs) and qualitative vignettes. Results showed that most supported using abortion pills from drug vendors and traditional healers rather than going to standard health facilities. This is due to the perception that adolescent pregnancies and abortions are generally frowned upon in society because they are considered social transgressions. Hence, the de-stigmatization of abortion-seeking adolescents in health facilities within Ibadan metropolis is required for higher adolescent uptake in obtaining safe abortion procedures. (*Afr J Reprod Health* 2024; 28 [3s]: 121-128).

Keywords: Abortion, preference, decision-making, adolescents, Nigeria

Résumé

Dans les pays à revenu faible ou intermédiaire, plus de la moitié des grossesses non désirées chez les adolescentes aboutissent à un avortement. Une part importante de ces avortements est pratiquée dans des conditions dangereuses. Cette étude explore les parcours de recherche d'avortement et les perceptions de la préférence des prestataires d'avortement parmi les adolescentes de la métropole d'Ibadan, au Nigeria. Vingt-huit étudiants de quatre écoles secondaires ont participé à trois discussions de groupe (FGD) et à des vignettes qualitatives. Les résultats ont montré que la plupart étaient favorables à l'utilisation de pilules abortives auprès de vendeurs de médicaments et de guérisseurs traditionnels plutôt que de se rendre dans des établissements de santé standards. Cela est dû à la perception selon laquelle les grossesses et les avortements chez les adolescentes sont généralement mal vus dans la société car considérés comme des transgressions sociales. Par conséquent, la déstigmatisation des adolescentes cherchant à avorter dans les établissements de santé de la métropole d'Ibadan est nécessaire pour permettre une plus grande participation des adolescentes à l'obtention de procédures d'avortement sécurisées. (*Afr J Reprod Health* 2024; 28 [3s]: 121-128).

Mots-clés: Avortement, préférence, prise de décision, adolescents, Nigeria

Introduction

The World Health Organization (WHO, 2020) reports that not less than 10 million unintended pregnancies occur among female adolescents in low and middle-income countries yearly¹. More than half (56%) of these unintended pregnancies result in abortion.

According to the 2020 Guttmacher Institute report, 8 million induced abortions occur each year among women of reproductive age in Africa. This places the abortion rate in Africa at 33 percent. Three in four abortions in Africa are unsafe and the region houses the highest occurrence of abortion-related deaths².

Similarly, in Nigeria, abortion is a major problem among adolescents. For example, in a study among clients of abortion service, Byrne and colleagues found that 21% of the respondents were adolescents at the time of their abortion experience³. Unfortunately, many of these persons access abortion from untrained service providers⁴.

Abortion service providers can be classified into two broad categories: clinical and non-clinical. Clinical providers are trained professionals in government owned health facilities, private hospitals and clinics, family planning and mobile clinics. Non-clinical providers are untrained persons include chemists, patent medicine vendors, friends, relatives, traditional

healers, and other informal providers. Bankole *et al.* revealed that more than half of the abortion in the country are unsafe because they are carried out secretly and by non-clinical providers². This is due to the restrictive nature of abortion law and reproductive social norms in Nigeria. Unsafe abortion is a major public health problem, accounting for approximately 30-40% of the maternal morbidity and mortality in Nigeria⁵. To promote safe abortion among adolescence, there is a need to investigate their abortion-seeking pathways. Abortion seeking pathways reveal the decision-making processes of females seeking abortion right from the time of pregnancy detection to termination.

Exploring abortion-seeking pathways in Ibadan metropolis Nigeria is important because adolescent pregnancies are on the rise and there is a low knowledge of contraception and family planning programs. A recent qualitative study by Scott Ashely, Akande, Adebayo and Iken confirmed this⁶. Despite the adolescents' high awareness of teenage pregnancies, there is still an increase in the occurrence of teenage pregnancies in Ibadan metropolis.

