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Navigating sexual and reproductive health issues: Voices of deaf adolescents in a residential school in Ghana

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ABSTRACT

Globally, the sexual and reproductive health (SRH) of adolescents continue to receive a lot of attention; yet little focus has been placed on the SRH needs of adolescents with disabilities, particularly in developing countries. While adolescents with disabilities experience the same feelings, needs, and desires as those without disabilities, society tends to underestimate their SRH concerns. Furthermore, adolescents with disabilities may have limited access to SRH information in comparison with their peers without disabilities and may also encounter challenges with communicating their SRH concerns. Guided by the Social Cognitive theory (SCT), this study focuses on the knowledge and experiences of selected deaf adolescents in a residential school in Ghana regarding SRH. Using Ghanaian Sign Language, twenty-five (25) participants (13 females and 12 males) aged 15–19 years were engaged in qualitative in-depth interviews. While some of the participants reported abstaining from sex despite pressure from peers, others disclosed that they had sexual experiences, both consensual and non-consensual. In most cases, these SRH behaviors were found to be influenced by participants' personal and environmental factors. Participants mentioned talking to teachers, peers, health professionals, parents and siblings about their SRH issues, but findings revealed challenges and reservations about communication with these groups of people in their social environment., It is recommended that SRH intervention strategies for deaf adolescents should focus on enhancing communication opportunities (especially with Sign Language) with parents and health professionals as they are critical elements in their environment for promoting healthy SRH behaviors.

1. Introduction

Adolescence constitutes a period of rapid physiological, intellectual, and psychosocial change, accompanied by a growing sense of independence, identity, and self-esteem (Moreland & Logan, 2000; Oladunni, 2012). Adolescents often engage in active self-exploration, as "their awareness and understanding of the world, themselves, and others increases" (Sheridan, 2008, p. 8), and one of such areas of exploration typically is their sexual and reproductive capacities. However, the sexual and reproductive health needs of adolescents remain poorly understood, under-served and/or unmet in many parts of the world (Pulerwitz et al., 2019; United Nations Population Fund [UNFPA] & Save the Children, 2009; Zulu et al., 2018).

Over the past few decades, there has been growing recognition of the need to improve adolescent sexual and reproductive health outcomes, but there has been little improvement in low- and middle-income countries (Sommer & Mmari, 2015). Even less well understood are the sexual and reproductive health (SRH) needs of adolescents with disabilities. Global estimates indicate that about 93 to 180 million young people between the ages of 10–24 years live with some form of disability, and the majority are found in the developing countries (Oladunni, 2012; United Nations Children's Fund [UNICEF], 2013).

Although adolescents with disabilities experience the same feelings, needs, and desires as those without disabilities, society tends to downplay their SRH concerns (Hardoff, 2012; Isler, Beytut, Tas, & Conk, 2009; World Health Organization, 2009). This could be attributed largely to unfounded but prevailing ideas about the sexuality of persons with disabilities. For example, Priestley (2003) notes that there are portrayals of persons with disabilities as "asexual, sexually threatening, or unquestioningly heterosexual" (p. 98). He further asserts that young people with disabilities "are often excluded from, or receive inferior levels of, sex education" (Priestley, 2003, p. 98). Scholars generally agree that persons with disabilities conceivably have unmet needs for sexual and reproductive health education and services as a

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result of peculiar challenges such as limited accessibility to relevant SRH information and services, stigma, prejudice, and vulnerability to sexual abuse (Denno, Hoopes, & Chandra-Mouli, 2015; Hardoff, 2012; Schenk et al., 2018; Sommer & Mmari, 2015).

Like all other adolescents, deaf[1] adolescents require information about puberty, the changes in their bodies and emotions, and the choices they face concerning sexual and reproductive health related behavior (WHO/UNFPA, 2009). However, deaf people do not typically receive the opportunities for growth that hearing people have access to (Sheridan, 2008). Furthermore, research on deaf adolescents' sexual and reproductive health is generally limited (Heiman, Haynes, & McKee, 2015; Job, 2004; Sebald, 2008) especially in low- and middle-income countries. Studies have estimated that "approximately 1 child in 1000 is deaf or severely hard of hearing from birth, and the prevalence rises to about 1.6 per 1000 in adolescents" (Smeijers, Ens-Dokkum, van den Bogaerde, & Oudesluys-Murphy, 2011, p. 1359), thus making them a population that requires attention. Globally, majority of the studies among deaf adolescents have focused on HIV/AIDS risk (de Andrade & Baloyi, 2010; Goldstein et al., 2010; Hanass-Hancock & Satande, 2010; Tobin-West & Akani, 2014); while a few have addressed sexual health behaviors, abuse and SRH information access among various deaf populations (Heiman et al., 2015; Job, 2004; Joseph, Sawyer, & Desmond, 1995; Sebald, 2008). However, there is a huge research gap in the African sub-region regarding sexual and reproductive health issues among deaf adolescents.

In Ghana, Mprah, Anafi, and Yeaboah (2017), and Mprah (2013, 2014) have written widely on SRH issues among deaf people, but not much focus has been placed on deaf adolescents, let alone their perceptions about their own sexual and reproductive health. A number of initiatives from as far back as 1980, culminated in the formulation of the Adolescent Reproductive Health Policy in 2000, and the launch of the National Adolescent Health and Development Programme (ADHD) in Ghana in 2001 (Kumi-Kyereme, Awusabo-Asare, & Darteh, 2014; Aboagye & Logan, 2017). However, there is not much to show in terms of how this policy has impacted the lives of adolescents with disabilities, which reflects the general outlook in Ghana concerning disability issues.

In Ghana, matters pertaining to disability and sexual and reproductive health tend to be complicated. On the one hand, beyond the age-old debate about viewing disability as either an individual problem (medical model) or as a result of societal barriers (social model), there have historically been pervasive cultural and superstitious beliefs that result in the marginalization of persons with disability (Avoke, 2002; Botts & Evans, 2010; Botts & Owusu, 2013; Mills, 2018; Reynolds, 2010). While efforts have been put into eradicating negative socio-cultural beliefs and attitudes towards disability, (for example, with the passage of the Persons with Disability Act, 2006), there continues to exist a lot of misunderstanding in the Ghanaian society (Mprah, Anafi, & Sekyere, 2014). On the other hand, conservatism regarding the discussion of sexual and reproductive health matters among the general Ghanaian population compounds the matter, and with the disability movement in Ghana focusing on basic issues such as education and employment, not much attention and advocacy have been channelled into addressing the sexual and reproductive health needs of persons with disability (Mprah et al., 2014). Meanwhile, as earlier established in this paper, persons with disabilities have SRH needs as well and particularly for persons with hearing disability or deafness, the communication challenges associated with the condition exacerbates their access to useful information and interaction about SRH issues.

[1] I use "deaf" rather than "Deaf" in this manuscript because the students interviewed for this project have had little exposure to the Deaf culture movement prevalent among ASL users in the United States. In addition, the term "deaf adolescents' is used interchangeably with "adolescents with hearing impairment" in this paper.

