UTILISATION OF INTERNET HEALTH INFORMATION BY ADOLESCENTS IN OSUN STATE: ROLE OF THE SCHOOL LIBRARY MEDIA SPECIALIST

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Abstract

Globally, adolescents are the highest group of Internet users. The accessibility, affordability, anonymity and ease of use endear the Internet to adolescents probably due to their shyness about discussing sensitive health issues. The study identified the frequency and purpose of Internet health information utilisation by study respondents. A descriptive, cross-sectional survey was carried out among adolescents in public and private secondary schools in Osun-State, Nigeria. 1,200 school-going adolescents were selected using multi-stage random sampling. A validated, self-administered questionnaire elicited relevant data which was analysed using SPSS version 17. Majority of the respondents 798(67.3%) were in mid-adolescence. As much as 792(66.8%) and 129(10.9%) were from lower socio-economic classes IV and V . Only 2(16.7%) of the twelve schools surveyed had a school library with Internet facilities. Majority 747(63%) used the Internet weekly for personal health matters with 877(73.9%) access mostly from mobile phones. Only 148(12.5%) access Internet from school libraries. Health information frequently utilised was on sexuality/STI (59.7%), nutrition (45.2%) and body shape (37.1%). Although study respondents utilised Internet health information extensively, Internet access from the school library media centre was low. Information on very sensitive health issues was frequently utilised by respondents of this study. Accessing the Internet from the school library media centre will therefore provide a valuable opportunity for school library media specialists to improve the media and health literacy skills of school-going adolescents in Osun State, Nigeria.

Keywords: Internet Use; Health Information, Adolescents, School Library; Media Specialist

Introduction

The Internet has become a major source of health information among adolescents. Adolescents in contemporary times grow up alongside Internet technology hence

they are referred to as 'digital natives' (Hargittai, 2010). For instance Internet - enabled devices now include not only computers but other hand-held devices such as cell-phones. Several studies have provided compelling evidence that the Internet is a favoured source of health information utilisation by adolescents (Berzekowski, Fobil & Asante, (2006); Nwagwu, (2007); Bamise, Bamise & Adedigba (2011).This could be because the Internet has become one of the most important mediums to educate and inform adolescents about health and medical issues because it provides a non- punitive, easily accessible space to find sensitive health information in addition to having a high level of interactivity. Cooper (2002) as cited in Kunnuji (2014) and Farmer (2014) suggest that adolescents are more likely to utilise Internet health information because of the availability, affordability and anonymity.

The American congress of obstetricians and Gynaecologists (2012) reported that majority of American adolescents utilise Internet health information .In Ghana, Berzekowski, Fobil and Asante (2006) described the extent of Internet health information utilisation by Ghanaian adolescents which was similar to reports of a Nigerian study by Nwagwu (2007) and a Ugandan survey by Ybarra, Kiwanuka, Emenyonu & Bangsberg (2006).The trend in existing literature portends that the Internet is a major tool for health information utilisation among adolescents globally, irrespective of their cultural diversity and socio-economic backgrounds; they share similar traits in Internet health information utilisation.

Adolescent utilisation of Internet health information is certainly not a new phenomenon. Miller & Bell (2012) found that the popularity of Internet among adolescents is due to its great potential in facilitating information searching and decision-making on self-care and health related issues. Several studies in developed countries and developing countries allude to the fact that adolescents go online almost on a daily basis to find health information (Kunnuji,2014;Glik, Massey, Gipson, Dieng, Rideau & Prelip, 2014; Tsai, Chau, Lin and Lin, 2013; Arulogun & Ogbu, 2016). Previously, Internet access by adolescents was limited to private and public spaces such as home, school, school library media centre and cyber cafes probably because the major device for Internet access was the desktop computer connected to Internet cables. Following the advent of mobile phones, i-pads, tablets and other handheld devices, Internet utilisation is no longer limited to certain places. In a Nigerian study by Kunnuji (2014) Internet access was greatest at cyber cafes followed by home access. The study suggested that school regulations prohibiting the use of cell-phones and similar devices in secondary schools explained the low level of school Internet utilisation.