The perception of adolescents concerning abortion-seeking behaviour is a worthy area to investigate because it gives a clear picture of the decisions made by clients including the type of health provider utilized for the abortion, its safety and complications that arise thereafter. There is inadequate research on abortion-seeking pathways including preference and choice of abortion providers among female adolescents in southwest Nigeria, particularly in Ibadan, the largest city in West Africa. We present in this article findings from a qualitative study that explored the abortion-seeking pathways and perceptions of abortion provider preference among female adolescents in Ibadan Metropolis.

In accordance with the findings, policy briefs will be designed for government agencies and civil society experts concerned with adolescent reproductive health. There is going to be awareness campaigns to educate parents, community leaders, media practitioners and other relevant stakeholders in the Ibadan metropolis on the de-stigmatization of abortion-seeking teenagers. It is expected that the results of the study will lay a concrete basis for providing friendly and effective policies in Ibadan health institutions in order to spur a social change

in the uptake of safe abortion procedures by adolescents.

Methods

The setting

Apart from being a source of social prestige, children in most African societies are seen as financial security for old age and some believe that ancestors are reincarnated in additional children given birth in the household. This explains the social values placed on childbearing. As evinced by Oladeji, cultural norms significantly influence reproductive behavior in Ibadan metropolis⁷. Muralidharan *et al* reiterated that in existing literature, the prevalence of these reproductive social norms are significantly associated with low use of contraceptives, high maternal mortality rates, and unsafe abortion amongst others⁸. Hence, cultural norms has been a major determinant influencing the decision of abortion seeking in female in-school adolescents in Ibadan metropolis Nigeria.

Study population and recruitment

To recruit participants, visitations were made to four community schools within the study setting. Study participants were purposely selected from the senior class students who showed interest in the research. Ten female adolescents responded to the vignette while eighteen female adolescents participated in the focus group discussions. The profile of the vignettes and FGDs participants is shown in Table 1. The majority of the students are aged 18 and are of the Yoruba ethnic group.

Data collection

The study adopted two qualitative methods to collect data: use of vignettes and focus group discussions. These methods were considered appropriate because they provide opportunity for the researcher to describe respondents' perception, attitudes, and preferences concerning not-publicly-discussed matters like sexuality, rape, and abortion. Vignettes are used to elicit respondents' opinions about a hypothetical scenario based on their personal judgement⁹. Within the qualitative paradigm, vignettes are used to interpret actions in a situational context, and help to clarify individual

Table 1: The profile of the vignettes and FGDs participants

Age	Number (Vignettes participants)	Number (FGD participants)
18 years	9	13
19 years	1	5
Class		
Senior Secondary School Class 2	4	2
Senior Secondary School Class 3	6	16
Tribe		
Yoruba	7	14
Igbo	1	3
Akwa-Ibom	2	1

beliefs in relation to moral dilemmas in a less threatening way¹⁰.

Utilizing the tool of storytelling, 10 in-school female adolescents responded to the vignette, titled Bola's Dilemma; the vignette is a story of a brilliant girl who got pregnant "mistakenly" and planned to terminate it. Questions were asked after the story was read. The first author moderated the vignette sessions and there was a note taker as well. All data from the vignette were recorded on audio tape after participants have provided informed consent.

Nyumba, Wilson, Derrick and Mukherjee explained that focus group discussion (FGD) is a tool popularly used to explore and understand social issues¹¹. It allows the full participation of respondents in sharing their own opinions through personal experiences or other people they know. This makes FGDs useful for exploring perceptions and abortion-seeking pathways amongst female adolescents in Nigeria.

Eighteen participants participated in three FGDs sessions moderated by the first author. The number in each group ranged from 6-8 participants. The office of a community Non-governmental Organization served as venue of the discussions. A note taker and an observer who operated the recorder after receiving informed consent from the study participants assisted the moderator. The average duration of the discussion was 1 hour 20 minutes. A guide was used for conducting the FGD. The guide explored and probed for perceptions regarding reproductive health problems, incidence of teenage pregnancies, abortion-seeking pathways, and preference for abortion service providers. Field

notes were also taken from the note taker and observer to improve the quality of responses from the FGDs.

