Sexual and reproductive health behavior and needs of undergraduates in Ghana and Nigeria

Introduction

In spite of the relative paucity of data on the sexual behavior of undergraduates, extant literature shows that knowledge does not impact sexual and reproductive health choices of undergraduates who continue to exhibit risky sexual behavior (McCance and Hall 1972, Arowojoye et al. 2002, Olley 2008). Sexual behavior of young people has implications for their needs as well as the programmes that should be designed for them. Without sufficient knowledge of their sexual behavior, it would be difficult to determine the reproductive health needs of young people. Research effort in different parts of the world had been for the most part directed at the sexual behavior of adolescents, with recommendations on how to increase their knowledge and change their attitude and sexual practices (Eggleston, Leitch and Jackson 2000, Ip et al. 2001, Jewkes 2001, Koster, Kemp and Offei 2001; Ward, Hansbrough & Walker 2005). In Nigeria and Ghana, adolescent sexuality in general had also drawn scholarly interest as seen in the works of Makinwa-Adebusoye 1992, Amazigo et al. 1997, Wagbatsoma and Okojie 2006, Segun 2006, Kumi-Kyeremeet al. 2007, Bammeke&Nnorom 2008, Kunnuji 2010, Ndubisi 2011, Oladunni 2012, Omotere 2012, Asante 2013, Oppong and Oti-Boadi 2013, Kumi-Kyereme et al 2014, Van der Geugten et al. 2013, Wusu 2013, Makwe and Ahmad 2014, Udigwe et al. 2014 etc.

Scholarly interest in the sexuality of university undergraduates has covered their sexual behavior in general (Yan 2006) and their contraceptive practice (McCance and Hall 1972; Peltzer 2000, Arowojolu et al. 2002). Other important factors related to undergraduates' sexual behavior include general economic conditions, poverty and family structure (Odimegwu and Adedini 2013),child sexual abuse and harmful alcohol usage (Olley 2004, 2008), sexual violence (Mezie-Okoye and Alamina 2014)HIV and VCT(Aluede et al. 2005, Asante 2013, Oppong and Oti-Boadi 2013, Woldeyohannes et al. 2017,). Undergraduates' sub culture is similar globally yet with distinct cultural stance. With the social media, undergraduates tend to share information which influences their interest in music, fashion, entertainment and sexual attitudes and beliefs among others as they network with those beyond their national boundaries. With the influence of ICT, undergraduates' access to information may be increased but the type of information also matters just as it matters whether or not the correct information would be utilized to enhance their reproductive health choices. To be impactful, contemporary research cannot ignore the fact that undergraduates, living as it were, in a world without boundaries, would have much more in common with their peers in other countries. The study seeks to examine and compare sexual and reproductive health practices and needs of undergraduates in Nigeria and Ghana, both in the West African sub-region. It also seeks to identify differences in the attitude of the undergraduates to services provided by the university medical/health centers; as well as their perception of and attitude and response to violence on campus.

Rationale for the study

University students deserve research attention because of their characteristics and the consequences of their choices not only for them and their peers but also for their families and by implication, the society. Typically young, active and adventurous, they are inclined to sexual experimentation and other risky sexual behavior, often ignoring health information and warning. Being free from parental control and surveillance (Arowojolu et al. 2002, Olley 2008, Odimegwu and Adedini 2013) they are likely to exhibit liberal sexual attitude often leading to risky sexual behavior. Many of the existing studies on university undergraduates are country-specific (McCance and Hall 1972, Peltzer 2000, Cok, Gray and Ersever 2001, Olley 2004, Yan 2006, Asante 2013, Odimegwu and Adedini 2013, Mezie-Okoye and Alamina 2014, Woldeyohannes et al. 2017). Cross national studies on undergraduates' sexual behavior will foster an understanding of the sexual culture (Yan 2006) of more societies and allow a comparison of the sexual attitudes as well as the health needs of youths across nations.

Ghana and Nigeria share social, cultural and political linkages, not restricted to history. The two most popular countries in the West African sub-region experience the influx of migrants from either country with the attendant acculturation evident in the language, dressing, music, culinary and religious practices of both countries. Nigerian youths constitute the largest group of international students in Ghanaian universities, influencing greatly all aspects of Ghanaian campus life. Even in the absence of comprehensive data, about 71,000 Nigerian students are studying in Ghana (Fatunde 2014). Among the youths, Nollywood and Gholly wood (The movie industries in Nigeria and Ghana respectively) have impact on attitudes and values about sexuality and sexual behavior.