This paper adopts the term 'navigate' to refer to how adolescents with hearing impairments understand and utilize the information that is available to them to direct their sexual and reproductive health. Not much is known about how deaf adolescents in Ghana navigate the pressures and confusion that mark this critical stage of their growth and development, considering that most of them are restricted to a limited group of people with whom they can effectively communicate. Deaf adolescents constitute one group of adolescents with disabilities in Ghana whose SRH concerns and experiences need to be explored and addressed. This study explores the experiences that deaf adolescent students in a residential institution in Ghana have in relation to their sexual and reproductive health. The research questions are: (a) how do deaf adolescent students in the residential school apply information they have about sexual and reproductive health in their lives?; (b) what are their experiences regarding sexual and reproductive health?; and (c) what factors in their environment influence their sexual and reproductive health behaviors? It is anticipated that the findings of this study will draw attention to the peculiar needs and challenges of deaf adolescents in Ghana in order to offer appropriate interventions that create an enabling environment to support positive SRH behaviors and reduce negative or risky ones.

1.1. Social cognitive theory and sexual and reproductive health

The Social Cognitive Theory (SCT) has been selected as a framework for this study because it has been widely recognized and used by several scholars to analyze various health issues, including those concerning persons with disability and long term injuries (for example: Ravesloot et al., 2011; Wilroy et al., 2018). The social cognitive theory (SCT), propounded by Albert Bandura in 1986, asserts that individuals learn within their social environment through a variety of reciprocal interactions (Bandura, 1986). According to the SCT, there is an intricate interplay of interactions involving the person, their social context and behavior (Bandura, 1986; LaMorte, 2019).

Evolving from the Social Learning Theory (SLT), also propounded by Albert Bandura in the 1960s, the SCT posits that people's behaviors are guided by purposes and goals that are influenced by their personal beliefs of self-efficacy and by goal expectations from their behaviors within a particular social environment. There are six basic constructs within the SCT: reciprocal determinism, behavioral capability, observational learning, reinforcements, expectations and self-efficacy.

Reciprocal determinism, the core concept within the SCT, implies that the person (an individual with a set of learned experiences), the environment (external social context), and behavior (responses to stimuli to achieve goals) are constantly interacting (Bandura, 1986; LaMorte, 2019). In other words, behavior is the result of interactions between personal and environmental factors (Aarø et al., 2006). Behavioral capability refers to person's real ability to carry out a behavior, given the necessary knowledge and skills (LaMorte, 2019).

Another tenet of the SCT, observational learning, asserts that people can reproduce behavior(s) that they observe from others, and before replicating the behavior, there are anticipated consequences, referred to as expectations (Aarø et al., 2006; Bandura, 1986; LaMorte, 2019). However, whether the behavior that is witnessed and reproduced will be continued or discontinued depends on the outcome – i.e., internal and/or external reinforcement (Bandura, 1986). The sixth construct referred to as self-efficacy refers to the degree of confidence that a person has in his or her ability to perform a behavior successfully. An individual's unique characteristics, coupled with environmental factors, constitute barriers and facilitators, which have a strong influence on the person's self-efficacy. SCT has been widely used in promoting positive health behaviors due to the emphasis on the individual and his or her environment (LaMorte, 2019) and has proved to be a valuable and productive framework for developing sex education programs (Aarø et al., 2006). In this study, the SCT helps to explain how adolescents with hearing impairments deploy their knowledge and experiences

regarding sexual and reproductive health, as well as how the factors in their environment serve as barriers or facilitators in that quest.

1.2. Study site

The study site is one of nine (9) public residential schools for the deaf in Ghana, with a population of over four hundred students. Students come from different parts of the country as well as neighbouring countries. The school runs the Ghana Education Service (GES) basic education curriculum, from kindergarten to Junior High School (JHS). The JHS progresses from level one to level three, equivalent to grades seven to nine in other jurisdictions. In addition, there are vocational and technical units where students may progress to, in order to learn specific trades.

2. Methods

A qualitative research design was employed to enable the researcher gain in-depth information about the subject matter. Study participants were selected from one of the residential schools for the deaf in Ghana. The school had a population of about four hundred students, with classes from Kindergarten to Junior High School (JHS) and Vocational/Technical units. The Junior High School The study population comprises adolescents in the Junior High School and the Vocational/Technical units, who constituted a total of 68 students. Final year JHS students were excluded from participation because the field work period coincided with a time when they had to prepare and take their final examinations (the Basic Education Certificate Examination, BECE).

Purposive sampling was employed to select participants for the study and the inclusion criteria were as follows: must be a Junior High School student, aged 15–19 years, and willing to participate in the study. The study targeted those at the Junior High School (JHS) level because part of the JHS curriculum in Ghana covers aspects of adolescent sexual and reproductive health. It was anticipated that in addition to participants' own experiences, their exposure to some SRH issues in their curriculum could help them in responding to the interview questions. Altogether, 25 deaf adolescents participated in the study (13 females and 12 males). Data saturation was reached after interviewing about 19 participants. However, an additional six students who had expressed interest in participating were included to further confirm that no new themes were emerging from the interviews, and to honour their motivation towards participating in the study.

A semi-structured interview guide was designed by the principal investigator to elicit information from participants. The interviews were carried out in an informal and conversational manner in order to put participants at ease. Sign language interpreters (one male and one female) were recruited to assist in the face-to-face in-depth interviews. The male interpreter was assigned to the interviews with male adolescents and the female interpreter was assigned to interviews with the female participants. To protect the privacy of the participants, the sign language interpreters were not recruited from the residential school where the study took place. Research assistants (one male and one female) were also trained to assist the principal investigator in conducting the interviews. They helped to schedule interviews, transcribe and edit audio-recorded interviews. Participants were given prior information about the presence of a sign language interpreter, and only those who were comfortable with that arrangement were engaged in the study. Consent was provided by the leadership of the residential school, because the school acts as both an academic institution and *in loco parentis* for students in their care. Informed consent was also sought from participants aged 18 and 19 years because they were of legal adult age in Ghana, while assent was sought from those aged 15–17 years. The Ethics Committee for the Humanities at the University of Ghana provided ethical clearance for the study. Sign language interpreters and research assistants were all bound by the research ethics of confidentiality, privacy, no harm to participants, and voluntary participation. No one was coerced to take part in the study, and neither was any participant pressured to divulge information that he or she was not comfortable with. Interviews lasted an average of 70 min. With participants' permission, interviews were audio-recorded (that is, the voice rendition of the questions and responses that were being communicated through sign language interpreters). To ensure confidentiality and anonymity of research participants, details in their profiles that may be used to identify them were eliminated or altered. All names used in the report are pseudonyms.