Internationally, several studies have significantly associated socio-demographic factors with Internet health information utilisation (Lerin-Zamir, Lemish & Gofin, 2011; Ghaddar, Valerio, Garcia & Hansen, 2012). Adolescents all over the world are increasingly utilising the Internet for health information despite

substantial variation in use in different countries of the world and in the various socio-economic groups (Arulogun & Ogbu ,2016). Rice (2006) reported that gender was one of the strongest predictors of Internet health information utilisation. Supporting this view, Helsper (2010) found that there are marked gender differences in Internet health information utilisation with regard to the purpose and type of online activities engaged in. Tsai, Chou, Lin & Lin (2010) reported that although Internet was an increasingly popular source of health information among Taiwanese adolescents, age, gender, being in school and sub-urban location were determinants of Internet health information utilisation .This study was informed by the Uses and Gratifications theory because it has been widely used to explain Internet utilisation to meet adolescent health information needs (Borzekowski, Fobil & Asante, 2006; Nwagwu, 2007 and Markwei & Appiah, 2016). The theory proposes that individuals actively choose media based on their needs and choice of media is influenced by information needs and the gratification or satisfaction obtained by using these media.

Hargittai (2010) alluded to the fact that although today's adolescents are 'digital natives,' they may have technology deficiencies or poor physical access to Internet facilities. Farmer (2014) observed that although filtering software limits adolescent access to valuable Internet health information, low or inadequate health literacy levels can cause adolescents to be ignorant about some aspects of health information. Consequently, they may not be able to ascertain the validity or reliability of information obtained before utilisation.

School library media specialists (SLMS) in their role as information gatekeepers and teachers seek, select, evaluate and utilise Internet resources and tools and give students instruction on how to use them. Lukenbill & Immroth (2009) asserted that School libraries and librarians play the role of health information gatekeepers for adolescents in their schools. Oyewusi (2016) stated succinctly that the SLMS must be a certified library media specialist who initiates, develops and operates information services and is competent to teach different information handling skills and strategies. SLMS's therefore have key roles to play in ensuring that irrespective of socio-economic background, age, gender or cultural background, all school going adolescents have equitable access to available health information.

According to the New Zealand National Library (2015) a school library media centre (SLMC) is a place which offers seamless access to information resources, apps, advice and support to the classroom, home and mobile devices 24/7. Oyewusi (2016) conceptualised the SLMC as a school resource offering equity of access, support and encouragement to all students irrespective of age, ability and socio-economic background. Buchi, Just and Latzer (2015) opined that Internet health information utilisation among adolescents is predicted by socio-demographic factors. Their study confirmed that socio-demographic factors

account for up to 50% of the variations in Internet utilisation with age being the strongest predictor of health information utilisation. School Library media specialists(SLMS) are information literacy experts, uniquely trained and skilled to help all students develop reading and research skills (New Jersey Library Association, 2016) which explains why they are best suited to guide school going adolescents in their continuous search for health information from the Internet. Farmer (2014) alluded to the fact that some adolescents are struggling readers or may have language barriers which could hamper Internet health information utilisation.

IFLA School Library Guidelines (2015) as cited in Oyewusi (2015) declared that, 'a school library is a physical and digital learning space where reading, enquiry, research, thinking, imagination and creativity are central to students' information -to - knowledge journey and to their personal, social and cultural growth. The central focus of the SLMC are the students with its main purview as the information hub of the school. The school library media specialist (SLMS) therefore bridges the gap between the adolescents in the school and the information. It is therefore within the purview of the SLMS to create good rapport with the students and also be competent in teaching information handling skills in order to develop multi-literacies in students. The New Jersey Library Association (2016) recognising the importance of school library programmes reiterated that, ''access to a quality school library media centre staffed by a certified school library media specialists is a necessary part of every students education. Skills in navigating information literacy (which includes digital, visual, media, textual and technological literacy are best taught by certified school library media specialists.''

Objectives

The study addressed the following objectives: to determine the place of access of Internet for health information utilisation by the respondents; to determine the frequency of Internet health information utilisation by the respondents ;to ascertain the purpose of Internet health information utilisation by the respondents; to establish the status of the school library media centre and level of preparedness of school media specialists in enhancing Internet health information utilisation and to determine the relationship between socio-demographic profile and the extent of Internet health information utilisation by the respondents.

Methodology

The study was a descriptive cross-sectional survey .A questionnaire-based survey was carried out involving 1,200 school-going adolescents in senior secondary schools in Osun State Nigeria. Sample size was calculated using the Leslie Fischer's formula for sample size in population greater than 10,000 (Araoye, 2004). By multi-stage random sampling technique, 6 private and 6 public owned senior secondary schools were randomly selected from the 3 education districts

in Osun State .Of the 1,200 questionnaire applied, 1,186 were found to be analysable giving a response rate of 98.8%.

