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Global Public Health

An International Journal for Research, Policy and Practice

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/rgph20

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To cite this article: Hannah M. Degge, Comfort Z. Olorunsaiye, Timothy A. Achema, Tina O. Ubanyi & Farida N. Yada (2023) Adolescent pregnancy outcomes in Jos, North Central Nigeria: The roles of disclosure and social support systems, Global Public Health, 18:1, 2129724, DOI: 10.1080/17441692.2022.2129724

To link to this article: https://doi.org/10.1080/17441692.2022.2129724

Published online: 20 Nov 2022.

GLOBAL PUBLIC HEALTH
2023, VOL. 18, NO. 1, 2129724
https://doi.org/10.1080/17441692.2022.2129724

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Adolescent pregnancy outcomes in Jos, North Central Nigeria: The roles of disclosure and social support systems

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ABSTRACT

Adolescent pregnancy is mostly unintended and an indicator of unmet sexual and reproductive health (SRH) needs. In most African cultures, sociocultural and religious expectations of chastity make unintended adolescent pregnancy a traumatic experience. This study examined the roles of disclosure and social support networks in determining adolescent pregnancy outcomes in Jos, Nigeria. Using a qualitative design, we conducted in-depth interviews with 17 young persons aged 16–24 years, recruited through purposive and snowballing sampling methods. Data were analysed using an inductive approach. Informal social support networks, mainly mothers and close friends, played prominent roles in pregnancy disclosure. The fear of unsafe abortion complications and lack of other options forced most participants into early motherhood. Parenting issues also contributed to unintended adolescent pregnancies. Participants noted that adolescent males had better access to contraceptive devices like condoms. Additionally, the absence of formal opportunities for institutional support through education and youth-friendly SRH services constituted barriers to preventing unintended adolescent pregnancies. Considering the important role family plays, preventing unintended adolescent pregnancies requires empowering parents on SRH communication. A gender-based approach to adolescent-friendly SRH services is recommended. The Nigerian government needs to reconsider how to provide contextually-acceptable comprehensive sexuality education to young people.

ARTICLE HISTORY
Received 5 January 2022
Accepted 14 September 2022

KEYWORDS
Adolescent pregnancy; disclosure process; social support; parent–child communication; sexual and reproductive health

Introduction

Adolescents are persons aged 10–19 years old, accounting for 25% of the global population (Population Reference Bureau, 2013; WHO, 2014). Similarly, the current proportion of adolescents in Nigeria is 23% (Dokua Sasu, 2022; Performance Monitoring for ATIC, 2017). They are also unique in terms of traits and requirements and encounter distinct obstacles, often, as a result of their stage of development (Okeke & Odelola, 2018). Due to risky behaviours like unprotected sexual activity, young people are more likely to become pregnant unintentionally.

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In low and middle-income countries, an estimated 21 million females aged 15–19 years become pregnant each year, with around 12 million giving birth (Darroch et al., 2016). Adolescents' sexual health knowledge, attitude, behaviour, access to and acceptance of health care are all significant risk factors for adolescent pregnancy (Goicolea et al., 2009; Igras et al., 2014). However, embedded in this is a variety of socio-cultural factors that influence adolescent pregnancy. Family dynamics, peer pressure, cultural tolerance, family dysfunction early marriage, a lack of sexual literacy, and/or poor contraception use are all variables to consider (East et al., 2007).

Adolescent sexual and reproductive behaviour is frequently shaped by culture, primarily through obligations of communities and families which frequently offers a strong foundation of support. This, however, can also be limiting, particularly when taking into consideration gendered norms among young women (Kaphagawani & Kalipeni, 2017). Chigbu et al. (2022) noted an association between parenting style and sexual behaviours of adolescents. The author concludes that in order to effectively raise adolescents, parents must employ a variety of parenting techniques and calls for good integration and interaction among the many parenting styles. Furthermore, non-parental care was also linked to risky sexual behaviour as young individuals who seem to have disconnected and troubled relationships with their families are more likely to begin sexual activity early (Neville et al., 2022; Woodward et al., 2001). Despite this premise, adolescents value the backing of their parents during the disclosure process, as this provides them with stability and support which is critical to the awareness of the pregnancy and its consequences (House, 2018).

Adolescent girls may find it challenging to decide whether to disclose unplanned pregnancies. The complexity and volume of the information to be shared, as well as other people's behaviour, all impact disclosure, which is a voluntary behaviour(Omarzu, 2000). The pregnancy outcome, which implies the decision to keep the pregnancy or abort in this context, might be informed by the disclosure process (Aziato et al., 2016). Factors centred on social support systems, including poverty and poor communication between adolescents and parents or caregivers are important in the disclosure process, which often determines pregnancy outcomes (Bain et al., 2020). Disclosing an adolescent pregnancy is crucial for both parents and children and can significantly disrupt family dynamics. Therefore, pregnant adolescents often face the dilemma of disclosure and making pregnancy decisions when compared with older women. For an adolescent, having to disclose pregnancy raises two issues. First, it reveals that she is sexually active to the public in an environment that frowns upon premarital sex. Secondly, a pregnancy indicates a young person's freedom regarding sexual intercourse, regardless of parental consent in the African context (House, 2018).