Data analysis

The responses from the FGDs and vignettes were analyzed using thematic analysis. Thematic analysis helps to identify, categorize, describe, and report similar responses, which could be grouped into themes in a qualitative dataset¹². Discussions and vignette sessions were transcribed as soon as they were completed, and the researchers based on the issues highlighted in the research instruments developed a codebook. The transcripts were read multiple times to identify potential themes and generate initial codes. The field notes taken provided additional information, which improved the quality of responses in the transcript. Afterwards, final themes were generated from the data gotten from the FGDs and vignette. These themes include knowledge on reproductive health, perceptions on unwanted teenage pregnancies, abortion provider preference, factors limiting the utilization of clinical abortion providers among adolescents among others.

Ethical considerations

Ethical approval for the study was obtained from the University of Ibadan Social Sciences and Humanities Research Ethics Committee with the assigned number UI/SSHREC/2022/0035. Participants were informed of the purpose of the study, and the intentions of the researcher to get their consent. Informed consents were obtained from the participants through the filling of consent forms prior to the study. Informed consent was obtained from each participant after they were informed of the purpose, benefits, voluntariness, and non-maleficence of the study and the confidentiality of the information provided.

Results

The following answers were recorded from the vignette:

Who do you think she will talk to about the decision to terminate the pregnancy?

Nine out of 10 participants answered that Bola will talk to her friend first about her decision while one

participant emphasized that the male partner should be the first person to know of this decision as “pregnancy is not a one-person thing”. Other participants answered that the male partner come as a second option after the friends know about Bola’s decision to terminate the pregnancy.

In this society with cases I have heard, most time the partner usually takes his hands off the whole drama of pregnancy and maybe run away or deny or try to excuse himself, so the female is usually the one that takes the most burden... - Participant 9

What do you think are the likely consequences of terminating the pregnancy?

All the participants believe that abortion procedures could lead to womb damage, loss of blood, infertility, and death. When asked the sources of their knowledge, they identified referenced movies and hearsays within their social networks. None of them had seen or known anyone who had experienced these side effects of abortion.

I used to hear from people... including my mother.... that if you terminate pregnancy you are going to die... - Participant 3

The girls in my neighborhood, I know some of them that have aborted pregnancies before, and nothing happened to them ...and I also watch it in movies that some girls die as a result of abortion...- Participant 5

What do you think about abortion service provider options (chemists and herb sellers)?

In investigating the girls’ personal beliefs towards non-clinical abortion providers, three participants perceived that chemist is a good option while seven participants believed that both chemists and herb sellers are not ideal abortion service providers. They opined there could be side effects of the drugs and herbs due to wrong dosage. They viewed it as unsafe options because the people involved are not licensed to carry out abortion procedures and this can increase the likelihood of complications.

... From my knowledge of chemistry, my teacher will tell us that drug abuse is not good so it might...affect any organ in her stomach maybe her womb and same thing for the herbal concoction... Participant 5

...most chemists that we have out there now... at least in my society they are not exactly people that went to school for it maybe they just learnt it or something.... – Participant 9

Now that Bola has agreed to terminate the pregnancy, where do you think she will go?

Concerning how to resolve Bola’s dilemma, six participants recommended the chemist as the preferred abortion service provider. Two participants advised her to go to a standard hospital; one suggested the traditional herb seller, while one was undecided. The participant further explained the reasons behind their choices. Those who mentioned the chemist claimed that it offers confidentiality, convenience, and minimum stigmatization. Those who chose the hospital believed that this setting has low chance of mortality during abortion procedure. One participant who chose herbs explained that the local herbal mixtures are very fast and effective compared to pills.

Assuming she choose to go to the hospital, what can change her mind back to use the chemist’s drugs or herbal concoction?

This question seeks to expose the factors that can limit female adolescents from accessing abortion services in hospitals. Participants opined that the expensive bills could make her change her mind from going to the hospital. They also explained that the criticisms from hospital workers and the hospital requirement of parental consent could also allow Bola to seek abortion services elsewhere than the hospital. They mentioned the fact that Bola’s reference network might influence her decision to go to the hospital. For instance, this would be relevant if she wanted to please her friend (Jennifer) or get instructions from her boyfriend to use pills. Describing the stigma faced by adolescents at the hospitals, a participant said, “...in my society if I get to a hospital and most likely they ask me how old I am and I tell them I’m past 18 they still believe I’m a child so most likely they ask me. Have you told your parents at home? They will try to advise me... try to you know... go all motherly on me especially the nurses”. In all, the most prevalent factors are the cost of hospital bills and stigmatization from the healthcare professionals.