The audio-recorded data was transcribed and checked for accuracy by listening to the audio files while reading the transcripts. Data from 25 transcripts were analysed using thematic analysis (Braun & Clarke, 2006). The first step was familiarization with the data, which was done by reading the transcripts repeatedly to get a grasp of the content. This process resulted in the organization of the data from each transcript according to the broad topics explored in the study, for example "knowledge about puberty and changes that occur", "sexual desires". This was followed by the development of initial codes which typically highlighted some points of interest to the researcher. For instance, when a participant expressed excitement or was puzzled about the physical changes that he/she was experiencing, it was coded as "excited about bodily changes" or "puzzled about bodily changes". In the ensuing phase of the analysis, the researcher searched for themes by combining different codes which focused on a common subject. Using the example previously given about a participant expressing excitement or being puzzled about pubertal changes, the central theme used at this stage was "reactions to pubertal experiences".

The fourth phase involved going over the initial themes, and checking, on one level, whether "candidate themes formed a coherent pattern", and at the second level, whether the candidate themes reflected "the meanings evident in the data set as a whole" (Braun & Clarke, 2006, p. 91). During this phase, the themes were revised by either merging some or creating sub-themes under broader one. Other themes were maintained as they originally were. In phase five, the themes were defined and refined to ensure that each theme was distinct in the story it told, did not overlap with other themes, but fitted well enough to tell the whole story about the data. In phase six, the final report was written up. The written report highlights two broad themes: 'dealing with sexual desires/pressures' and 'reaching out'. Each of these themes has sub-themes under which the findings are discussed.

2.1. Demographics

Participants ranged in age from 15 to 19 years. Thirteen were female, while 12 were male. Seventeen out of the 25 participants reported that, though they were born hearing, illness, accidents, and unknown factors resulted in their becoming deaf. Eight participants reported being born with some degree of deafness. Participants had been in the residential school for a minimum of three years and a maximum of eight years. At the time of the study, eight participants were in their first year of Junior High School, fifteen were in their second year, and two were in a Vocational programme at the residential school. Table 1 provides a summary of the demographic characteristics of study participants.

3. Findings

3.1. Dealing with sexual desires and/or pressures

Participants expressed various concerns about how the changes they had been experiencing as adolescents affected them. There was curiosity, confusion or both, regarding how to deal with the "feelings" they experienced, and they applied different approaches in dealing with these pubertal experiences. Some participants maintained that in spite of the pressure and difficulty, they abstained from sex through various

Table 1
Sample demographics.

Females				Males			
#	Pseudonym	Age	Class	#	Pseudonym	Age	Class
	Akeela	15 years	JHS 2	14	Tinji	19 years	JHS 2
	Adima	19 years	JHS 2	15	Feyi	19 years	JHS 2
	Cora	16 years	Vocational	16	Kita	17 years	JHS 1
	Bree	17 years	JHS 2	17	Okello	18 years	JHS 2
	Bisa	16 years	JHS 1	18	Bama	18 years	JHS 2
	Deela	18 years	JHS 2	19	Buti	15 years	JHS 2
	Isla	17 years	JHS 2	20	Ayor	15 years	JHS 1
	Pippa	15 years	JHS 2.	21	Asher	18 years	JHS 2
	Marcia	15 years	JHS 1	22	Declan	17 years	JHS 2
	Hamisi	18 years	Vocational	23	Wyatt	19 years	JHS 2
	Heidi	17 years	JHS 1	24	Demas	16 years	JHS 1
	Zeka	15 years	JHS 2	25	Jango	18 years	JHS 1
	Lexi	15 years	JHS 1				

*JHS 1 = Grade 7 *JHS 2 = Grade 8.

means, while others admitted to having sexual experiences either through consensual or forced means.

3.1.1. Abstinence

Physical activities, dwelling on adult advice or pre-empting possible negative outcomes of sex, as well as 'fleeing' from a troubling situation were some of the strategies that some participants used to manage their sexual drives.

> When you reach your puberty, you have feelings, so you need to do more exercise, to take your mind off… That's what our teacher taught us. (Akeela, female, 15 years)
> I do have my friends who tell me [sex] is sweet and that I should give it a try… You know, the feeling, sometimes when it comes, … In fact, I find a way to escape [from their presence] so that I will not be tempted so hard.
> (Tinji, male, 19 years)
> All I can say is that if you don't want to get pregnant then you better stay away from sex. (Cora, female, 16 years)
> I normally go to the field to run or do some little exercise to clear my mind from such feelings. I do some skipping … (Okello, male, 18 years)

Altogether there were 10 participants who indicated that they try to abstain from sex. However, one of them, Okello, reported having had a one-time sexual experience 3 years prior to the interview, but said he had been trying his best to abstain since then. Some other participants admitted that it was not always easy to abstain and that they needed to have intercourse by all means. Satisfying sexual urges occurred in two main ways: consensually or forcibly.

3.1.2. Consensual sex

Some participants, both male and female, clearly articulated that sexual activity occurs consensually among them. While some shared this as their experience, others stated it as the ideal situation regarding sexual activity.

> When I feel for [sex] I approach the boys…. they agree… because the boy also has the desire… and has that same feeling. (Lexi, female, 15 years)
> Sometimes students will converge at a secret place to have sex and it's all because of the feelings they are experiencing… I have tried it [sex] before…. The lady agreed to it. (Feyi, male, 19 years)
> I need your consent before I can have sex with you… (Ayor, male, 15 years)

Despite the recognition that sexual activity needs to be consensual, participants also talked about situations in which sexual encounters occur without consent from one party.

3.1.3. A cultural narrative of forced sex

Interview data suggests a troubling pattern in which students perceive that forced sex can be expected under certain circumstances. The majority of the male participants reported the belief that sometimes males forcibly have sex with females, especially when the latter refuse to consent to their advances and requests. Stories told by different participants suggest that this belief is firmly held. Examples are as follows:

> Maybe if I see a lady and I approach her by telling her that I love her, and she refuses, I could easily rape her if I get hold of her….Let me add this … When that situation happens, you will see that ladies would be shouting. So it will be clear that there was no agreement between the two parties to have sex…. but I have no experience about rape. (Declan, male, 17 years)
> But with guys, if they approach the girls and the girls refuse … then they try to catch them by force and sleep with them (Asher, male, 18 years)
> If you see someone and she is beautiful and you love her, you approach her that I love you and I want to sleep with you and if she refuses, then by force you grab her … (Kita, male, 17 years)

To support their belief that forced sex is an expected response to sexual frustration, several participants narrated a specific case of gang rape that once happened at the school.

> There were some guys who wanted to sleep with a certain lady in this school. But the lady consistently refused to have any affair with them. So it happened that one evening when the girl went to their area, the boys took advantage and slept with her…. About two to three boys. (Ayor, male, 15 years)
> I know of an incident where two boys or three boys attack a lady and sleep with her, I know of that….It once happened here [at the school] and they were dismissed. (Demas, male, 16 years)
> I heard [about an incident] … one lady and three gentlemen… They tried to harass that lady… by force… in this school. (Tinji, male, 19 years)

The fact that stories about this incident (whether correct or not) were told by different participants in the individual interviews, (though with varying details) suggest that it is circulating as a formula story or cultural narrative in the student culture of the school (Loseke, 2007).