Comprehensive sexuality education (CSE) is a means of enabling adolescents to achieve autonomy over their bodies and lives, as well as promoting positive reproductive health outcomes (Kunnuji et al., 2017). CSE contributes to enhanced sexual and reproductive health (SRH) practices. It can help avoid early and unsafe sexual behaviour when used in conjunction with other measures such as formal education, promoting gender equality, positive societal and family values, among others (Coakley et al., 2017; George et al., 2020; Psaki et al., 2019).

Nigeria is one of the few low- and middle-income countries, outside Latin America, that provides CSE through the Family Life and HIV Education (FLHE) curriculum introduced in 2003 for junior secondary schools (Dejong, 2014). However, many factors contribute to the poor uptake of this curriculum in schools. Adolescents' sexuality, gender relationships, and rights are viewed as irrelevant and forbidden (Aprianti et al., 2017). Furthermore, despite the introduction of a policy on Adolescent-Friendly Health Services (AFHS) (Federal Ministry of Health [FMoH], 2011), access to and utilisation of these services remain limited in Nigeria and across sub-Saharan African countries (Ninsiima et al., 2021; Onukwugha et al., 2019). Additionally, abortion services, though available, are only legal when necessary to save a woman's life. Despite these restrictive policies, approximately two million abortions were recorded in Nigeria in 2017, with 11% of women within the reproductive age group seeking post- abortion care for complications (Bankole et al., 2020; Jhpiego, 2020). These figures are based on estimates, as national data on abortions are unavailable (Oluseye

et al., 2022). However, in a study by Bell et al. (2020) their safety-related findings showed that younger, poorer and less educated women were at greater risk of having unsafe abortions.

The relationships between adolescent pregnancy, the disclosure process, and the determination of pregnancy outcomes are very complex. Therefore, this study aimed to explore and describe the complex interplay of factors related to adolescent pregnancy, disclosure, and social support structure as well as specifically examine the gaps related to pregnancy disclosure and social support. Findings may contribute to recommendations for reducing the occurrence of unintended adolescent pregnancies.

Methods

Study setting

Nigeria has a population of over 200 million people and also has one of the highest numbers of youth globally (United Nations, 2019). Nearly 52% of the population is younger than 18 years old (National Population Commission - NPC and ICF, 2019). Young people become sexually active for the first time at a median age of 17.2 years. More than 4 in 10 young women aged 25–29 years were married before their 18th birthday and about 8% of adolescents aged 15–19 years were married by age 15 (National Population Commission - NPC and ICF, 2019). Administratively, the country is divided into six regions, namely, North East, North Central, North West, South East, South South, and South West, and 36 states and the Federal Capital Territory.

Plateau State is one of the North Central states and is home to people of diverse ethnic groups, cultures, and religions. The state has an estimated population of 3.5 million people. Young people aged less than 20 years make up approximately half of the population (Government of Plateau State, 2019; National Population Commission - NPC and ICF, 2019). The state-wide prevalence of adolescent childbearing is 8.2% (National Population Commission - NPC and ICF, 2019). However, localised studies have reported varying prevalences of adolescent childbearing and sexual debut in the state. For example, among 13- to 19-year-old female residents of Jos, 1 in 4 participants in a cross-sectional study reported being currently or ever pregnant (Envuladu et al., 2014). In another study, adolescents ages 18–19 years, in focus groups, reported sexual debut at ages 10–15 years (Envuladu et al., 2017). We conducted this study in Jos, the capital city of Plateau State, North Central Nigeria.

Research design and participant recruitment

We used a qualitative study design to explore the teen pregnancy experiences of adolescents and young women in Jos, Nigeria. In the context of this study, adolescent pregnancy included all experiences of pregnancy among participants up to 19 years of age, and encompassed all pregnancy outcomes. The study approach is detailed elsewhere (Olorunsaiye et al., 2021). The data were collected from October-November 2016. The study participants included adolescents and young women ages 16–24 years, who had experienced teen pregnancy, and resident in Jos, Plateau State. The participants were recruited, using a purposive sampling method, from the teen counselling centre of a university teaching hospital in the city. The centre is run by a charitable organisation providing pregnancy counselling services, financial support, child-rearing resources, and adoption referrals. We also used snowballing techniques by asking participants to refer young persons that met the study's inclusion criteria, as well as the research team's personal contacts, to identify other eligible participants.