The following themes were generated from the focus group discussions:

Perceptions on unwanted teenage pregnancies

All participants perceived that the frequency of unwanted teenage pregnancies is on the rise in Ibadan. They opined that the occurrence of unwanted pregnancies is now rampant. In a participant's words, "...somebody very close near my house just gave birth to a baby and she's barely 17 and I have some other people that we grew up together and they already have kids...I think it is that rampant around me". Another one said, "...in my school, three of my classmates got pregnant in one year."

The participants attributed based on their opinion, the increase in unwanted teenage pregnancies to lack of awareness and sexuality education, peer pressure, poverty, lack of home training and the curiosity that happens during puberty when reproductive organs are being developed. According to one participant:

there was this girl that her friends do criticize her saying things like you don't know much because her friends already started having sex, so she was determined to show them and that's how things went wrong and so she got pregnant - Participant, FGD 3

Reactions of adolescents when they have unwanted pregnancies

In their opinion, participants revealed that fear, shock and in worse cases, depression and suicide are common reactions to unwanted pregnancies among adolescents. These negative feelings stem from the fact that unwanted teenage pregnancies are frowned at in the society. As one participant puts it;

If I realize I am pregnant, I would first freak out, I will panic, I would first be scared, and I would not know what to do. - Participant, FGD 2

Parents will be disappointed as it is seen that the pregnant adolescent has brought shame and disgrace to the family. This is why adolescents try to keep their pregnancies secret.

I am very close to my mom...We tell ourselves things. But if I get pregnant, I am sure I will not go to her first. - Participant, FGD 3

Hence, the stigma and isolation from the social environment will lead to regret and most times, abortion (even when one wishes to keep the pregnancy). All participants unanimously agreed that teenagers in Ibadan would resort to abortion and there is no circumstance under which the pregnancy will be carried to term due to the hostility of the environment and lack of support from significant others.

Preference for network during unwanted pregnancies

Majority of the participants revealed that their close friends or female siblings would be the first person they will confide in when they discover they are pregnant because a close friend ... "will not judge me too much". A few participants mentioned that the male partner should be the first person they will inform when pregnancy occurs in their own opinion.

However, when asked why they would not inform a male partner first, the participants replied that the partner is 'unpredictable; he might choose to accept it or not'. The participants further stated that most male partners are not ready to be responsible and they tend to deny their involvement with the female adolescent.

Knowledge of abortion methods

Participants perceived that self-medication is the most popular method adolescents' use for abortion. They believe that the use of pills and some other traditional methods facilitate abortion. These local methods include the use of potash, gin, lime, and a popular soft drink.

Despite their confidence in sharing these abortion methods, few participants revealed that they know at least one person who used these local methods, and it did not work. One participant also mentioned that there are quack doctors in small shops that carry out abortion for teenagers around the city.

Preference and choice of abortion providers

FGD participants identified three types of abortion service providers to choose from when they need

such service; hospital, Chemist and drug vendors, and herb sellers (locally called *Iya Alagbo*). Half of the participants prefer to patronize the chemists, drug vendors, six prefer to patronize the traditional herbs sellers (*Iya Alagbo*), and three prefer to go to the standard hospital for their abortion procedure. Participants prefer to patronize chemists for pills to use due to the fear of stigmatization in hospitals. In their words, *“the chemist will understand better...”* The participants who prefer to use the chemist also stated that it is convenient, cheap, and discreet compared to the hospitals.

The participants who prefer to use local herbs from the *“Iya Alagbo”* opined that the *iya alagbo* is *“experienced and will also keep it secret.”* One participant prefers to use the *iya alagbo* due to her upbringing. In her words, *“I actually grew up in an environment where they believe in making herbs....and it has never been ineffective...”*

The three participants who preferred to go to the hospital revealed that this is due to the quality of care given to patients during and after the abortion procedure. They believe the healthcare workers are more educated and knowledgeable about the procedure.