Sexual behavior of undergraduates

Age at first sexual intercourse and contraceptive use is low among undergraduates, while multiple sexual partnerships are high. Knowledge of contraception and awareness of HIV/AIDS does not inform decisions about sexual practices (McCance and Hall 1972, Cok, Gray and Ersever 2001, Arowojoye et al. 2002, Wouhabe 2007, Olley 2008). This has been confirmed mostly by studies from sub-Saharan Africa. A study of undergraduates in five Nigerian universities shows that in spite of high level of sexual activity and multiple partnerships among students, there was a low usage of precautionary measures (Arowojoye et al. 2002). Freshmen were in particular vulnerable to sexual risk behavior when they had low self esteem and were under the influence of drugs (Olley 2008). In Ghana, poor reproductive health information available to adolescents and poor sex related communication contribute to their little knowledge and non-use of contraception and the subsequent high level of teenage pregnancy (Koster, Kemp and Offei 2001; Kumi-Kyereme et al. 2007, Van der Geugten et al. 2013, Kumi-Kyereme, Awusabo-Asare and Darteh 2014). This is particularly not surprising as contraceptive use is very

low among female adolescents in Ghana (Marrone et al. 2014). Studies in Ethiopia also show that the youth exhibit high risk sexual behavior with multiple sexual partners, low condom use and low contraception practice (Wouhabe 2007).

The background of youths may be a contributory factor in their sexual behavior and reproductive health choices. For instance, young men raised in two parent households in Nigeria delayed the onset of sex compared to those whose parents were divorced even with consideration for religiosity and economic status (Odimegwu and Adedini 2013). The social and cultural contexts within which the youths live influence their sexual and reproductive health behavior and needs. The silence surrounding the discussion of sexuality and sexual behavior in many African societies prevents youths and adolescents from seeking reproductive health services, hinders professionalism among service providers and encourages resistance to family life education by various gatekeepers (Kumi-Kyereme, Awusabo-Asare and Darteh 2014). Gender differences have been found in HIV knowledge among undergraduates in Ghana and Nigeria with female undergraduates showing higher knowledge of HIV than male undergraduates (Aluede et al. 2005, Oppong and Oti-Boadi 2013).

The sexual behaviour of university undergraduates have been explained from various perspectives but this study offers explanation for their behavior from the Social Learning Theory because of the capacity of people to learn behavior through modeling, observation and imitation (Bandura 1986). University undergraduates tend to identify with models whose lifestyles appear to be rewarded by society and they internalize the values of these models. In the learning process, they process their observation cognitively and decide whether or not to imitate. This cognitive processing means that among other measures, sexual and reproductive health programmes which project role models with whom young people identify can be effective in eliciting behavior change.

Data and Methods

This study is a cross national comparison focusing on Ghana and Nigeria. The main objective is to examine the sexual and reproductive health practices and needs of undergraduates in universities in selected countries. Using a multi-staged sampling technique, a sample of 1142 respondents was randomly selected from universities in the two countries. A structured, self administered questionnaire was the instrument for the survey which was conducted in one federal government owned university campus in Lagos, Nigeria and a government owned university in Accra, Ghana. The instrument had 65 items meant to test sexual and reproductive health knowledge, attitude and behavior among undergraduates in the selected universities. Participation was restricted to students from 100 to 400 levels in the main campuses of the two universities. Graduate students in the universities were recruited and trained as research assistants and the respondents were selected across faculties. Questions were directed at

collecting information on respondents' sexual behavior and experience, including the onset of sexual activity, sexual partnership, knowledge and use of contraception, and knowledge of sexually transmitted infections and experience of forced sex and unwanted pregnancy. Questions were also asked on participants' perception of and attitude to violence as well as attitude to and patronage of medical facilities provided on campus. Focus Group Discussions (FGDs) complemented the survey. Eight FGDs were held across the two universities; with attention paid to the relative homogeneity of the groups in terms of gender, faculty and level of study.

Study Location

Ghana and Nigeria are both in the West African sub-region. Ghana has a population of about 27 million (CIA World fact book) and a land mass of 240,000 sq.km. Ghana is ethnically diverse with over 20 ethnic groups. It has 10 regions and it has less than 20 government owned universities and about 20 private owned ones. Ghana has an Adolescent Reproductive Health Policy (2000) as well as a National HIV/AIDS STI Policy 2004(Kumi-Kyemere et al. 2014).