Data collection

A semi-structured interview guide, developed by the research team, was piloted with four young women and revised based on their feedback. Using the finalised interview guide, data collection

was conducted by four trained research assistants, comprising two medical doctors and two hospital counsellors (three female, one male). The interviews were conducted in English, in a private room at the teen crisis centre, other locations chosen by the participants, or by phone. Each interview lasted approximately 60 min. We interviewed 17 young women aged 16–24 years. Past qualitative studies on sexual and reproductive health have achieved data saturation within 12–20 interviews (Francis et al., 2010; Guest et al., 2006); we achieved data saturation in 15 interviews. The one male research assistant is a physician; hence, due to his training and experience, he felt comfortable discussing with participants in an unbiased and non-judgmental way. Participants, likewise, did not express any concern or discomfort about being interviewed by a male; there were also no observed differences in the depth or quality of data between the male and female research assistants. The interviews were audio-recorded with participants' permission. Upon completing the interview, each participant received an incentive, in the form of mobile phone recharge credit for their preferred network, for their time.

Data analysis

The interviews were transcribed and compared with the recordings to check for accuracy. We used an inductive analytic approach to analyse the data. First, we read the transcript several times to immerse ourselves in the data; we then identified codes that were later broadened to form categories of text, which were further developed into themes. Two of the study authors analysed the data individually, compared and harmonised initial codes, then jointly identified and developed emerging themes and sub-themes. Where there were discrepancies in interpretation, both researchers met to discuss and resolve the differences. The rest of the research team confirmed and validated the themes for finalisation.

Trustworthiness

We clearly defined the study's objectives for the research team. Interviews were transcribed by an independent party that was not a part of the research team. The research team met frequently with the research assistant to debrief following interviews. The data collection and analysis were carried out by multiple researchers. The findings were compared with the raw data to ensure referential adequacy (Lincoln & Guba, 1985). Additionally, all members of the research team provided inputs and further insights on the findings before finalisation.

Ethical considerations

The study protocol was approved by the Health Research and Ethics Committee of the Bingham University Teaching hospital, Jos- Nigeria (NHREC/21/05/2008/00219). Young people, aged 16 years and older, do not require parental consent but must consent themselves to participate in SRH research in Nigeria (FMoH, 2014). Prior to interviewing, all participants provided written informed consent. In the informed consent, participants were notified that they could decline to answer any question or stop the interview at any time. All interview recordings and transcripts were deidentified, and pseudonyms were used in lieu of participants' real names in reporting findings. The research data are accessible only to the research team members.

Findings

Socio-demographic characteristics of study participants

At the time of data collection, participants' ages ranged from 16 to 24 years. Ten participants had completed senior secondary school, while four had completed junior secondary school, and three

had completed tertiary education. Seven participants were employed in various occupations, three participants were unemployed, while another seven were full-time students. Fourteen participants had never been married and three were formerly married. Six of the 17 participants were living with their parents, six were living with intimate partners and/or relatives, while five lived alone. All participants in the study self-identified as Christian. Eight participants reported having had a live birth and 3 who were pregnant during data collection said they would keep the pregnancy, three terminated their pregnancies, and two participants had stillbirths. The emerging themes and codes are reported below using pseudonyms to characterise participants' quotes.

Pregnancy disclosure: persons first informed

Participants reflected on their pregnancy disclosure process, including the first person they told and their motivations for disclosing the pregnancy to these persons. Some of the participants identified an intimate partner as the first person they told because they were responsible for the pregnancy.

> He [boyfriend] was the first person I told … After 2 months … Uhm, because the baby belongs to him, so … I did not trust my friends at that time, so I didn't want to tell them. (Binta, pregnant at 17 years; outcome-pregnant at time of interview)

> My boyfriend … immediately I collected the result I went and showed him … Because he's responsible. (Rahila, pregnant at 16 years, outcome-live birth)

Others told their intimate partner, not just because they were responsible, but as an opportunity for the partner to figure out what they wanted to do about the pregnancy.

> It was the dad [partner], the same guy. He being older than me, I thought he will figure out something … a way out that will favour both of us (Rose, pregnant at 16 years; outcome-abortion).

> … the dad [partner] was the first person I told because he was the one responsible. Why I told him was … I told him 'this is it … I'm pregnant … and I'm the one giving you the option, if you want to stay, stay … if you want to go, go. I'm even ready to say you're not the one that got me pregnant.' That was what I told him. (Hannatu, pregnant at 18 years; outcome-live birth)

Participants recounted disclosing their pregnancy status to their parents, usually the mother, or other female family members.