Perceived barriers to seeking abortion service from clinical providers

The participants agreed that the hospital has the best form of abortion care. However, only few out of the participants preferred to patronize the hospital for abortion. Majority of the participants complained that the nurses would express disappointment and stigmatize them. In their words, *“the matron and nurses are witches...they won't allow abortion”*.

They opined that the healthcare workers would request for parental consent before any abortion procedure can be carried out and that the medical bills are too expensive. Two participants also stated that seeking abortion in hospitals is not legal in Nigeria. Overall, the participants agreed that there is stigmatization of teenagers seeking abortion service at hospitals. A participant explained, *“If I enter the hospital with my small stature... they will be like where are your parents.... They will just abuse you and before you get home you will be depressed....”* - Participant, FGD 3.

Discussion

Participants perceived that frequency of unwanted teenage pregnancies is common and increasing in Ibadan. This has been identified because of cultural norms that encourage early childbearing and frown upon use of modern contraceptives and abortion. This finding correlates with the results of existing studies that emphasized parents and social influence of peer groups as promoters of teenage pregnancies in several African settings like rural Eastern Uganda¹³, South Africa¹⁴ and Nigeria¹⁵.

There is concern that participants identified harmful and ineffective methods of carrying out an abortion including use of boiling rings, potash, lime, and other mixtures. This is not surprising since many of the participants from both the focus group discussions and qualitative vignettes rely unreliable sources for information on reproductive health.

This finding buttresses a critical review of existing literature by Atuhaire that showed the “resort” of African adolescents to unsafe abortion practices like self-medication and insertion of sharp objects in the genitals¹⁶. It is interesting to note that as they gave different options of unsafe abortion, none of them has seen or known anyone who used these methods successfully. The implication is that abortion myths are common among this population. Triangulating these findings from both methods highlights the essence of targeted interventions to address this misconception.

Concerning the abortion-seeking pathways, study participants opined that teenage pregnancies are usually seen as a social deviance and hence, they are frowned at in the society. This leads to expressions of fear, panic, depression and suicide amongst female in-school adolescents carrying unwanted teenage pregnancies¹⁷. This reinforces the findings of a qualitative study by Olorunsaiye, Degge, Ubanyi, Achema and Yaya which reiterated that teenage pregnancies in Jos, Nigeria elicited feelings of anxiety, shame and fear¹⁸.

Despite these negative expressions, the community gets to accept the deviant as children are seen as “gifts from God”. However, it was discovered that academic performance could be perceived as a determining factor to whether the unwanted teenage pregnancy will be carried to term

or not. Existing literature has shown that education reduces the risk of unwanted teenage pregnancies in Nigeria^{4, 19}. However, this study showed that if the pregnant teenager is brilliant and studious, there are expectations to abort the pregnancy. In a participant's words, "*she should abort the pregnancy based on her performance in school as a bright student....*" This implies that the level of academic performance and not just the educational status could be perceived as an influencer of abortion-seeking behavior among female high school adolescents in Ibadan Metropolis.

In the focus group discussions and vignettes, a consistent theme emerged regarding the adolescents' preferred confidantes when confronted with an unwanted pregnancy. A close friend was identified as the most reliable person to confide in during episode of unwanted pregnancy. This finding is in contrast with a scoping review made by Strong²⁰ which highlights men's significant involvement in women's abortion care in low- and middle-income countries. However, since peer pressure has been established as a leading cause of unwanted teenage pregnancies in existing literature, it is logical to posit that the pregnant teenagers confide to close friends who are not judgmental and capable of proffering solutions to their predicament.

When the results of the two data collection techniques were triangulated, there was a convergence indicating that the majority of the participants felt a stronger preference for non-clinical abortion providers. This is due to convenience in access, and confidentiality of service provided. These findings align with the quantitative research of Byrne *et al.* They noted that 55 percent of Nigerian women who have sought an abortion actually utilize non-clinical providers³.

