Journal Homepage: - www.journalijar.com
INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)
Article DOI: 10.21474/IJAR01/xxx
DOI URL: http://dx.doi.org/10.21474/IJAR01/xxx
ISSN NO. 2320-5407

RESEARCH ARTICLE

ADOLESCENTS' UTILIZATION OF WEBSITES AS A SOURCE OF REPRODUCTIVE HEALTH INFORMATION.

Dr. Randa Mohammed Abo Baker.
Lecturer of Nursing Department, College of Applied Medical Science, University of Hafr Al Batin, KSA.

Manuscript Info

Manuscript History

Received: xxxxxxxxxxxxxxx
Final Accepted: xxxxxxxxxxx
Published: xxxxxxxxxxxxxxx

Key words:-
adolescent, Reproductive health, health, internet and technology.

Abstract

Adolescence is a transitional phase of growth and development between childhood and adulthood among ages 10 and 24 with an estimated 1.2 billion adolescents alive today, the world is experiencing the largest adolescent population in history. The present study aimed to explore adolescents' utilization of Websites as a source of reproductive health information. An exploratory descriptive study was conducted at College of Applied Medical Science and College of science, University of Hafr Al Batin, KSA, through systematic random technique.Data were collected through one tool: Tool 1: A questionnaire sheet was developed to collect the necessary data. It entailed three sections: Section I: Socio-demographic characteristics. Section II: Media available at home. Section III: Reproductive health related topics. Results of the study illustrated that Internet is the first choice of source of reproductive health information to explore sensitive topics online. The students agreed that information easily accessed, private and the quality of information was more than expected. Most girls did access such topics related to adolescents' such as pregnancy, menstruation, contraception. The study concluded that, Internet may offer opportunities for identifying reproductive health information among adolescents. Also the study provides a useful snapshot of current adolescent searching patterns and enhancing educators' knowledge are likely to encounter such as spelling and medical terms.

Introduction:-

No matter where, adolescence is a time of transition. At this age, young people need special attention, reproductive health information and care that meet their needs. It is a time of unique risks. (WHO 2016) In many societies, however, adolescence is narrowly equated with puberty and the cycle of physical changes culminating in reproductive maturity. In other societies adolescence is understood in broader terms that encompass psychological, social, and moral terrain as well as the strictly physical aspects of maturation. (Csikszentmihalyi 2016). Adolescence is a transitional phase of growth and development between childhood and adulthood between ages 10 and 24 (Wikipedia2016) . There are 1.2 billion adolescents in the world today, accounting for 17 % of the global population. "Adolescents are often lumped into groups, such as 10 to 19, or 15 to 24, but there are vast differences between adolescents of different ages. (Lane 2017) Within the framework of WHO definition of health as a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity, reproductive

Corresponding Author:- Randa Mohammed Abo Baker.
Address:- Lecturer of Nursing Department, College of Applied Medical Science, University of Hafr Al Batin, KSA.

health addresses the reproductive processes, functions and system at all stages of life. Reproductive health, therefore, implies that people are able to have a responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so (WHO 2017).

Adolescence is a critical period of human development often characterized by confusion, mixed interpretation and understanding of adult behaviour and environment, exuberance and a penchant for experimentation. During this period, the future health character and culture profile of the individual are formed, where the biological and sexual maturation are the most distinctive as well as the most problematic. (WHO, 2001, Naghshbandi *et al*. 2004)

According to Caldwell (Caldwell *et al*. 1998) adolescence is a post - pubertal population younger than twenty years who have a distinct lifestyle. They often want to discuss topics such as physical fitness, stress, nutrition & good eating behavior. They also hesitate to request personal health information from their parents or physicians. Adolescents also struggle with lack of knowledge about their reproductive health. In general, adolescents are uncomfortable to discuss private health issues such as sexuality, and they are embarrassed, afraid or uncomfortable to discuss certain issues as menstruation and pregnancy than their older peers. Moreover, Adolescents may experience resistance or even hostility from adults when they attempt to obtain the reproductive health information and services they need. They therefore may be at an increased risk for health consequences that can affect their futures—and the future of their communities—for many years to come. (Program for Appropriate Technology in Health. 1999). The key concern about the health of young people is the extent to which they have access to resources that promote their development. Access to information and communication services is now seen as a universal right within this decade. Access to reproductive health care, information and education is critical for adolescents in all settings. Adolescents should be made aware of their right to access these services—and so should parents and community leaders. (WHO 2016).