Three of the male participants, Asher, Jango and Bama, individually reported personal experience with forced sex. Asher intimated that he had a lot of difficulty controlling his sexual drive and that is what led him to force himself on a girl. According to him, the incident happened while he was at home.

> Some time ago, I saw a lady, and I approached her, …and said, "I love you, so I want to have sex with you". In fact, I tried convincing her, but she refused. Then later, on she came to my room. But looking at how I had erected and all that, that day, in fact, I was so determined to sleep with her, …. So when it happens like that, please it is not easy for me. I have to sleep with someone. In fact, I initially approached her nicely that, 'look at what I am going through, I can't sleep, I have feelings… so can we do it?' She said no, so I forced her when she entered my room. (Asher, male, 18 years)

Asher further explained that his lack of sexual control was so bad that that he had been sent to the hospital to be examined before. In the case of Jango and Bama, they reported cases of gang rape. According to Bama, he was pressured by the boys in his gang to rape the girl, but Jango did not give any such indication of being compelled.

> I was forced to rape someone… because of friends…. They told me it's sweet so I should go in for it, so I forced myself to rape somebody…Yes, it's true …It was a group [of boys] …only one girl …

they pressured me…. (Bama, male, 18 years)
About three years ago, we were three [boys] and we slept with one lady …In fact we forced her. (Jango, male, 18 years)

The foregoing findings depict how forced sex seemed to have become part of the accepted cultural narrative among the male participants. This is explored in more detail in the discussion section. The next major theme addresses how the participants sought help that related to their SRH needs.

3.2. Reaching out

While the revelations from the participants about their pubertal experiences and struggles could be likened to those of the general adolescent population, their situation is somewhat complicated because unlike the general population of adolescents, these students need people they can easily communicate with. Overall, this theme covers the different groups of people to whom participants try to reach out, to share their challenges regarding their sexual and reproductive health. Participants mentioned that they talk to teachers (or other school personnel) and peers mostly, but a few of them also reached out to health professionals and family members. Others maintained that they preferred to keep matters regarding their sexual and reproductive health to themselves since they did not want to be subjects of gossip or ridicule.

3.2.1. Teachers (and other school personnel)

Personnel in the residential school such as teachers, counsellors, 'house mothers' and 'house fathers' were identified by a majority of the participants as those they confide in about their sexual and reproductive health issues.

I contact my teacher. This is because when I talk to the teacher, they do not inform any other person…they are wise, and so they will not gossip…. (Akeela, female, 15 years)
I normally go to our school counselor…. he has been advising us to desist from sex at our age…. And he keeps on telling us not to entice the ladies to sleep with them…. It's not easy to tell someone what you are going through though… (Kita, male, 17 years)
I don't trust my fellow students much but I believe in what the teachers say. (Marcia, female, 15 years)
Sometimes it's hard for me to contact somebody because of what I'm going through…. There is one teacher though that I'm very cordial with, so I do go to him, especially to his place, to maybe talk about this issue…. He is the first person I would go to…. In fact, sometimes the teacher himself will look at the way I would be behaving, and he will ask to see me. (Feyi, male 19 years)

3.2.2. Friends (Peers)

A number of participants stated outrightly that when it comes to matters relating to sexual and reproductive health, they usually confide in their friends more.

My friends… because they are just like me and they have similar experiences…. We normally group for discussions, so when we group like that, it's an opportunity for me to bring my problem up… they don't gossip about me…. (Ayor, male, 15 years)
It is friends I depend on. (Bree, female, 17 years)
I confide in my friends. Friends come first! (Asher, male, 18 years)

Although Feyi had previously indicated that he trusts or confides in his teachers, he also admitted discussing SRH issues with friends

With friends it's normal because we discuss some of these things. (Feyi, male, 19 years)

Although some participants felt comfortable reaching out to their peers, some were rather wary of their friends. According to Marcia (female, 15 years), "friends can sometimes be deceptive…". Akeela's challenge had to do with the pressure that tends to mount when friends get involved.

The problem I have is that they [friends] will force you…. After listening to them you have to practice what they say. (Akeela, female, 15 years)

While there is a general awareness that adolescents usually like to identify with their peers, it is interesting to note the reservations that some of the participants harboured in that regard.

3.2.3. Health professionals

Participants indicated that they sometimes approached health professionals with their questions and concerns. The health professionals occasionally visit their schools to give them health talks. Other participants had actually sought services from the hospital before, for various reasons such as painful menstruation or infections. However, they highlighted a common constraint which was the lack of interpreters at the hospital.

For instance, when I am having my menses and I feel pain, I quickly go to the hospital…. (Deela, female, 18 years)
Sometimes when I go to the hospital, they would talk and talk and talk without sign language interpreter… But I will still go to the clinic… Because they have the medicine to give. For example, if I feel some itching in my vagina I go to the clinic and then they would give medicine to take and I feel fine… they should add the interpreters… (Marcia, female, 15 years)
There are doctors and nurses who visit the school [from time to time], so I am able to communicate my sexual and reproductive health needs to them when necessary…. But when the need arises, I also go to the hospital…. But there is no interpreter at the hospital …. (Akeela, female, 15 years)
When I am having vaginal infections … I go to the hospital. But there are a lot people there and they don't have interpreters. (Heidi, female, 17 years)

3.2.4. Parents and siblings

A few participants acknowledged that they could confide in their parents or siblings about their SRH issues. Some of these participants were however selective about the kind of SRH issues they discussed with their parents (Bree for example). In the case of Asher, his father was the one who reached out to him about his son's SRH difficulties.

I confide in my sister … the second born. She is very knowledgeable …. My sister knows sign language, so I am fine. (Bisa, female, 16 years)
My mother…it is my mother who explains things to me. I don't contact anybody else, only my mother…. I only approach my mother when I have menstrual problems. (Bree)
My father… at home, when it happens like that… my mood changes, so he will ask, "oh, are you sick? Are you feeling cold? Do you have headache?" And through that, I will share…what I'm going through. (Asher, male, 18 years)

Asher, who had earlier intimated that he had difficulty controlling his sexual urges, explained that at a point in time, he was sent to the hospital by his father to get medical examination.

When I informed my father about what I am going through… my father sent me to the hospital to be checked on, but there they told him it is a normal thing in every human being. (Asher, male, 18 years)

For a participant like 15-year-old Akeela, she reported that her parents only advise her to "stay away from boys", the cliché most parents of adolescent girls would offer. However, the majority of participants clearly indicated that they could not (and would not) discuss SRH matters with their parents because, first, their parents were not

proficient in sign language, and second, there was the perception of being deviant if a child brings up SRH issues for discussion with their parents.