Research instrument

The survey instrument consisted of 2 sections. Section A elicited information on the socio-demographic profile of the respondents. Socio-economic classification was based on the Oyedeji classification of socio-economic class (Oyedeji, 1985), which has been widely used and accepted by many researchers in Nigeria. Section B is a validated Internet health information utilization scale (Chronbach alpha 0.9) was adapted from Britt and Hatten's (2013) e-HEALS scale and Niemla, Ek, Eriksson-Backa & Huotari's (2012) health information literacy screening tool. It consist of is a 10 item scale tagged "Internet health information utilisation scale" (IHIUS). It elicited responses on self-reported "information utilisation" (purpose and frequency) of Internet health information resources using a 4 point Likert Scale. Data was collected between January and February, 2017. All data was analysed using SPSS version 17.

Results

Table1: Socio-demographic profile of school-going adolescents in Osun State

Socio-Demographic Variables	Levels	Frequency (f)	Percentage (%)
Age of the students (as at last birthday)	11-13yrs	137	11.6
	14-16yrs	798	67.3
	17-19yrs	251	21.2
	Total	**1186**	**100.0**
Gender	Male	570	48.1
	Female	616	51.9
	Total	**1186**	**100.0**
Socio-Economic Class	Class I	30	2.5
	Class II	102	8.6
	Class III	133	11.2
	Class IV	792	66.8
	Class V	129	10.9
	Total	**1186**	**100.0**
Religion	Christianity	610	51.4
	Islam	560	47.2
	African traditional religion	4	.3
	Others	1	.1
	Total	**11**	**.9**

Types of families	Monogamy	619	52.2
	Polygamy	331	27.9
	single parent	168	14.2
	Widowed	29	2.4
	Divorced	12	1.0
	No Response	27	2.3
	Total	**1186**	**100.0**

The socio-demographic profile of in-school adolescents in Osun State is as shown in table 1. It is shown in the table that more than half of the in-school adolescents that participated in this study were of age 14-16years. Gender distribution showed that more than half, 616 (51.9%) of the adolescents were females. Clearly, most 792 (66.8%) of the adolescents sampled for this study have parents from socio-economic class described by Oyedeji (1985) as class IV. A little above half 619(52.2%) of respondents came from a monogamous family while 331(27.9%) came from a polygamous family setting.

Table 2. Place of access of Internet health information

Place	Frequency	%
School library	148	12.5
Mobile phone	877	73.9
Cyber café	71	6.0
Friends' house	46	3.9
Parents Laptop	44	3.7
Total	**1186**	**100.0**

Majority of the respondents 877(73.9%) access Internet from their personal mobile phones while only 148(12.5%) access the Internet from the school library Internet facility.

Table 3: Descriptive analysis of school-going adolescents responses to frequency of utilization of Internet health information

S/N	Frequency of for ...	Daily	Weekly	Monthly	Never	$\bar{x}$	SD
1.	Sexually transmitted infections e.g gonorrhoea, chlamydia, HIV etc.	601 50.7%	205 17.3%	192 16.2%	188 15.9%	3.03	1.15
2.	Sexuality issues and other rapid	561	253 21.3%	210 17.7%	162	3.02	1.22

	changes in my body	47.3 %			13.7 %		
3.	Menstrual pain and disorders	446 37.6 %	320 27.0%	210 17.7%	210 17.7 %	2.85	1.11
4.	Healthy diet and other Nutritional issues	482 40.6 %	240 20.2%	172 14.5	292	2.77	1.22
5.	Issues related to pregnancy, abortion and associated complications.	254 21.4 %	565 47.6%	189 15.9%	178 15.0 %	2.76	1.12
6.	Body size, shape, body image or physique	371 31.3 %	346 29.2%	241 20.3%	228 19.2 %	2.73	1.21
7.	Upload and communicate validated and relevant health information on the Internet for the benefit of other Internet users.	350 29.5 %	277 23.4%	230 19.4%	329 27.7 %	2.55	1.18
8.	Adolescent contraceptive use	222 18.7 %	252 21.2%	210 17.7%	502 42.3 %	2.16	1.17
9.	Use and abuse of alcoholic beverages	213 18.0 %	190 16.0%	193 16.3%	590 49.7 %	2.02	1.17
10.	Health issues relating to smoking	225 19.0 %	166 14.0%	159 13.4%	636 53.6 %	1.98	1.20