The adolescents need include: access to education, information and services; resources that reside in a stable and supportive structure such as the family; resources contained within policy-making and decision-making processes, and many young people do not have access to these facilities. To improve young people's access to these resources, new strategies that are attractive to the youth are beginning to emerge and they make use of the power, creativity and enthusiasm of adolescents. This is where information technology, such as the Internet, is expected to play a critical role as a source of information. (Nwagwu 2007).

Adolescents are known to be frequent users of the Internet, but less is known about the frequency and nature of their searches for information about health and sexuality. In theory, the Internet offers adolescents unprecedented access to such information in a convenient and confidential way. In turn, this information may help them to seek medical care or advice. Currently the internet is recognized as a valuable tool for intervention and prevention in Western culture. This may be especially true for adolescents, who have overwhelmingly adopted the technology as another environment in which they interact and learn. An estimated 25%-31% of young people in the United States have looked for health information online in 2006. (Ybarra *et al*. 2006, Currie & Reaban 2003). Considering the attributes of cheapness, availability, ease of use and confidentiality of online resources, adolescent information needs may better be served by the Internet, which allows them to explore sensitive topics online which they may not want to reveal to parents, physicians, school officials, or acquaintances. Web resources such as web pages, bulletin boards, newsgroups and chat rooms found on the Internet contain health information and provide access to information for a potentially large number of participants worldwide. (Nwagwu 2007). Internet services are available in college and in homes. This study is attempts to explore and describe how adolescents use online resources to meet their reproductive health information requirements and the extent to which this infrastructure serves their needs.

Aim of the study: The aim of this study is to explore adolescents' Utilization of Websites as a Source of Reproductive Health Information

Study questions

1. Are the web – site used as a source of reproductive health information?
2. What are the kinds of the reproductive health topics that the adolescents look for?
3. What are the other sources for information about the reproductive health?
4. Are the web-sites searching for information about their reproductive health preferred by the adolescent?

Operational definitions:
1. In these study adolescents refers university students who are in their late adolescence period of life (age17-21 years)
2. Reproductive health refers to reproductive health related topics accessed by the study subjects e.g. puberty, menstruation, pregnancy, nutrition, drugs…. etc.

Design :This study is an exploratory descriptive study.

Material and methods:-

Material:

Setting

The study was conducted at College of Applied Medical Science and college of science. Data was collected from two college affiliated to University of Hafr Al Batin.

Subjects

A total sample of 250 students from the above mentioned setting was selected for this study. 150 students from college of science and 100 from College of Applied Medical Science. All students enrolled in the first Academic Year who accepted to participate in the study. First year students were chosen because they are still in the late adolescence period (17-21 years). The systematic random technique was followed in the selection of the study subjects.The third comer on the registration record was chosen among students who in the first Academic at the time of data collection.

Tool

A questionnaire sheet was specially designed by the researcher to collect the necessary data. It was tested for validity and reliability. It entailed three sections:

Section I: Socio-demographic data such as student's age, parents' education and occupation.

Section II: Media available at home e.g. radio, TV, telephone, computer and internet. Sources of internet used such as home, relatives and friends.

Section III: Reproductive health related topics accessed by the study subjects e.g. puberty, menstruation, pregnancy, nutrition, drugs, cancer…. etc. The participants were also asked to select the ones from whom they have ever sought information; preferred topics, other sources of their information e.g. radio TV or printed material... etc. and their perception about the health information on the internet.

Methods

The study was executed according to the following steps:

- Approvals: An official permission clarifying the purpose of the study was obtained from Dean of the College of Applied Medical Science and the concerned collage to conduct the study and collect the necessary data.