> Don't even talk about my parents! My mother doesn't even know the sign language! I alone I am quiet when I go home. (Adima, female, 19 years)
> With my parents, you know, they gave birth to me alright, but I can't rely on them…Because with such [SRH] issues, sometimes they tend to think that maybe I'm misbehaving, and they can punish me for that. (Buti, male, 15 years)
> For parents, out! … With my parents, I will never tell them [about my SRH issues]. (Jango, male, 18 years)

3.2.5. No one

Although some participants had teething SRH issues, they had decided against confiding in anyone about them. These participants were aware of the options available to them, but largely due to mistrust and uncertainty about confidentiality, they preferred to keep matters to themselves. Some of their explanations were as follows:

> A teacher is human and can one day tell one of my colleagues. In case I behave badly in school at some point in time, the teacher can even disclose my information to them. So I'll keep it to myself! I won't tell anyone! (Okello, 18 years)
> I won't go to anyone… I don't trust anyone so I will just keep it to myself (Jango, male, 18 years)
> I will be quiet about it.… Maybe if I inform someone, they will tell me that "aaaaahh, you are having sexual intercourse', so I better keep quiet… (Lexi, female, 15 years)
> I don't confide in anyone. I don't have anyone that I trust very much.… Nobody! (Tinji, male, 18 years)

Table 2 provides a summary of the findings according to the major themes and sub-themes.

4. Discussion

This study explored the SRH experiences of deaf adolescent students in a residential institution in Ghana. Participants acknowledged their experiences of having sexual drives or feelings which they dealt with by either distracting themselves with other activities to help them abstain or having sexual relations to satisfy those sexual drives. For those who chose abstinence, their reasons were fundamentally related to anticipated undesirable outcomes resulting from having sexual relations such as unwanted pregnancy or contraction of STIs. In this context, as explained by the SCT, they had no expectation of a positive outcome emerging from yielding to their sexual desires, and were therefore ready to stick with their decision and effort to abstain from sexual relations. Aarø et al. (2006) affirm that in relation to establishing a behavior pattern, "people set individual goals, identify strategies to accomplish these goals, and monitor and evaluate the outcomes of their behavior" (p. 156). Similarly, participants who indulged in consensual sexual relations to satisfy their sexual urges operated from the point of view that as long as the outcome was positive, in this case, having their sexual urges satisfied, it served as reinforcement of the behavior performed.

While it is well-established that adolescence is a period partly marked by the development of sexual drives, very few studies have explored this issue among deaf adolescents globally (Joseph et al., 1995; Kolibiki, 2014; Retznik et al., 2017; Rusinga, 2012), and no study in Ghana has yet been sighted. Kolibiki (2014) reasons that because the sense of sight and touch are more developed among the deaf than among their hearing counterparts, touching or caressing is more comprehensible and appreciated by the deaf; and indulging frequently in that behavior could inevitably result in a sexual relationship (Kolibiki, 2014). It is important to note that although the research setting (which was a residential facility) did not permit students to have sexual relations, the study reveals that some participants managed to indulge in consensual sex, nonetheless. This finding confirms the assertion by Shakespeare, Gillespie-Sells, and Davies (1996) that young persons with disabilities do engage in sexual relationships, regardless of whether they are in restricted residential institutions or not.

Apart from consensual sex, there was a revelation of a cultural narrative existing among some male participants regarding forced sex. This narrative was that if the object of one's sexual desire (in this case a female) refused to consent to mutual intercourse, then the male could force himself on the targeted female. This may be explained by the SCT given the context that there were environmental pressures (such as negative peer influence) as well as personal factors (such as inability to control one's sexual urges) that drove some of the participants to indulge in such behavior.

In a study by Cheng and Udry (2002) which assessed sexual behaviors of adolescents with physical disabilities, boys with mild disabilities confessed to having forced sex with others before. Joseph et al. (1995) study also revealed that approximately 25 percent of respondents in a survey at Gallaudet, an educational institution for the deaf, reported having been victims of forced sex. In this study, three male participants confessed to ever forcing a girl to have sex with them and two out of the three accounts implied gang rape. Even for participants in this study who did not report any personal experience, they clearly articulated their knowledge about the occurrence of forced sex, and further shared examples to illustrate their understanding. Being a

Table 2
Summary of major themes, sub-themes and sample quotes.

	Major Themes	Sub-themes	Sample quotes
1	**Dealing with sexual desires and/or pressures**	a) Abstinence	"All I can say is that if you don't want to get pregnant then you better stay away from sex." (Cora, female, 16 years)
		b) Consensual sex	"Sometimes students will converge at a secret place to have sex and it's all because of the feelings they are experiencing… I have tried it [sex] before…." (Feyi, male, 19 years)
		c) A cultural narrative of forced sex	"If you see someone and she is beautiful and you love her, you approach her that I love you and I want to sleep with you and if she refuses, then by force you grab her…"(Kita, male, 17 years)
2	**Reaching out**	a) Teachers (and other school personnel)	"I contact my teacher. This is because when I talk to the teacher, they do not inform any other person… they are wise, and so they will not gossip…" (Akeela, female, 15 years)
			"My friends… because they are just like me and they have similar experiences…." (Ayor, male, 15 years)
		b) Friends (Peers)	"I don't confide in anyone. I don't have anyone that I trust very much…. Nobody!" (Tinji, male, 18 years)
		c) Health professionals	
		d) Parents and siblings	
		e) No one	

cultural narrative, the accounts given by participants were varied due to the unique ways in which the participants evaluated the phenomenon (Loseke, 2007). While forced sex may be attributed to unequal power relations between males and females in some societies (Richardson, 1993), Ghana not being an exception, the SCT draws attention to how such inequality could feed into males' perceptions of their behavioral capabilities regarding sexual norms. It is important to note that regardless of whether the participant had been a perpetrator of forced sex or not, the accounts did not suggest an approval of the act per se.

The experience and/or knowledge of forced sex is undoubtedly familiar to various adolescent populations. In a study by Afenyadu and Goparaju (2003) in which they investigated adolescent SRH behaviors in Dodowa, a town in Ghana, both female and male adolescents disclosed having ever been forced to have sex. Ogunfowokan et al. (2016) also revealed from their study in Nigeria that, out of a sample 338 adolescent boys, six percent reported having raped an adolescent girl in the past, and of this number, 55 percent reported they had participated in gang rape. That gang rape is a phenomenon occurring among adolescents in general, including deaf adolescents, is an issue that needs critical attention. Some experts in public health believe that rape is usually perpetrated based on a desire to dominate the victim and not necessarily for sexual fulfilment (Leach, 2004). However, in this study, two other reasons emerge, which were lack of self-control and pressure from peers. Invariably, the circulating narrative about forced sex among some study participants could result in a subconscious 'code' (Loseke, 2007; Polkinghorne, 1991) which could influence their sexual lives.