Grand Mean= 25.87

Findings revealed that sexually transmitted infections such as gonorrhoea, chlamydia, HIV etc. ranked highest by the mean score rating ($\bar{x}$ =3.03) and was followed by sexuality issues ($\bar{x}$ =3.02) and menstrual pain and menstrual disorders ($\bar{x}$ =2.85). On the other hand issues on adolescent contraceptives ($\bar{x}$

=2.16), drug use ($\bar{x}$ =2.02) and smoking related problems ($\bar{x}$ =1.98) were the least frequently utilised resources by rank.
Grand Mean = 25.87.

Interval	Total Mean Score	Remark
31-39	25.87	Daily
21 – 30		Weekly
11-20		Monthly
1-10		Never

Since 25.87 falls within the range of 21-30 interval, this implies that school-going adolescents in Osun State utilise Internet health information on weekly basis.

In Table 3, respondents were asked to indicate for what purposes they utilised Internet health information.

Table 4: Purpose of Internet health information utilisation by school- going adolescents in Osun State

	Purpose of Use	**SA**	**A**	**D**	**SD**	$\overline{X}$	**SD**
1.	Sexuality issues and other rapid changes in my body	513 43.3%	389 32.8%	162 13.7%	122 10.3%	3.09	0.99
2.	Healthy diet and other Nutritional issues	536 45.2 %	358 30.2 %	142 12.0 %	150 12.6 %	3.08	1.04
3.	Body size, shape, body image or physique	440 37.1 %	374 31.5 %	202 17.0 %	170 14.3 %	2.91	1.05
4.	Sexually transmitted infections e.g Gonorrhoea , Chlamydia, HIV etc.	366 30.9 %	353 29.8 %	240 20.2 %	227 19.1 %	2.72	1.10
5.	Upload and communicate validated and relevant health information on the Internet for the	341 28.8 %	378 31.9 %	232 19.6 %	235 19.8 %	2.70	1.09

	benefit of other Internet users.						
6.	Menstrual pain and disorders	326 27.5 %	366 30.9 %	254 21.4 %	240 20.2 %	2.66	1.09
7.	Adolescent contraceptive use	284 23.9 %	390 32.9 %	310 26.1 %	202 17.0 %	2.64	1.03
8.	Issues related to pregnancy, abortion and associated complications.	296 25.0 %	346 29.2 %	339 28.6 %	205 17.3 %	2.62	1.04
9.	Use and abuse of alcoholic beverages	275 23.2 %	268 22.6 %	353 29.8 %	290 24.5 %	2.45	1.10
10.	Health issues relating to smoking	248 20.9 %	274 23.1 %	357 30.1 %	307 25.9 %	2.39	1.08

Overall weighted Mean = 2.73

Key: SA=Strongly Agree A= Agree D= Disagree SD= Strongly Disagree

Findings revealed that sexuality issues and other rapid changes in the body ($\bar{x}$ =3.09) was the major purpose for which the in-school adolescent utilise Internet health information. Using the overall weighted mean of 2.73 as the benchmark for respondents' purpose of Internet health information utilisation, it could be inferred that Sexuality issues and other rapid changes in the body, nutritional issues and information about body size, shape, body image or physique were the major purposes for which Internet health information was utilised.

Table 5: Preparedness of the school library in enhancing Internet health information utilisation of the respondents.

S/N	School Library Media Centre facilities	No. of Schools	% of Schools
1	School library managed by a SLMS with varieties of books, Computer work station, Internet facilities with dedicated time for school library instruction/use.	2	16.67%
2	School library managed by a SLMS with varieties of books, Computer work station,	1	8.33%

	Internet facilities with dedicated time for library instruction/use.		
3	School library managed by a SLMS with varieties of books BUT no Computer work station, Internet facilities, or dedicated time for library instruction/use.	1	8.33%
4	School library with few books. No SLMS, Computer work station, Internet facilities or dedicated time for library instruction/use.	4	33.33%
5	No school library	4	33.33%

Objective 5: What type of relationship exists between socio-demographic factors (age, gender and socio-economic background) and Internet health information utilisation?