Nigeria is the seventh most populous country in the world and the most populous in Africa with an estimated population of 192 million (www.nationsencyclopedia). It has a land mass of 923768 sq.km. Nigeria has about 250 ethno-linguistic groups. It has 40 federal universities, 44 state universities and 68 approved private universities (www.nationsencyclopedia). Nigeria, through its Federal Ministry of Health adopted a National Adolescent Health Policy (1995) and a National Policy on HIV/AIDS and STI (1997).

Results

Sample characteristics

The participants (N=1142) were Ghanaian (n=580, 50.8%) and Nigerian (n= 562, 49.2%) undergraduates, male (n=591, 51.8%) and female (n=545, 47.7%) and predominantly single (n=1071, 93.8%). They were largely between 20 and 24 years of age (n=759, 66%). The Ghanaian sub sample had more female (n=302, 52.1%) than male (n=278, 49.9%) while the Nigerian sub sample had more male (n-313, 55.7%) than female (n-243, 43.2%) participants.

Sexual Behaviour

Nearly half (n=564, 49.4%) of study participants have ever had sexual intercourse. More male undergraduates (58.7%) have ever had sex compared with the female (39.3%). When disaggregated by country, the finding holds true for both Ghana and Nigeria where 59.7% and 57.8% respectively of male and 38.1% and 40.7% respectively of female undergraduates have ever had sex. Table 1.1 shows that the differences in the sexual experience of the participants by country are not significant. Table 1.2 shows that sexual initiation was largely voluntary in both countries with the differences not being significant. The majority of those who have had sex (n=408, 72.3%) had their first sexual experience with a boyfriend/girlfriend.

Table 1.1: Distribution of respondents by experience of sex by country

Have you ever had sex?				
Country	Yes	No	NR	Total
Ghana	281(48.4%)	295(50.9%	4 (0.7%)	580(100%)
Nigeria	283 (50.4%)	270(48.0%)	9(1.6%)	562(100%)
Total	564(49.4%)	565(49.5%)	13(1.1%)	1142(100%)

X^2-2.753, df=2, P<.252

Table 1.2: Distribution of respondents by voluntary experience of sex by country

The first time you had sex was it voluntary?				
Country	Yes	No	NR	Total
Ghana	229(81.5%)	50(17.8%)	2 (0.7%)	281(100%)
Nigeria	239 (84.5%)	42(14.8%)	2(0.7%)	283(100%)
Total	468(83.0%)	92(16.3%)	4(0.7%)	564(100%)

X^2-902, df=2, P<.637

There is a significant difference between the mean ages of female and male undergraduates at onset of sex. (t = -3.599; df = 401; p-value < 0.01). The mean ages at onset of sex are 17.34 years (SD = 3.661) and 18.74 years (SD = 4.043) for male and female undergraduates respectively (Table 1.3.) indicating that male undergraduates initiate sexual intercourse earlier than female undergraduates.

Table 1.3: Mean age at onset of sex by country by sex

Dependent Variable: How old were you when you first had sex?				
Country of the respondents	Sex	Mean	Std. Deviation	N
Ghana	Male	17.36	3.736	118
	Female	18.71	4.360	91
	Total	17.95	4.065	209
Nigeria	Male	17.33	3.602	123
	Female	18.77	3.626	71
	Total	17.86	3.669	194
Total	Male	17.34	3.661	241
	Female	18.74	4.043	162
	Total	17.91	3.875	403

Knowledge of contraceptive, condom use and experience of STI

Most of the participants (n=1047, 91.7%) have knowledge about contraceptives, such as pills (n=666, 58.3%) and injectables (n=391, 34.2%). Even more undergraduates (n=910, 79.7%) are knowledgeable about condoms and condom use for dual protection. Only 26.2% and 29.0% of male and female respectively have however, ever used condom. In Ghana, 28.3% and 27.8% of male and female respectively have used condom while in Nigeria, condom use was acknowledged by 24.4% and 30.3% of male and female respectively. Undergraduates' experience of sexually transmitted diseases in both countries is close as 7.8% and 7.2% of male undergraduates in Ghana and Nigeria respectively have ever had an STI. For the female participants, the figures are 9.6% and 6.1% for Ghana and Nigeria respectively.

Unwanted pregnancy could be an outcome of the sexual and reproductive behavior of undergraduates as acknowledged by some (n=144, 25.5%) participants who had impregnated their partners or had become pregnant. When disaggregated by country, there were 31.3% (88) of such in Ghana and 19.8% (56) in Nigeria. A little over half of those with the experience of pregnancy (n=76, 52.8%) procured an abortion with 64.5% (49) in Ghana 35.5% (27) in Nigeria.