When faced with SRH challenges, participants typically reached out to people with whom they could easily communicate with (using sign language) to help them gain direction regarding that phase of their life. Teachers (or other school personnel) and friends/ peers stood out as the most preferred and frequently consulted in this regard. This was followed by health personnel, parents and siblings, most of whom participants expressed difficulty in communicating with. A few of the participants however preferred to keep to themselves in matters relating to their SRH lives.

Teachers of deaf students are described by Shaul (1981) as parent surrogates because of the unique 'parental' role they play in the lives of deaf children, especially those in residential schools. Teachers were described by some participants in this study as trustworthy, cordial, and able to maintain confidentiality about issues the participants discussed with them. While this is helpful to the extent that some of the adolescents are able to open up to responsible adults, some participants refused to talk to teachers because they did not want to be used as scapegoats. This paradox shows that teachers in residential schools for the deaf require specialised training in handling the SRH issues that adolescents may present to them. It is also important that deaf adolescent students understand the limits of confidentiality that teachers can exercise, especially if the issues discussed in private have dire implications for the student, his or her colleagues, or the school-wide community.

The place of peer interactions among adolescents cannot be underestimated (Brown, 2013). Nonetheless, it was interesting to find that while some participants were completely comfortable with sharing their SRH issues with their peers, others were strongly opposed to doing so. For those who chose to confide in their friends, their reasons bordered on trust and commonality of experiences. Meanwhile participants who opposed discussing SRH matters with friends cited mistrust and undue pressure from friends to practice their recommendations on issues that are discussed with them.

A few of the participants stressed their preference to discuss SRH issues with health professionals, either when the health professionals visited their school for health talks or when the students went to the hospital themselves. It was no surprise that the main SRH issues that participants cited in this context included vaginal infections, menstrual problems and for one male participant, lack of sexual control. However, participants who preferred to talk to health professionals mentioned the lack of sign language interpreters at the hospital as a major challenge. When it comes to SRH matters, people typically prefer private consultations with health providers, and the case is no different when it comes to adolescents. It is critical for healthcare providers to make all the appropriate accommodations and provide adequate information to children and adolescents with disabilities and their significant others in order to facilitate overall health service delivery (Murphy & Young, 2005). This would include sign language interpretation for deaf patients. It would be important for a healthcare provider who is proficient in sign language to interpret for the deaf adolescent and the consulting physician since that interpreter would first, be a neutral person in the life of the deaf adolescent, and second, understand the health terminology that may be used. Here again, details relating to confidentiality and being a minor need to be clearly communicated, but at least, the deaf adolescent would have confidence that he or she would be attended to in a language that he or she comprehends.

In spite of the common notion that adolescents do not typically confide in their parents about SRH matters, Whitaker and Miller (2000) suggest that when parents communicate with their teens about sex, they are more likely to consider their parents' information as more accurate, and therefore act on that instead of what their peers may tell them. It is when the parents fail to provide the necessary information to their adolescent children that they turn to peers (Whitaker & Miller, 2000). In the context of this study, the majority of participants reported a major communication challenge between themselves and their parents and siblings. Invariably even if these adolescents wanted to discuss SRH matters with their parents, the language barrier made it difficult or impossible. One probable reason for the existence of this challenge is that most of the participants (17 out of 25) reported acquiring the hearing disability in their middle to late childhood, implying that their parents used to communicate with them as hearing children. According to Sheridan (2008), parents' knowledge, experience, and comfort levels are factors to be considered in their adjustment to the unexpected responsibility of being a parent of a deaf child (especially if neither parent is deaf). In effect, the values of hearing parents and those of their deaf adolescent may be a source of tension, as the deaf adolescent attempts to establish individuality in many things, including the exploration of sexual behaviors.

It is well-documented that about ninety percent of deaf children are born to two hearing parents (Joseph et al., 1995; Sheridan, 2008) and therefore these parents may have little awareness and understanding of deafness and how to handle it if not provided with appropriate tools and support. Meyers and Bartee (1992) observed in their study that while there was a trend toward improvement in parents' ability to sign, deaf children of hearing parents still rated their parents' proficiency in sign skills as low. Consequently, this results in deaf children having limited access to the lessons about life and society that are usually transmitted within family settings (Meyers & Bartee, 1992). Furthermore, other studies suggest that parents who do learn sign language often struggle to learn signs relating to sexuality (Shaul, 1981).

Participants who indicated that they preferred to keep SRH matters to themselves generally did not trust anyone to keep their issues in absolute confidence. Kolibiki (2014) points out that while it is difficult for deaf people to talk openly about sex, it is "even more difficult when using sign language, because sign language, uses visual symbols which evokes sexual acts too clearly, therefore they avoid dealing with this issue" (p. 401). Whether it is a due to lack of trust or discomfort with 'signing' about personal SRH issues, or to any other reason for that matter, it is important that deaf adolescents are provided a supportive environment at home, in school, and in the wider community so that they can communicate their SRH needs.

5. Conclusion

Findings of this study indicate that deaf[1] adolescents grapple with

similar sexual and reproductive health issues as their counterparts without disabilities. However, without considering their unique circumstances such as limited avenues for sign language communication and less stimulating opportunities for development compared to hearing adolescents, intervention for this population may not be effective. Most parents and health professionals are limited by communication barriers, which lead deaf adolescents to interact more with their teachers and peers, and in other cases, keep to themselves about their SRH concerns. Considering that although the participants of this study were in a residential educational setting where they were prohibited from having sexual relations, some did engage in sexual relations, nonetheless. The greater concern has to do with the outcomes of their sexual explorations and how to seek help, if need be, about those outcomes, bearing in mind that the general Ghanaian social environment does not offer much opportunities for interaction with persons with hearing impairments. This draws attention to the need for more pragmatic approaches in dealing with SRH issues within this population that acknowledge the reality, including the socially circulating formula stories about forced sex (Loseke, 2007; Priestley, 2003). It is recommended that the phenomenon of forced sex be investigated in a broader study to help identify factors that drive adolescent boys (both with and without disabilities) to engage in such actions.

Furthermore, professionals in the public health and helping fields (such as social workers), parents, and policy makers need to be made aware of the peculiar needs of deaf adolescents and should work collaboratively with the schools to meet identified needs. For example, Chapple (2019) addresses critical elements and skills that professional social workers need to offer culturally competent services to deaf clients in mental health settings. These skills and competencies are adaptable and transferrable to providing SRH services for deaf adolescents both in school and community settings.

Some limitations of this study need to be highlighted. Because data was collected using sign language, there was the possibility of data loss through interpretation from researcher to sign language interpreter to participant and vice versa. Being cognisant of this, a lot of probing questions were used to verify information that was passed on through the sign language interpreters. Furthermore, it would have been interesting to engage deaf adolescents who were out of school about how they navigate their SRH lives for the purposes of comparing with the responses of this study's participants, who were students in a residential educational setting. Much as an endeavour of such nature would require more resources, it would help expand the knowledge base about the SRH lives of deaf adolescents in Ghana. Nonetheless, the findings of this study provide relevant empirical data which serves as a foundation for future studies about the SRH lives of deaf adolescents, and adolescents with disabilities in Ghana generally.