> First of all, I went to my mom, she said I should not um … I should not do anything or plan to abort the pregnancy, that I should leave the pregnancy … Let me say it was in the hospital that I knew about it. (Fatima, pregnant at 17 years; outcome-miscarriage)

> I told my sister … Because she was the only one that … we were close, and anything … we shared it together. (Lami, pregnant at 19 years; outcome-live birth)

Additionally, participants identified two distinct categories of friends or relatives to whom they first disclosed their pregnancy status. The first included friends with a medical background or working in the healthcare field. Disclosure to friends in the health/medical field was informed by hopes that their 'medical' friends would be able to help them obtain an abortion or information on abortion.

> He's a friend to me. He's just a friend … I chose to tell him because he [was] working in the hospital, and I believed he would find a way to help me with [ending] the pregnancy, that's why I told him. (Jummai, pregnant at 16 years; outcome-live birth)

> I told her [aunt] I missed my period. I did not tell her I was pregnant. I told her because she is a pharmacist, so I was hoping she could tell me something I [could] use to terminate the pregnancy. (Rifkatu, pregnant at 15 years; outcome-stillbirth)

Another participant said she did not want the baby and also did not want an abortion, but hoped her 'medical' friend would talk to a doctor who would 'know what to do.'

> There's one of my friends, he's working here [the hospital] so he was the first person to know. I told him that a doctor said I'm pregnant and I didn't want the baby … and I didn't want to abort the baby. So [I said] please, he should just help me and talk to the doctor, so that he [the doctor] would know what to do. (Kemi, pregnant at 18 years; outcome-live birth)

The second category of friends included close friends without a medical/healthcare background. Some participants first told their friends about the pregnancy for various reasons, including their closeness to these friends, or out of fear of the unknown.

> [My] best friend … She told me I should not be scared, I should go and tell my parents, or someone I know I'm very close to … I should tell that person. (Grace, pregnant at 16 years; outcome-live birth)

> I told my best friend at school. Because she was a science student. When I told her how I was feeling and about the missed period, she searched some of her science books and we found the ways I was feeling were, truly, signs of pregnancy. (Kaneng, pregnant at 17 years; outcome-live birth)

Influence of pregnancy disclosure on social support and pregnancy outcomes

Participants' narratives about the reactions following their pregnancy disclosure varied widely. They described reactions, including positive ones such as comfort, advice, and encouragement, mostly from family and friends. These disclosures generally elicited feelings of relief, hope, and support.

> When I told her [a cousin], she said ok, 'How will you go and tell mom and dad?' I told her 'no problem, I will go and tell my mom and my dad.' She said … I should hold on. So … she went and told my mom, and she told my mom that it was not my fault. (Lami, pregnant at 19 years; outcome-live birth)

> No, the reason why I did not take anything [self-managed abortion] was because my mother had already comforted me, she gave me some advice. She said, 'go and meet the person [responsible for the pregnancy], if [he] rejects you, just come back, we can take care of you.' (Ladi, pregnant at 18 years; outcome- live birth)

For other participants, their disclosure was met with negative reactions, including blame and denial of responsibility for the pregnancy. For these participants, rather than support, the disclosure process brought shock and rejection.

> He [partner] was shocked … He told me 'ah-ah … so I did not take anything [contraception]?' I now told him I didn't take anything.' (Binta, pregnant at 17 years; outcome- pregnant at time of interview)

> When I told him [partner], he said that I should abort the baby, and I told him that I will not abort the baby. He just said that we should abort the pregnancy because he could not … he was not ready to take responsibility. (Rahila, pregnant at 16 years; outcome-live birth)

In some cases, when the partner wanted a different outcome than the participant, he deferred to her position.

> He told me to get rid of it … .I [said] … I wasn't going to get rid of it … if he wasn't going to stand by me, he should pick his bags and go. I told him my decision to keep it was not because I wanted to tie him down [and] he could leave since he [wanted] me to abort it. He now said he was scared of what my uncle would say … so he [was] scared for me, but I said … I'm ready to face my uncle. So, he said … *toh!* (okay!), he [was] ready to stand by me. (Hannatu, pregnant at 18 years; outcome-live birth)

> He wanted me to keep it because he said it was advanced and he did not want anything to happen to me if I went for an abortion. He did not want my blood on his hands … When I insisted that I did not want to keep the pregnancy because of the consequences of dropping out of school, he decided to find someone who could help terminate the pregnancy. (Rifikatu, pregnant at 15 years; outcome-stillbirth)

For some participants, although their disclosure resulted in advice and encouragement from friends to keep the pregnancy, they were not dissuaded from their initial plans.

> I … my best friend advised me not to get the abortion but I saw it like she was not in my shoes. *He who wears a shoe knows where it pinches*, so, I disregarded all the advice … I've been hearing stories about girls dying

during the [unsafe abortion] procedure, but I still went ahead, just to save face. (Rose pregnant at 16 years; outcome-abortion)

Roles of informal and formal social support networks in adolescent pregnancy

From some participants' narratives, they did not receive adequate social support from informal sources. In the case of one participant, following rejection and denial of responsibility by the partner, she found acceptance and support from her parents.