Sexual partnership

Undergraduates engage in multiple sexual partnerships. There is significant difference between the mean number of sexual partners of male and female undergraduates (T = 3.81; df = 401; p-value < 0.01). The mean number of sexual partners for male and female undergraduates are 2.05 (SD = 2.455) and 1.39 (SD = 1.109) respectively showing that male undergraduates have more sexual partners than female undergraduates.

Table 2.1 Mean of sexual partners by country by sex

Dependent Variable: How many sexual partners have you had in the last 12 months?				
Country of the respondents	Sex	Mean	Std. Deviation	N
Ghana	Male	1.88	2.066	125
	Female	1.34	.786	98
	Total	1.64	1.651	223
Nigeria	Male	2.22	2.770	133
	Female	1.46	1.393	85
	Total	1.92	2.357	218
Total	Male	2.05	2.455	258
	Female	1.39	1.109	183
	Total	1.78	2.034	441

Perception of violence: attitude and response

Undergraduates' perception of violence varies with 40.7% (465) considering threat, being hit (n=616, 53.9%), rape (n=780, 68.3%), sexual molestation (n=692, 60.6%), curtailed/restriction of movement (n=282, 24.7%) and being dehumanized (n=539, 47.2%) as violence. Gender differences exist in undergraduates' perception of violence, with a higher percentage of male (45.2%) considering threat as violence compared to female (36%) undergraduates. Similarly, more male students considered being hit (male; 56.7%, female; 51.4%), being curtailed/restricted movement (male; 26.2%, female; 23.1%) and being dehumanized in any way (male; 49.4%,

female;47.2%) as violence against them, while a higher percentage of female undergraduates considered rape (female; 70.5%, male 66.7%) and sexual molestation (female; 62.4%, male; 59.4%) as violence against them.

On country basis, more Nigerian students believed that being threatened (Nigeria; 41.1%, Ghana; 40.3%) and restriction of movement (Nigeria; 25.8%, Ghana; 23.6%) were forms of violence against them, while a larger percentage of Ghanaian students believed that being hit (Ghana; 57.9%, Nigeria; 49.8%), rape (Ghana; 72.8%, Nigeria; 63.7%), sexual molestation(Ghana; 64.8%, Nigeria; 56.2%) and being dehumanized (Ghana; 54.5%, Nigeria; 39.7%) were acts of violence against them. The undergraduates considered all forms of threat and compulsion as forms of violence.

Majority of male (n=477, 80.7%) and female (n=463, 85%) university students would not tolerate violence from their partners because it is against human rights (male; 13.9%, female; 15.6%), demeans an individual psychologically/emotionally (male; 20.3%, female; 20.6%), and it is a wrong and barbaric act (male; 26.4%, female; 23.6%). On country basis, more (n=502, 86.6%) Ghanaian than Nigerian (n=440, 78.3%) undergraduates would not tolerate violence from partners.

Undergraduates' use of university medical/health centre

Similar proportions of undergraduate participants in Ghana (n=146, 25.2%)and Nigeria (n=141, 25.1%) have reservation about the university health or medical centre as seen in Table 3.1 although close to three-quarters have no problem. Table 3.2 shows that the problem ranges from the unfriendly attitude of staff to a perceived lack of expertise.

Table 3.1: Distribution of respondents by problem with the use of health centre

Any problem with the use of university health centre??				
Country	Yes	No	NR	Total
Ghana	146(25.2%)	424(73.1%)	10(1.7%)	580(100%)
Nigeria	141 (25.1%)	405(72.1%)	16(2.8%)	562(100%)
Total	287(25.1%)	829(72.6%)	26(2.3%)	1142(100%)

X^2-1.624, df=2, P<.444

Table 3.2: Nature of problem with university health centre

Undergraduates' perceived problem with university medical centre			
No expertise	25(17.1%)	25(17.7%)	50(17.4%)
Staff are not friendly	84(57.5%)	50(35.5%)	134(46.7%)
No confidentiality	17(11.6%)	11(7.8%)	28(9.8%)
Staff are old and not understanding	4(2.8%)	38(27.0%)	42(29.8%)
Others	16(20.0%)	17(12.0%)	33(11.5%)

Rather than discuss sexual and reproductive health issues with staff at the health centre or parents, undergraduates (n=127, 62.9%) would rather discuss with friends because they are more trusted (n=46, 23.3%) and give comfort (n=46, 23.3%) on issues relating to sexual and reproductive health. Some of the issues they would rather not discuss at the health centre include personal issues, sexual issues, relationship issues, premature ejaculation and sexually transmitted infections (STIs). Reasons for their reluctance to discuss these issues include the fact that they are shy, the issues are sensitive, lack of trust and no time on the part of the staff.