We found one inconsistency in response of students' preference for abortion service provider. Although clinical methods are perceived to be the safest and optimal provider of abortion service, majority of the participants prefer to use non-clinical methods. This is due to the stigmatization and unfriendly treatment by nurses and doctors, bureaucratic processes of the hospital, which requires parental consent, and the huge financial expenses. This finding correlates with the findings from other studies²¹⁻²². Both studies posited that health workers have negative and impolite attitudes towards adolescents seeking reproductive health services in Nigeria²¹⁻²².

The triangulation of results from FGDs and qualitative vignettes provides a rich and comprehensive understanding of adolescents' perceptions of abortion provider preferences. The qualitative vignettes shed light on personal perspectives while the FGDs provided a broader societal context. Both data sources revealed the influence of societal beliefs and expectations on adolescents' perception of abortion consequences and provider choices. The convergence of themes enhances the study validity and the triangulation process exposed the multifaceted decision-making processes faced by abortion-seeking adolescents

Limitations and strengths

The study was carried out among students from two LGAs in Ibadan; hence, the findings might not be applicable to all LGAs in the state or Nigeria as a whole. Nonetheless, the findings of the study can provide a basis for conducting similar studies in the future with a large sample of students.

As sensitive issues like abortion are rarely discussed, the use of storytelling in the vignette made it easy for study participants to be comfortable to share their perceptions about the story and putting themselves in the story character's shoes.

A strength of the study is integration of FGDs and Vignette for data collection, which facilitated triangulation. Overall, the study contributes to the scarce literature on abortion provider preference by adolescents in Nigeria. Further research is suggested amongst adolescents with actual abortion experiences to study disparity between preferences and actual choice of abortion service providers in Nigeria.

Conclusion

The study explored the perceived preferences of abortion service providers among adolescents. Findings confirm that they prefer to use non-clinical methods despite their knowledge on the risks involved. Clinical methods are not preferred due to the stigmatization experienced by abortion-seeking teenagers in health facilities. Interventions are needed to improve adolescents' knowledge and provide adolescent-friendly services that will attract more adolescents to seek abortion in clinical settings. Hence, the de-stigmatization of abortion-seeking adolescents in health facilities within

Ibadan metropolis is required for higher adolescent uptake in obtaining safe abortion procedures. Capacity building programs on adolescent sexual and reproductive health should be organized to educate parents, community leaders, media practitioners and other relevant stakeholders in the Ibadan metropolis.