> Well … when I had the baby, I said, I couldn't face my family, I couldn't face people around me. So what I did is that I [went] far away from home. I picked my baby, and I left home, so I [went] and started over again. I live with my baby [now]. (Jummai, pregnant at 16 years; outcome-live birth)

> He [partner] did not accept the pregnancy, he started complaining … [saying] he is a student and that … I should go and look for the person that [got] me pregnant … I [had] the baby, and the baby [is] growing very healthy … [with] no problems. (Ladi, pregnant at 18 years; outcome–live birth)

There were other narratives of support, including financial and caregiving support. Participants commonly cited receiving financial support from their fathers and caregiving from their mothers.

> Well, I'm grateful for everything they [family] have done for me. First, my mom … she helped me with everything … I was admitted, I was given blood [transfusion] … she helped me in the ups and downs, in taking care of me … in buying the drugs, she helped in everything. He [participant's father] helped me, he provided the money, and he … took responsibility financially. (Fatima, pregnant at 17 years; outcome-miscarriage)

> He [participant's father] was just being really nice, like making sure I had everything I needed. He was buying me things he typically wouldn't on a normal day. (Rifkatu, pregnant at 15 years; outcome-stillbirth)

The formal social support systems participants interacted with when they discovered that they were pregnant included occupational and religious institutions. The roles played by these institutions varied from supportive to punitive ones. The religious institutions, including faith-based counselling centres and churches to which the participants belonged, were supportive in some instances.

> … it was in the hospital that I knew about it [the pregnancy]. Then later, I came to the [counsellor's] office for counselling, then he, later on, called her [participant's mom] to tell her about the pregnancy. The pregnancy almost affected me, but they came and consoled me … our youth fellowship … our youths … I'm a member of the youth fellowship. (Fatima, pregnant at 17 years; outcome-miscarriage)

In other cases, the roles played by religious institutions were punitive and oriented towards discipline by barring participation in certain religious activities.

> … .when it [sexual assault] happened, the Church handled it, and … (pause) … as a communicant member, I had to be disciplined. And though, I have never stopped going to Church … but only I was not participating [in the Holy Communion]. And even when I came here, I had to immediately report to the new Reverend here … and so, that was how the punishment was linked to the new Church. And later on, I was accepted and I continued from where I stopped. (Monica, pregnant at 17 years; outcome-live birth)

In the case of Naomi (pseudonym), who was pregnant during data collection, she expected to be 'disciplined' by the Church after she gave birth, suggesting that such punitive measures were expected and accepted as the norm in religious institutions.

> After [I have] the baby, I know they [Church] will call me [to] the front of the church, and then they will pray for me. Some of the activities, I will not [be allowed to] do, so it's only on Sundays that I will go to church, [give my] offering … you understand? After 3 months, they will call me, and then they will accept me, and I will continue [with activities] in the church. (Naomi, pregnant at 16 years; outcome- pregnant at time of interview)

Based on the type of occupation, participants had different experiences with their employers. In the case of one, she was temporarily suspended from her job in childcare. For another participant, she expected to be laid off due to the risk of harm to her in the workplace.

> … due to the situation [pregnancy], I had to pause work because [at my job] I worked with small children … so, I was suspended from work, then, later on, was called back. (Talatu, pregnant at 16 years; outcome-unknown [incomplete interview])

> … I [will] have problems, seriously, [at] my work if my madam [boss] should notice that I'm pregnant. For her, if you're pregnant, you will not work with her … because she is scared … because you are working close to [an open] fire, maybe you can feel dizzy and faint, so that's what she usually does. (Naomi, pregnant at 16 years; pregnant at time of interview)

Gaps in the informal and formal social support structures to help prevent unwanted teen pregnancy

Parenting issues described included over-parenting and excessive discipline, which did not prepare participants for independence.

> I didn't know what I was getting into, I was foolish and let loose into the world, just like … I grew up in this kind of setting and background that my parents wouldn't let us go out … except … to school, or to church … it's just like setting a goat loose … the kind of destruction … so, that's what happened … They thought they were protecting us. (Rose, pregnant at 16 years; outcome-abortion)

> … sometimes it's our parents. Because sometimes when you do something wrong, some parents will tell you [to] stop it, and they will correct you. But some … parents, they will pursue you … send you out, so maybe if … you go and stay with your friends … anything that they're doing, you will join them to do it … .and when you join them to do it, maybe you've gotten pregnant or contracted HIV. (Lami, pregnant at 19 years; outcome-live birth)

On the flip side of over-parenting, some participants described feelings of disconnected parenting or lack of parental support for the growing adolescent. As such some felt they were unprepared for dealing with the realities and decisions related to sexuality and had no one to confide in.