Discussion

This study examined sexual and reproductive health behavior and needs of university undergraduates in Ghana and Nigeria. Although only one university was studied in each country, these preliminary results confirm the findings of other studies on the sexual behavior and practices of undergraduates in selected universities. As found by Olley (2008), undergraduates tend to exhibit sexual behaviours that are potentially risky. This study found that nearly half of

the participants (49.4%) were sexually active while other studies had reported that about two-thirds (Odimegwu and Adedini 2013) and less than half (44%) (McCance &Hall 1972) and (43%) (Olley 2008) of their undergraduate participants had been sexually active.

The findings of this study show that location (country) is not necessarily an important factor in the sexual and reproductive health of the respondents. This is because the results show that Nigerian and Ghanaian undergraduates who are sexually active are not significantly different in sexual practices (e.g. initiation and partnerships). What seems to be an important factor is gender.

More male than female students are sexually active in both Ghana and Nigeria and sexual initiation was largely voluntary in both countries. Male undergraduates also had their sexual debut earlier than their female counterparts with the mean ages at the onset of sex being 17.34 years and 18.74 years for male and female undergraduates respectively.

Knowledge of contraceptive was highest as related to condom and use of condom for dual protection. Knowledge of other forms of contraceptives was low. In a survey conducted in Northern Nigeria, the adolescent participants had poor understanding of the 'safe' and 'unsafe' period and the only pregnancy prevention method well known to them (43.5%) was the condom (Adeokun et al. 2009). In spite of the knowledge of condom, its usage was very low among undergraduates in both Ghana and Nigeria. In a study in Ghana, among the female respondents, only 35% reported to have used contraceptives (Marrone et al. 2014). In this reported study, age and religion were not associated with condom use although in an earlier study in Nigeria (Odimegwu 2005), age and religion had been associated with condom use. The discrepancy between knowledge and usage of condom has been noted by other scholars. In an all female study reported by Olley (2008), although 43% of respondents were sexually active, only 26% ever used condom, thus confirming that high awareness does not necessarily translate into safe sex behavior (Odimegwu and Adedini 2013).

In terms of sexual partnership, gender is again an important factor. Although multiple sexual partnerships were confirmed by both male and female, in both countries, male undergraduates have more sexual partners than female. Male experience of sexually transmitted diseases in both countries is also close 7.8% and 7.2% for Ghana and Nigeria respectively. For female

participants, the figures are 9.6% and 6.1% for Ghana and Nigeria respectively. About 28% of both respondents in another study in Nigeria had confirmed that they had symptoms of sexually transmitted diseases (Odimegwu and Adedini 2013).

Violence influences sexual behavior, heightening young people's susceptibility to sexual risks. Gender differences manifest in the participants' perception of violence as more female than male students considered rape and sexual molestation as acts of violence against them. Close proportions of undergraduates in Nigeria and Ghana expressed reservation about use of the university health centre. Although such respondents were in the minority, their reasons cannot be ignored. Their perception that the health centre staff lacked expertise and were not friendly and that confidentiality could not be ensured, cannot be ignored as it may be the very reason why undergraduates seek help from their friends rather than from professionals.

Conclusion

The fact that undergraduates could have missed sexual and reproductive health information as adolescents makes it imperative that they be provided adequate attention and information on this subject matter in the university. There is evidence from Ghana that adolescent boys receive little reproductive health information from schools, parents or health providers (Koster, Kemp&Offei 2001). If as undergraduates, their sources of information on reproductive health issues are still informal or largely from peers and other non professionals, their needs would remain unmet. Factors that have prevented the use of health facilities must be removed. For male adolescents these include the absence of male health workers (sometimes they exist but are very few), negative attitude of staff and expensive charges (especially for the treatment of STI) (Koster, Kemp&Offei 2001). The perception of male and female undergraduates in Ghana and Nigeria about university health centre must also be addressed. Sexual and reproductive health information must be targeted at university undergraduates to improve not only their knowledge but to foster behavior change.

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