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Ethics approval

The research protocol employed in this study was approved by the Ethics Committee for the Humanities (ECH) at the University of Ghana, Legon, and all participants provided appropriate informed consent and assent. Before data collection, consent was provided by the appropriate authorities of the residential school, because the school acts as both an academic institution and *in loco parentis* for students in their care.

Author statement

The manuscript titled '*Navigating sexual and reproductive health issues: Voices of deaf adolescents in a residential school in Ghana'* is solely authored by Abigail Adubea Mills (PhD), of the Department of Social Work, University of Ghana, Legon.

References

Aarø, L. E., Flisher, A. J., Kaaya, S., Onya, H., Fuglesang, M., Klepp, K. I., & Schaalma, H. (2006). Promoting sexual and reproductive health in early adolescence in South Africa and Tanzania: Development of a theory-and evidence-based intervention programme. *Scandinavian Journal of Public Health, 34*(2), 150–158.

Aboagye, P. Logan, D.Z. (2017, February 20). GHS adopts new policy on adolescent health development service. *Graphic Online*. Retrieved from https://www.graphic.com.gh/news/general-news/ghs-adopts-new-policy-on-adolescent-health-development-service.html.

Afenyadu, D., & Goparaju, L. (2003). *Adolescent sexual and reproductive health behavior in Dodowa Ghana.* Washington DC: Centre for Development and Population Activities.

Avoke, M. (2002). Models of disability in the labeling and attitudinal discourse in Ghana. *Disability & Society, 17*(7), 769–777.

Bandura, A. (1986). *Social foundations of thought and action. a social cogni-tive theory.* Englewood Cliffs, NJ: Prentice Hall.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa.

Botts, B. H., & Evans, W. H. (2010). Ghana: disability and spiritualiity. *Journal of International Special Needs Education, 13*, 32–39.

Botts, B. H., & Owusu, N. A. (2013). The state of inclusive education in Ghana, West Africa. *Preventing School Failure: Alternative Education for Children and. Youth, 57*(3), 135–143. https://doi.org/10.1080/1045988X.2013.798776.

Brown, B. B. (2013). Adolescents' relationships with peers. In R. M. Lerner, & L. Steinberg (Eds.). *Handbook of Adolescent Psychology*. New York: Wiley.

Chapple, R. L. (2019). Culturally responsive social work practice with D/deaf clients. *Social Work Education, 38*(5), 576–581. https://doi.org/10.1080/02615479.2019.1595569.

Cheng, M. M., & Udry, J. R. (2002). Sexual behaviors of physically disabled adolescents in the United States. *Journal of Adolescent Health, 31*(1), 48–58. https://doi.org/10.1016/S1054-139X(01)00400-1.

de Andrade, V., & Baloyi, B. (2010). HIV/AIDS knowledge among adolescent sign-language users in South Africa. *African Journal of AIDS Research, 9*(3), 307–313. https://doi.org/10.2989/16085906.2010.530189.

Denno, D. M., Hoopes, A. J., & Chandra-Mouli, V. (2015). Effective strategies to provide adolescent sexual and reproductive health services and to increase demand and community support. *Journal of Adolescent Health, 56*(1), S22–S41. https://doi.org/10.1016/j.jadohealth.2014.09.012.

Goldstein, M. F., Eckhardt, E. A., Joyner-Creamer, P., Berry, R., Paradise, H., & Cleland, C. M. (2010). What do deaf high school students know about HIV? *AIDS Education and Prevention, 22*(6), 523–537. https://doi.org/10.1521/aeap.2010.22.6.523.

Hanass-Hancock, J., & Satande, L. (2010). Deafness and HIV/AIDS: A systematic review of the literature. *Ajar-African Journal of Aids Research, 9*(2), 187–192. https://doi.org/10.2989/16085906.2010.517488.

Hardoff, D. J. (2012). Sexuality in young people with physical disabilities: Theory and practice. *Georgian Medical News, 9*(210), 23–26.

Heiman, E., Haynes, S., & McKee, M. (2015). Sexual health behaviors of deaf American Sign Language (ASL) users. *Disability and Health Journal, 8*(4), 579–585.

Isler, A., Beytut, D., Tas, F., & Conk, Z. (2009). A study on sexuality with the parents of adolescents with intellectual disability. *Sexuality and Disability, 27*, 229–237. https://doi.org/10.1007/s11195-009-9130-3.

Job, J. (2004). Factors involved in the ineffective dissemination of sexuality information to individuals who are deaf or hard of hearing. *American Annals of the Deaf, 149*(3), 264–273.

Joseph, J. M., Sawyer, R., & Desmond, S. (1995). Sexual knowledge, behavior and sources of information among deaf and hard of hearing college students. *American Annals of the Deaf, 140*(4), 338–345. https://doi.org/10.1353/aad.2012.0379.

Kolibiki, H. M. (2014). A Study of emotional relationships among deaf adolescents. *Procedia-Social and Behavioral Sciences, 114*, 399–402. https://doi.org/10.1016/j.sbspro.2013.12.719.

Kumi-Kyereme, A., Awusabo-Asare, K., & Darteh, E. K. (2014). Attitudes of gatekeepers towards adolescent sexual and reproductive health in Ghana. *African Journal of Reproductive Health, 18*(3), 142–153.

LaMorte, W. W. (2019). The social cognitive theory. Boston University School of Public Health. Retrieved from https://sphweb.bumc.bu.edu/otlt/MPH-Modules/SB/BehavioralChangeTheories/BehavioralChangeTheories5.html.

Leach, F. (2004). Gender violence in schools - Malawi. Brighton, UK: Sussex School of Education. Retrieved from https://www.sussex.ac.uk/webteam/gateway/file.php?name=gender-violence-in-schools-malawi-newsletter4.pdf&site=320.

Loseke, D. R. (2007). The study of identity as cultural, institutional, organizational, and personal narratives: Theoretical and empirical integrations. *The Sociological Quarterly, 48*(4), 661–688. https://doi.org/10.1111/j.1533-8525.2007.00096.x.