Table 6: Zero Order Correlation (Matrix Table) showing the significant relationships between Socio-demographic Factors (age, gender and socio-economic background) and Internet Health Information Utilisation

	Internet Health Information Utilisation	Age	Gender	Socio-economic status	Mean	S.D
Use of Internet Health Information	1				64.54	13.41
Age	.108** .000	1			15.30	1.60
Gender	-.035 .230	-.120** .000	1		-	-
Socio-economic status	.089** .002	.234** .000	.011 .702	1	3.63	0.85

The relationship between socio-demographic factors and Internet health information utilisation is as shown in table 6. Age and socio-economic class, had their respective beta weight values as.108 and .089 which were found to be significant at 0.05 level of confidence. Gender with beta weight value -.035 is not significant. This implies that age and socio-economic class had a positive significant relationship with Internet health information utilisation while gender had no significant relationship with Internet health information utilisation.

Discussions of Findings and Implications for SLMS

Place of Internet Access

Findings of this study indicate that mobile phones are the highest source of Internet access by the respondents of this study as shown in table 2 followed by the school library. The home which is symbolised by parents' laptops and desktops is the least used for Internet access. This is probably because the respondents are school-going adolescents who may feel shy about some health issues and therefore may prefer the privacy and ease of access offered by mobile phones.This peculiarity in the use of mobile phones to access Internet is similar to reports by Markwei & Appiah (2016) in a Ghanaian study of teen Internet utilisation. They noted that mobile phones are no longer the exclusive preserve of those in upper echelons of society because there are affordable ones in the market which explains why adolescents have increased Internet access on their phones. The overwhelming tilt to mobile phone Internet access could also be as a result of the fact that adolescents often seek information on sexual and reproductive health issues which they may feel shy to ask or discuss with parents or teachers. This finding is in keeping with evidence from (Nwagwu, 2007); Farmer (2014) & Glik, Massey, Gipson, Dieng, Rideau & Prelip (2014) who explained that certain attributes of the Internet such as affordability, privacy, anonymity and accessibility endear this medium to adolescents. In contrast, Kunnuji (2014) found cyber cafes to be the highest point of Internet access. He however noted that regulations prohibiting the use of cell phones and other mobile devices among the study respondents may be the reason for low phone Internet access.

The finding has grave implications for SLMS's. The school library has metamorphosed to the school library media centre which is supposed to be fully equipped with computers, Internet access and other electronic media resources which enables school-going adolescents to engage meaningfully with a wide range of information resources. If the respondents of this study shy away from utilising Internet facilities at the SLMC it implies that either the facilities are non-existent or that the SLMS has not been effective in creating trust and good rapport with adolescents. Oyewusi (2016) enumerated several threats to school library media centres in Nigeria which include: inadequate funding, poor electricity supply, inability to operate ICT equipment by the school library media specialist and slow Internet connectivity to mention but a few.

Frequency of Internet health information utilisation

The respondents of this study frequently utilised Internet health information on sexually transmitted infections daily and weekly respectively.This was followed by information on sexuality issues and other physiological changes they are experiencing on daily basis. This result is not unexpected cognizant of the fact that majority of the respondents are in mid-adolescence which is characterised by the onset of puberty and rapid physical, emotional and cognitive changes.

Indisputably, this could lead to curiosity and greater interest in their health thus the need to seek and utilise health information from easily accessible and confidential sources like the Internet. Buttressing this finding, Farmer (2014) opined that adolescents have to cope with their developing bodies and health related situations hence the need for accurate and relevant health information. This finding supports the Uses and Gratifications Theory which explains why individuals prefer using certain media to gratify their information needs by identifying motives for media use (Glik et al, 2014). Empirical evidence from several studies (Miller & Bell, 2012;Nolke, Mensing, Kramer & Hornberg, 2015) noted the acceptance and popularity of the Internet as a health information resource for school-going adolescents and affirmed that adolescents regularly utilise Internet health information for very sensitive health information like sexually transmitted infections and sexuality issues.

As the information gate keeper in the schools, the SLMS has the responsibility of making information available in simple language, cognizant of age, literacy level and backgrounds of the adolescents in the school. Lukenbill and Immroth (2009) suggested that school libraries and Librarians can play the role of health information gate-keepers for adolescents in their schools. A fundamental role of the SLMS is to ensure that the health information obtained is understandable and usable. A one-day workshop could be organized which would make a difference in the health information access and evaluation skills of the adolescents. The SLMS must be competent in teaching different information handling skills to students (Oyewusi, 2016). The pivotal role of the SLMS in providing an in-road to health information by promoting information literacy skills cannot be overemphasised.