> … I know that maybe if I was very close to my mom … sometimes I feel like maybe I didn't really get that love from my stepfather, and so maybe I went to find it somewhere else. I went the extra mile to get it. So, if girls can be very close to their mother, tell their mother about their relationships, then they may be cautioned about making a mistake. (Hannatu, pregnant at 18 years; outcome-live birth)

> With the mother … don't create a gap. It's a responsibility they [mothers] just have to do, having a female child under their care … there are some things that I should have known before that point [pregnancy]. There are so many things that I was ignorant of, and that's why I said no matter how [difficult] life will be, I can't give my child to my mom to raise. (Monica, pregnant at 17 years; outcome-live birth)

Participants described the lack of sex education in school as an important gap in empowering young girls for SRH care and decision-making.

> It [sex education] would have helped a lot because you don't get it at home, even in school, nobody talks about it, people are shy to talk about it. So I think it would have helped a lot if I had that education. (Mary, pregnant at 17 years; outcome-live birth)

> Maybe in Biology, they should take it [sex education] deeper than just teaching characteristics of living things. They should talk about pregnancy prevention. They can teach sex education as a subject because in Biology it does not include pregnancy or prevention. (Rifkatu, pregnant at 15 years; outcome- stillbirth)

Participants also described a lack of youth-friendly SRH services. They opined that community-based pharmacies and patent medicine vendors were more approachable and willing to provide contraceptive information and products to young people compared to clinics and health centres.

> *Sai dai, maybe, irin su chemist* [except maybe just like those chemist shops and pharmacies] because they want to sell their medicines. *Kaman asibiti* [like hospitals and clinics], a lot of people don't like to go to them for family planning, but will prefer to go to a chemist. They [health centres and clinics] feel that if you're not married, you should not be having sex or looking for family planning. (Hannatu, pregnant at 18 years; outcome-live birth)

Some participants also described experiences of poor interpersonal communication with health professionals. They felt judged by providers who did not understand the unique challenges of youth SRH and also did not communicate in ways that participants could understand.

> I think that the people working in hospitals … the doctors should have ways of approaching [patients] … but when you come to the hospital and then you are being criticised, it is really, really bad. You know we come as a layman … so, we need help. But when they [doctors] approach patients anyhow and tell them this is what you did … it makes the patients feel very bad because of the approach. It doesn't make the victim or patient open up. (Hannatu, pregnant at 18 years; outcome-live birth)

Additionally, there was an account of gender-based discrimination in the provision of SRH commodities, such as condoms, to young males but not to young females.

> There are some clinics that give free condoms to guys who come around. Maybe they can extend this to ladies as well, and also give contraceptives and advice on how to use them to ladies. (Rifkatu, pregnant at 15 years; outcome-stillbirth)

About formal social support gaps in government policies and services, participants noted the lack of access to youth development and empowerment opportunities, especially for out-of-school young people.

> … those [young girls] that did not go to school *kuma* [also], they [government] can give them work … to help them to go to school to continue with their education. (Rahila, pregnant at 19 years; outcome- live birth)

Discussion

Unintended adolescent pregnancy remains a public health concern, as it is an indicator of unmet SRH needs. To understand the contributions of social support systems toward preventing unintended adolescent childbearing, we explored the disclosure process and the perceptions of adolescents and young adults on the gaps in the support network that might have contributed to the pregnancy, in the first instance. Across most Nigerian and African cultures, gender-based socio-cultural norms make chastity a requirement for unmarried young women (Fatusi & Hindin, 2010). Considering the social norm that views adolescent pregnancy as unacceptable, the process of self-disclosure is a difficult one, as was observed in the current study.

An important factor during disclosure is the type of information shared (Vijayakumar & Pfeifer, 2020). As highlighted in our findings, the initial motive for pregnancy disclosure was how to get out of the difficult situation. The decision about who to inform, first, about the pregnancy reflected the extent of the desperation for a way out of the predicament of unintended pregnancy. Hence, disclosures were made to persons they perceived would know what to do or those more mature and knowledgeable to provide counsel on what to do about the pregnancy.

In the socio-ecological model, the family is one of the interpersonal-level factors that impact adolescent health outcomes (Blum et al., 2014). Expectedly, the most common informal support network during the unplanned pregnancy experience was the family, which was expanded to include close friends; and such persons were sometimes working in health care. According to Vijayakumar and Pfeifer (2020), self-disclosure changes coincide with social reorientation, in which adolescents grow less dependent on their parents and more reliant on their peers for social and emotional support. This reflects the stage of social reorientation that adolescence is frequently characterised by, marking a decline in reliance on and an increase in independence from parental figures (Collins & Laursen, 2013). This was evident to some extent in our study where most of the informal networks told were mothers and friends. The prominent role of the mothers as caregivers concurs with other studies, where mothers would be the most likely person to initiate discussions on SRH issues (Iliyasu et al., 2012; Izugbara, 2007). Some intimate sex partners who were involved in the initial disclosure process were told because they were responsible for the pregnancy and to seek guidance on what action to take. A study carried out in Indonesia identified relief from keeping

secrets and expectations of responsibility from the partners as drivers for disclosure (Aprianti et al., 2017). This conclusion was comparable to that from our study, in which adolescents told their partners in order to jointly reach a decision and accept responsibility for the pregnancy.