Meyers, J. E., & Bartee, J. W. (1992). Improvements in the signing skills of hearing

parents of deaf children. *American Annals of the Deaf, 137*(3), 257–260. https://doi.org/10.1353/aad.2012.0462.
Mills, A. A. (2018). Natural or supernatural: Beliefs about the causes of intellectual disability in Ghanaian society. *Review of Social Studies (RoSS), 5*(2), 23–38.
Moreland, S., & Logan, D. (2000). Modeling adolescent reproductive health in Ghana: An application of the ARH Model. Policy Project. Arlington: The Futures Group International.
Mprah, W. K. (2013). Exploring knowledge and attitudes towards HIV/AIDS among deaf people in Ghana. *Disability CBR and Inclusive Development (DCID), 24*(2), 22–39. https://doi.org/10.5463/DCID.v24i1.196.
Mprah, W. K. (2014). Sources and use of sexual and reproductive health information among deaf people in Ghana. *Indonesian Journal of Disability Studies, 1*(1), 1–11.
Mprah, K. W., Anafi, P., & Sekyere, F. O. (2014). Does disability matter? Disability in sexual and reproductive health policies and research in Ghana. *International Quarterly of Community Health Education, 35*(1), 21–35.
Mprah, W. K., Anafi, P., & Yeaboah, P. Y. A. (2017). Exploring misinformation of family planning practices and methods among deaf people in Ghana. *Reprod Health Matters, 25*(50), 20–30. https://doi.org/10.1080/09688080.2017.1332450.
Murphy, N., & Young, P. C. (2005). Sexuality in children and adolescents with disabilities. *Developmental Medicine & Child Neurology, 47*(9), 640–644. https://doi.org/10.1017/S0012162205001258.
Ogunfowokan, A. A., Olagunju, O. E., Olajubu, A. O., Faremi, F. A., Oloyede, A. S., & Sharps, P. W. (2016). Correlates of self-report of rape among male school adolescents in Ile-Ife, Nigeria. *Journal of Interpersonal Violence, 31*(4), 555–571. https://doi.org/10.1177/0886260514556104.
Oladunni, T. M. (2012). Sexual behavior and practices among adolescents with disabilities in southwest Nigeria. *Sexuality and Disability, 30*(3), 289–299. https://doi.org/10.1007/s11195-012-9270-8.
Persons with Disability Act, Ghana, Act 715 (2006). Available at https://sapghana.com/data/documents/DISABILITY-ACT-715.pdf.
Polkinghorne, D. E. (1991). Narrative and self-concept. *Journal of narrative and life history, 1*(2), 135–153. https://doi.org/10.1075/jnlh.1.2-3.04nar.
Priestley, M. (2003). *Disability: A life course approach.* Cambridge: Polity.
Pulerwitz, J., Blum, R., Cislaghi, B., Costenbader, E., Harper, C., Heise, L., ... Lundgren, R. (2019). Proposing a conceptual framework to address social norms that influence adolescent sexual and reproductive health. *Journal of Adolescent Health, 64*(4), S7–S9. https://doi.org/10.1016/j.jadohealth.2019.01.014.
Ravesloot, C., Ruggiero, C., Ipsen, C., Traci, M., Seekins, T., Boehm, T., ... Rigles, B. (2011). Disability and health behavior change. *Disability and Health Journal, 4*(1), 19–23.
Retznik, L., Wienholz, S., Seidel, A., Pantenburg, B., Conrad, I., Michel, M., & Riedel-Heller, S. G. (2017). Relationship Status: Single? Young Adults with Visual, Hearing, or Physical Disability and Their Experiences with Partnership and Sexuality. *Sexuality and Disability, 35*(4), 415–432. https://doi.org/10.1007/s11195-017-9497-5.
Reynolds, S. (2010). Disability culture in West Africa: qualitative research indicating barriers and progress in the greater Accra region of Ghana. *Occupational Therapy International, 17*(4), 198–207.
Richardson, D. (1993). Sexuality and male dominance. In D. Richardson, & V. Robinson (Eds.). *Introducing Women's Studies*London: Palgrave Macmillan. https://doi.org/10.1007/978-1-349-22595-8_4.
Rusinga, O. (2012). Perceptions of deaf youth about their vulnerability to sexual and reproductive health problems in Masvingo District, Zimbabwe. *African Journal of Reproductive Health, 16*(2), 271–282.
Schenk, K. D., Tun, W., Sheehy, M., Okal, J., Kuffour, E., Moono, G., ... Amanyeiwe, U. (2018). "Even the fowl has feelings": Access to HIV information and services among persons with disabilities in Ghana, Uganda, and Zambia. *Disability and Rehabilitation, 1–14*. https://doi.org/10.1080/09638288.2018.1498138.
Sebald, A. (2008). Child abuse and deafness: An overview. *American Annals of the Deaf, 153*(4), 376–383.
Shakespeare, T., Gillespie-Sells, K., & Davies, D. (1996). *The sexual politics of disability: Untold desires.* London: Cassell.
Shaul, S. (1981). Deafness and human sexuality: A developmental review. *American Annals of the Deaf, 156*(4), 432–439. https://doi.org/10.1353/aad.2012.1406.
Sheridan, M. A. (2008). *Deaf adolescents: Inner lives and lifeworld development.* Gallaudet University Press.
Smeijers, A. S., Ens-Dokkum, M. H., van den Bogaerde, B., & Oudesluys-Murphy, A. M. (2011). Clinical practice The approach to the deaf or hard-of-hearing paediatric patient. *European Journal of Pediatrics, 170*(11), 1359–1363. https://doi.org/10.1007/s00431-011-1530-6.
Smeijers, A.S., Ens-Dokkum, M.H., van den Bogaerde, B., & Oudesluys-Murphy, A.M. (2011). Clinical practice The approach to the deaf or hard-of-hearing paediatric patient. European Journal of Pediatrics, 170(11), 1359–1363. doi:10.1007/s00431-011-1530-6.
Tobin-West, C., & Akani, Y. (2014). Human Immuno-Deficiency Virus information: The challenges of hearing-impaired adolescents in Port Harcourt, Nigeria. *Sexuality and Disability, 32*(3), 299–309. https://doi.org/10.1007/s11195-014-9362-8.
United Nations Children's Fund [UNICEF] (2013). State of the World's Children 2013: Children with Disabilities. New York: UNICEF.
United Nations Population Fund [UNFPA] & Save the Children (2009). Sexual and reproductive health toolkit for humanitarian settings. A companion to the inter-agency field manual on reproductive health in humanitarian settings. New York: UNFPA.
Whitaker, D. J., & Miller, K. S. (2000). Parent-adolescent discussions about sex and condoms: Impact on peer influences of sexual risk behavior. *Journal of Adolescent Research, 15*(2), 251–273. https://doi.org/10.1177/0743558400152004.
Wilroy, J., Turner, L., Birch, D., Leaver-Dunn, D., Hibberd, E., & Leeper, J. (2018). Development and evaluation of a social cognitive theory-based instrument to assess correlations for physical activity among people with spinal cord injury. *Disability and Health Journal, 11*(1), 62–69.
World Health Organization (2009). Promoting sexual and reproductive health for persons with disabilities: WHO/UNFPA guidance note. Available at http://www.unfpa.org/webdav/site/global/shared/documents/publications/2009/srh_for_disabilities.pdf.
Zulu, J. M., Goicolea, I., Kinsman, J., Sandøy, I. F., Blystad, A., Mulubwa, C., ... Hurtig, A.-K. (2018). Community based interventions for strengthening adolescent sexual reproductive health and rights: How can they be integrated and sustained? A realist evaluation protocol from Zambia. *Reproductive Health, 15*(1), 145. https://doi.org/10.1186/s12978-018-0590-8.