Purpose of Internet Health Information Utilisation

Study findings indicate that sexuality issues and rapid body changes, followed by diet concerns, body size, shape or physique and STD's are the main purpose of Internet health information utilisation. Information about use and abuse of alcohol and smoking were least utilised by the respondents of this study. This result is not unexpected because respondents are adolescents who are curious about changes taking place in their body due to puberty and growth. This is not peculiar to the respondents in this study; Tsai, Chou, Lin and Lin, (2013) in a questionnaire survey of school going adolescents in Taiwan aged 12-18 found that respondents utilised Internet health information on issues pertaining to body physique diet and health advice for sensitive health issues. Glik et al (2014) in a Senegalese study affirmed that similarto the respondents of this study, Senegalese adolescents utilise Internet for health information they are too shy or embarrassed to discuss with their parents. Similarly, Beck, Richard, Ngugen - Than, Montagni, Perizot and Renahy (2014) emphatically stated that the physiological make-up of adolescent girls predisposes them to retrieving and utilising information on personal and sensitive health issues they may shy away from discussing such as

sexuality and reproductive health information, menarche and dysmenorrhea among others.

As health information gate keepers in schools SLMS's have to gain the trust of adolescents in order to guide them on how to evaluate the credibility of the Internet sites they access .It could prevent access to potentially harmful sites and information which may endanger adolescent health. Issues such as gender and culture in the provision of health information could be explored. Oyewusi (2015) suggested that SLMS's could transform SLMC into dynamic, transforming learning environments which provide a welcoming, vibrant and culturally inclusive environment.

Status of the SLMC and Level of Preparedness of the SLMS in Enhancing Internet Health Information Utilisation

It is quite disconcerting to find that of the twelve secondary schools surveyed (6 public and 6 private owned) only 2 (16.67%) had a well- equipped school library media centre which was staffed by a certified school library media specialist as shown in table 4.This indicates a very low level of preparedness to support Internet health information utilisation in Osun State which is worrisome.

The appalling state of school library media centres where they are existent is worrisome and not peculiar to this study. The New JerseyLibrary Association (2016) in reporting key findings of a survey of school districts in New Jersey observed that:20% of high schools have no certified school library media specialist available to students;91 school districts have no school library media specialists and only one SLMS covers 7 schools in one district. In one district, four out of the 12 schools surveyed, SLMC's were non-existent. The students in these schools are left alone to stumble about in today's information society without a guide. Here in Africa as reported by Glik et al (2016) some themes-such as sex and sexuality issues are not discussed openly, hence majority of adolescents go on the Internet to find information.

In the study of Glik et al (2016) one of the adolescents stated, ''sometimes you go on the Internet to search for something on a disease… were given lots of responses but you don't know which one to look at.''This is a reflection of lack of information literacy skill. A SLMS role as outlined by the IFLA/UNESCO school library guideline (2002) as cited in Oyewusi (2015) is expected to instruct in information knowledge and information retrieval skills; assist students in the use of library resources and information skills; answer reference and information enquiries using appropriate materials and analyse the resource and information needs of the school community.Where the SLMC is non-existent or lacks adequate facilities and a SLMS as is the case in this present study, what is the hope of the students in this digital age?.The findings of this study point to the sorry status of SLMC's and their poor level of preparedness to facilitate Internet

health information utilisation.Indisputably, there should be greater advocacy for the practice of school media librarianship in Nigeria and beyond to make policy makers see reason not to deprive any school of the services of a certified SLMS and a well- equipped SLMC.

Socio-demographic Profile and Internet Health Information Utilisation by Adolescents in Osun State

Findings show that age and socio-economic class have a positive, significant relationship with Internet health information utilisation. This implies that as age increases, there is increased Internet health information utilisation and adolescents from higher socio-economic background will utilise Internet health information more. The probable explanation for this finding could be that financial constraints limit access and utilisation of Internet facilities. This is particularly important since the majority of the respondents of this study are from the lower socio-economic background and attend the public owned secondary schools. With the cell phones as their main source of Internet access, they may not always have sufficient fund to buy air time for data use on their phones which could impede access to Internet. This finding aligns with the views of Ngugen, Mosadehi and Almario (2017) who in a California-based study found that there remains a persistent demographic and socio-economic digital divide in Internet health information seeking and utilisation. Their study provided empirical evidence that individuals from lower socio-economic backgrounds were less likely to utilise Internet health information. This finding corroborates reports from an Indian study by Naganatini, Rao & Kulkarni (2014); a Senegalese study by Glik et al (2014) and a Ghanaian study by Markwei & Apiah (2016) who affirmed that especially among adolescents in the rural areas from lower socio-economic background, cost and availability of Internet facilities could be inhibitors to Internet health information utilisation.