The decision to keep the pregnancy, despite considering the option of abortion, was mostly influenced by these conversations. Oluseye et al. (2022) similarly noted the decision is not solely that of the young woman; rather, it includes social and legal limitations which influence a woman's ability to convert a choice into the desired outcome. The decision to abort or keep the unplanned pregnancy is influenced by the adolescent's relationships with peers, parents, and intimate partners (Aziato et al., 2016). Additionally, Nigeria's restrictive abortion policy that limited their access to abortion, as well as religious, and socio-cultural beliefs all played significant roles in decisions to terminate the pregnancy (Oluseye et al., 2022). This was similarly observed in our study. Having someone to speak to about their predicament, despite, in some cases not receiving the advice they wanted to help terminate the pregnancy, still provided some relief to participants. The reactions of persons informed were another important aspect of the disclosure process that influenced decision-making. While support was offered to some, others noted rejection by family members upon disclosure. The mixed reaction that influenced the outcome of adolescent unplanned pregnancies noted in our study was similarly reported in a study in Ghana (Aziato et al., 2016). The majority of the young women that kept their pregnancies, were influenced by these reactions.

In our study, formal social support was limited to the involvement of religious bodies and employers, as participants in our study did not interact with other formal systems. The involvement of religious organisations was mainly to support disclosure to family and provide comfort. Other formal support systems, including health, education, and governmental policies and services have been shown to be unreliable as AFHSs are conspicuously absent from their services (Ninsiima et al., 2021). Furthermore, adolescents had to deal with the negative attitudes of health workers when seeking family planning services, noting that young men had better access to condoms (Onukwugha et al., 2019). Additionally, the adolescents felt that patent medicine vendors provided better access to contraceptive services as well as social support compared to other health workers. Even so, they noted that these services were mostly profit-motivated. The preference for patent medicine vendors has been documented in earlier studies across Nigeria (Envuladu et al., 2021; Okereke, 2010; Uneke et al., 2021). Despite concerns around the regulation and quality of medicines sold by these vendors (Beyeler et al., 2015), they remain the major source of contraceptive services due to their friendlier disposition towards young persons (Uneke et al., 2021).

It is important to note that the punitive actions attributed to religious bodies and employers highlight the stigmatisation of unintended adolescent pregnancy within the community. Even though religion is said to help young people navigate difficult circumstances (Francis et al., 2019), it has also been argued that these religious belief systems limit sexual conversations for young persons to expressions of sexuality within marriage alone as a deterrent from sexual activity (Odimegwu, 2005). This system has limitations in terms of comprehending the circumstances in which behaviours occur and the forces that drive them (Somefun, 2019). Our findings highlight that experiences of forced motherhood could be better managed, considering the psychological trauma and financial difficulties resulting from adolescent unintended pregnancy.

Implications

Poor parent–child relationship dynamics often manifesting as feelings of disconnectedness from parents, as a result of over-protection or over-discipline was noted by participants as a contributory factor in the pregnancy. For a healthy transition from early to late adolescence, and beyond, parental connectedness and communication are crucial (Blum et al., 2014); hence highlighting poor parent–child communication as a gap in adolescent pregnancy prevention. Parent–child communication in providing basic education on SRH is usually limited in the African context, in comparison to the West. Studies in Nigeria and other African countries report this communication to mainly

focus on physical development, menstruation, and abstinence (Crichton et al., 2012; Iliyasu et al., 2012; Izugbara, 2007). As highlighted by some of our participants, the absence of parent–child SRH communication has been associated with unintended pregnancy among adolescents. The cultural context and taboos surrounding parent–child communication about sex and the lack of alternative sources of information in the community undermined SRH education (Crichton et al., 2012). In the African context, when such conversations occur, they are mostly shrouded in secrecy, or incorrect information is provided, just to deter the young person from engaging in sex (Crichton et al., 2012; Iliyasu et al., 2012; Izugbara, 2007). This has been linked to a lack of SRH knowledge by parents themselves (Iliyasu et al., 2012; Izugbara, 2007). As noted in our study, research from low- and middle-income countries indicate that mothers are mostly reluctant to discuss SRH because they believe their children are immature for such discussions (Crichton et al., 2012; Noe et al., 2018). Hence, parents worry that discussing SRH would lead to their daughters becoming interested in sex (Iliyasu et al., 2012; Noe et al., 2018). This communication gap implies that poor information leaves adolescents ill-equipped to make informed decisions. Our study participants purported that mothers providing information on SRH are an important requirement in addressing unwanted adolescent pregnancies. The family setting is a potential source of education that requires further exploration in addressing youth SRH issues.