References

- World Health Organization. "Adolescent Pregnancy." 2020. Accessed September 8, 2022. <https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy>
- Bankole A, Remez L, Owolabi O, Philbin J and Williams P. From Unsafe to Safe Abortion in Sub-Saharan Africa: Slow but Steady Progress. 2020. <https://www.guttmacher.org/report/from-unsafe-to-safe-abortion-in-sub-Saharan-africa>
- Byrne ME, Omoluabi E, OlaOlorun FM, Moreau C and Bell SO. Determinants of women's preferred and actual abortion provision locations in Nigeria. *Reproductive Health* 2021; 18(1), 240. <https://doi.org/10.1186/s12978-021-01290-w>
- Obiyan MO, Olaleye AO, Oyinlola FF and Folayan MO. Factors associated with pregnancy and induced abortion among street-involved female adolescents in two Nigerian urban cities: A mixed-method study. *BMC Health Services Research* 2023; 23(1), 25. <https://doi.org/10.1186/s12913-022-09014-x>
- Oye-Adeniran BA, Adewole IF, Umoh AV, Ekanem EE, Gbadegesin A and Iwere N. Community-Based Survey of Unwanted Pregnancy in Southwestern Nigeria. *African Journal of Reproductive Health* 2004; 8(3), 103. <https://doi.org/10.2307/3583397>
- Scott-Ashley O, Akande S, Adebayo A and Iken O. Adolescents' Knowledge of Sexuality and Perceptions Regarding Teenage Pregnancy: A Qualitative Study among Secondary School Students in Ibadan, Southwest Nigeria. *International Journal of School Health* 2020; 7(2). <https://doi.org/10.30476/intjsh.2020.84758.1047>
- Oladeji D. Gender Roles and Norms Factors Influencing Reproductive Behavior among Couples in Ibadan, Nigeria. *Anthropologist*, 2008, 10, 133–138. <https://doi.org/10.1080/09720073.2008.11891037>
- Muralidharan A, J Fehringer, S Pappa, E Rottach, M Das and M. Mandal. Transforming Gender Norms, Roles, and Power Dynamics for Better Health: Evidence from a Systematic Review of Gender-integrated Health Programs in Low- and Middle-Income Countries. Washington DC: Futures Group, Health Policy Project 2015.
- Atzmüller C and Steiner PM. Experimental Vignette Studies in Survey Research. *Methodology*. 2010. <https://econtent.hogrefe.com/doi/abs/10.1027/1614-2241/a000014>
- Barter C and Renold E. The Use of Vignettes in Qualitative Research. *Social Research Update*, Issue 25, University of Surrey. 1999. <http://sru.soc.surrey.ac.uk/SRU25.html>
- Nyumba T, Wilson K, Derrick CJ and Mukherjee N. The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution* 2018; 9(1), 20–32. <https://doi.org/10.1111/2041-210X.12860>
- Kiger ME and Varpio L. Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher* 2020; 42(8), 846–854. <https://doi.org/10.1080/0142159X.2020.1755030>
- Nabugoomu J, Seruwagi GK and Hanning R. What can be done to reduce the prevalence of teen pregnancy in rural Eastern Uganda? Multi-stakeholder perceptions. *Reproductive Health* 2020; 17(1), 134. <https://doi.org/10.1186/s12978-020-00984-x>
- Thobejane T. Factors Contributing to Teenage Pregnancy in South Africa: The Case of Matjijileng Village. *Journal of Sociology and Social Anthropology* 2015; 6, 273–277. <https://doi.org/10.1080/09766634.2015.11885667>
- Okoli CI, Hajizadeh M, Rahman MM, Velayutham E and Khanam R. Socioeconomic inequalities in teenage pregnancy in Nigeria: Evidence from Demographic Health Survey. *BMC Public Health* 2022; 22(1), 1729. <https://doi.org/10.1186/s12889-022-14146-0>
- Atuhaire S. Abortion among adolescents in Africa: A review of practices, consequences, and control strategies. *The International Journal of Health Planning and Management* 2019; 34(4), e1378–e1386. <https://doi.org/10.1002/hpm.2842>
- Musyimi CW, Mutiso VN, Nyamai DN, Ebuenyi I and Ndeti DM. Suicidal behavior risks during adolescent pregnancy in a low-resource setting: A qualitative study. *PLoS ONE* 2020; 15(7), e0236269. <https://doi.org/10.1371/journal.pone.0236269>
- Olorunsaiye CZ, Degge HM, Ubanyi TO, Achema TA and Yaya S. "It's like being involved in a car crash": Teen pregnancy narratives of adolescents and young adults in Jos, Nigeria. *International Health* 2022; 14(6), 562–571. <https://doi.org/10.1093/inthealth/ihab069>
- Kunnuji MON, Eshiet I and Nnorom CCP. A survival analysis of the timing of onset of childbearing among young females in Nigeria: Are predictors the same across regions? *Reproductive Health* 2018; 15(1), 173. <https://doi.org/10.1186/s12978-018-0623-3>
- Strong J. Men's involvement in women's abortion-related care: A scoping review of evidence from low- and middle-income countries. *Sexual and Reproductive Health Matter* 2022; 30(1), 2040774. <https://doi.org/10.1080/26410397.2022.2040774>
- Onukwughu F, Agaba P, Hayter M and Orton B. Unmarried Adolescents' Experiences of Using Reproductive and Maternal Health Services in Nigeria and Uganda: A Qualitative Study. *Social Sciences* 2022; 11(5), 203. <https://doi.org/10.3390/socsci11050203>
- 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 Journal of Primary Health Care & Family Medicine* 2020; 12(1), 2307. <https://doi.org/10.4102/phcfm.v12i1.2307>