Although this study found that gender has no significant relationship with Internet health information utilisation, several studies within and outside Nigeria holds a contrary view.Kunnunji (2014) in a study of Internet use among Nigerian adolescents revealed that gender is a strong predictor of Internet health information utilisation. This stance corroborates an earlier study by Pitel, Geckora, Reijneveld, and Van Dijk (2013) which found gender to be a predictor of Internet health information utilisation. Evidence from Rowley, Johnson and Sbaffi (2017) in a US study suggest that being female and younger in age are factors associated with more frequent Internet health informationutilisation which is contrary to the findings of this study. A likely explanation could be that at the developmental stage of the respondents of this study,there may be no gender specific variations in health concerns as both male and female show similar interest in extent of Internet health information utilisation. As conceptualised by Oyewusi (2016), the school library media centre is a learning and information resource for the whole school with a certified SLMS offering equal access,

support and encouragement to all students irrespective of age, gender, ability and socio-economic or cultural background. The SLMS therefore has a crucial role to play and should be willing to play the important role of health information gatekeeper by networking with other concerned agencies in promoting and disseminating age-appropriate, gender sensitive health information that is culturally acceptable to Nigerian school-going adolescents. Macintyre and O'Shea (2014) suggested that SLMS could create clear information sheets to help students use sophisticated software.

Implication's for the Practice of School Library Media Specialists

This study and its findings have implications for the practice of school librarianship and policies concerning the establishment of school library media centres in Nigerian schools. Before the approval/establishment of any secondary school, there should be a policy document guiding the minimum criteria for the provision of a school library media centre which must be staffed by a certified school library media specialist. Where there is an already established SLMC without a certified SLMS, the teacher in charge should be retrained.Concerted advocacy should be made by all stake holders for the training and re-training of SLMS for continuing professional development so that they will keep abreast of recent developments in the rapidly changing field of digital literacies and competencies. As a matter of urgency, the provision of Internet facilities should be a priority in all SLMC's. To facilitate the achievement of the lofty goals of a successful school library media programme, SLMS's should be adequately recognised, motivated and given opportunity for career progression then they should be given a free hand to operate so that they can bring innovations and creativity into their practice. The researchers believe that with the implementation of these suggestions, school going adolescents will become more knowledgeable and confident users of Internet health information.

Limitations of the Study

The strength of this study is in the high response rate (98.8%). Due to constraints in time and funding, the study was limited to school-going adolescent in Osun State. The results of the survey were based on self-reported Internet health information utilisation which could have been under reported or over reported.

Conclusion and Recommendations

It can be concluded that the majority of school going adolescents favour mobile phones as access points for Internet health information with the SLMC trailing behind. To a large extent the Internet is accessed regularly to meet health information needs on sensitive health issues adolescents feel shy about discussing thereby gratifying their needs by utilising the Internet for health information. The SLMC's in Osun State are in a very poor state of preparedness to support Internet

health information utilisation. The raison d'etre being that school library media centres are virtually non-existent and where they exist, they lack adequate manpower and infrastructure. This situation will certainly not create an enabling environment for Internet health information utilisation for school-going adolescents. Age and socio-economic background had positive significant relationships with Internet health information utilisation which implies that the SLMS in order to be effective must be sensitive to the socio-demographic profile and information needs of the school going adolescents.

From the foregoing, the researchers recommend that:

- School library media centres as a matter of urgency should be established in all secondary schools.
- Certified school library media specialists (SLMS) should be employed to staff the SLMC and be adequately motivated and renumerated to ensure that they give their best.
- SLMS should be given a free hand to develop criteria/guidelines on what to look out for in the provision of age-appropriate and socio-culturally acceptable health information for adolescents.
- SLMS should gain the trust and create rapport with school going adolescents so that they will agree to the use of filtering software and to identify adolescent health interests.
- SLMS should align with cultural and gender expectations to provide developmentally appropriate health information/websites.
- SLMS should offer instruction on information literacy and in collaboration with health educators give instruction on health literacy.

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