The increasing prevalence of risky sexual behaviours among young women in Nigeria, in comparison to their male counterparts as noted by Adedini et al. (2021) in their cross-sectional survey drawn from the Nigeria Demographic Health data set (2008–2018), brings to light the issues surrounding sexual and gender violence as timing of sexual debut, age-disparate relationships, and transactional sex are all contributory factors to this trend (Amo-Adjei & Tuoyire, 2018; Hoss & Blokland, 2018). This further underlines the necessity for a gender-oriented approach to adolescent SRH (Adedini et al., 2021). Insufficient training of health personnel, poor infrastructure, and lack of access to AFHSs were highlighted as hurdles to accessing care in a similar study conducted in South Africa (Geary et al., 2014). This remains an ongoing issue of concern in Nigeria, despite the high prevalence of risky sexual behaviours among young persons (Adedini et al., 2021). The healthcare system's role as a source of support for pregnant adolescents should consist of social (including financial) assistance, psychological, and health support, all of which are dependent on government policies that provide adequate funding and coordination. Divergence from these frequently results in a lack of holistic treatment, which is frequently inaccessible to pregnant adolescents.

Another gap noted by the participants was the absence of SRH education in schools, which they perceived would have been protective against unintended pregnancies. Despite the arguments for CSE in the formal education system to promote healthy sexual behaviour in young persons (Otobo et al., 2021), this is still not general practice. CSE implementation can provide a setting in which adolescents can obtain SRH knowledge and life skills via sexuality and life skill education by teachers and community health workers, potentially reducing school dropouts, teenage pregnancies, and early marriage among girls (Chavula et al., 2021). However, evidence of effectiveness of CSE from Uganda, Kenya, Thailand and Indonesia, highlights the need for comprehensive teacher training, and the sexuality education delivered within the school curriculum (Vanwesenbeeck et al., 2016). The failure to leverage education as an avenue to provide age-appropriate SRH education is a missed opportunity to address unintended adolescent pregnancies.

Limitations of the study

Inherent to qualitative studies, our findings have limited generalizability. Nevertheless, great effort was taken to ensure rigour and trustworthiness of our findings. Additionally, other formal social support systems such as schools, health centres, and community-embedded systems were not explored. Understanding the interaction between these systems and adolescent pregnancy can help us better understand their roles in the disclosure and support process, as well as benefit future studies. Furthermore, selecting a teen counselling centre as the primary recruitment venue for this

study may result in selection bias. Snowball sampling and the use of personal and professional networks to recruit eligible youngsters who had not used the counselling centre's services were used to mitigate selection bias.

Conclusion

The study highlights the avenues for preventing adolescent pregnancy by leveraging existing informal and formal support systems to provide the necessary education, resources, and social support for adolescent development and well-being. For many adolescents, the pregnancy disclosure experience was challenging. The decision to keep one's pregnancy and begin a period of new challenges and opportunities as a young mother was ultimately made by the majority of participants. Disclosure highlights the influence of informal social support systems in guiding young women in decision-making. Their decision to choose someone they are more comfortable with is based on many criteria, the most important of which is pregnancy outcome. Family support was identified as a critical component in pregnancy continuation. The missed opportunities in improving adolescent health by the formal sector were another critical factor. The complex interplay of several support systems, each with its set of responsibilities, can be a positive turning point or a negative one for the adolescent, with far-reaching consequences for the future. Considering the important role of sociocultural variables in determining adolescent SRH outcomes, we recommend the need to explore avenues of supporting parents and religious bodies on SRH education. The glaring gap in SRH education within the national curriculum, despite the introduction of the FLHE, underscores the urgent need for the Nigerian government to consider a CSE program that will suit the contextual clime and yet deliver on promoting a healthy sexual life for adolescents. Additionally, a solid commitment by the government to support the provision of AFHSs is required to effectively address the unmet SRH needs of adolescents.

Acknowledgments

All the participants are appreciated for sharing their experiences, as well as Mr Dakolom G, for assisting with recruitments, and Mrs C Bala and Mrs S Sarma for helping with data collection. The authors are also grateful to the management of the Teen Crisis Centre of Bingham University Teaching Hospital, Jos-Nigeria, for the recruitment of some of the participants and the IFP Alumni awards for funding the study.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The authors are grateful to Ford Foundation International Fellowships Program (IFP) for their financial support to Comfort Olorunsaiye through the IFP Alumni award during the study.

Data availability statement

The data that support the findings of this study are available upon reasonable request from the corresponding author. The data are not publicly available due to participants' privacy and ethical restrictions on data sharing.

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