- Development of the tool: The questionnaire sheet was developed by the researcher based on an extensive review of relevant and recent literature. It was tested for content validity by 3 juries, who are experts in the related field to reach consensus on the best form to be implemented.

- A Pilot study was carried out on 30 students from the previously mentioned settings to ascertain the clarity and applicability of the tool. Also to detect any problem peculiar to the statements such as phrasing, sequence and clarity.

- Collection of data:
- First year students are three groups; the researcher met each group separate and explains the purpose of the study, then distribute the questionnaire to subjects who accepted to participate in the study to collect the necessary data. The duration of the interview ranged from 10-15 minutes.
- Data collection started by the end of November 2015 and continued until June 2016.
- The right of respondents to participate in the study was fully respected. Therefore, the purpose of the study was explained to each students and an oral consent to participate in it was secured.

Statistical design

The data were obtained, reviewed, prepared for computer entry, coded, analyzed, and tabulated. Data entry and analysis were done using SPSS 22.0 statistical software package and Microsoft excel program. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means for

quantitative variables. Using chi square to determine relation between qualitative data. The level of significant selected for this study was p equal to or less than 0.05.

Results:-

TABLE (1):-

Demonstrates their socio-demographic characteristics. It was noticed that, the adolescent's age ranged from 17-21 year with mean age 25.00±14.61 years. Also, mean level of education of fathers and mothers were (50.0±56.0 &50.0±36.8), respectively, while Occupation of fathers and mothers were (25.00±13.08 &208.0±69.4), respectively. No statistically significant difference was detected regarding their socio-demographic characteristics.

TABLE (2)

Reveals their Use of selected media. It can be observed that the majority of study subjects' is equipped with TV, telephone and internet 100%, while computer was available for 80 %, nearly one third 32% were listening to radio, only 8% of them listen for more than 2 hours daily and two fifths 40% preferred Quran and related program, while one fifth (20%) listening TV for more than three hour and three fifth (60%) preferred to listen health and talk show. No statistically significant difference was found between study subjects regarding use of selected media.

TABLE (3)

Illustrates their internet use. It was found that, the majority 80% of study subject used the internet, While 88% of them reported having an e mail accounts. Access locations most commonly used were at home used by about two thirds 64 %. Regarding duration of using the internet it was found that, the majority 80 % of them reported using the internet for more than five hours daily. Also, A highly statistically significant difference was observed among the activities such as searching health issues, news and searching general knowledge as well as searching fashion, cooking programs and songs, where (P =<0.0000), but No statistically significant difference was encountered in relation to activities in internet use, e mail account, hours day using internet and activities such as playing games, emailing, chat with friends and spelling and medical terms.

TABLE (4)

Clarifies their reproductive health topics. It was noticed that most commonly searched were observed that the majority (80%) of the same puberty, diet, nutrition, health information, breast self-examination and premarital counseling, followed by adolescence period / adolescence pregnancy and menstrual cycle visited by a sizable proportion (72%), respectively. Also fitness or exercise, parenting and menopause period visited by three fifth (60%) of them. Regarding to the presence of other sources of their reproductive health information. It was found that the majority (80%) of them had other sources for their reproductive health information with mean other source 12.11±3.88. A highly statistical significant difference were found regarding their reproductive health information, where (p=0.0002).

TABLE (5)

Shows their reasons of preference of the internet as a source of their reproductive health information. It was noticed that the majority (88 %) of the study subjects prefer the internet search for reproductive health information. More than one third (40% & 32%), respectively of the study subjects mentioned privacy and presence of variety of information, and easiness of internet use as reasons for preference. While, (29.2%, 21.6% and 20.4%), respectively of them mentions reasons as easy to use, useful, easy to read and visually appealing. Also the table represents their opinion about reproductive health information on the internet. It was found that two fifth and more (43.2% & 40.0 %) of the study subjects reported that the information were helpful and suitable respectively, followed by more than one fourth (28%) of them simple, while more than one fifth (22% & 21.2) of them express limited and fulfilled the needs. While, 17.2 % found it useful and a minority (5.2%, 6.0% & 3.6%) mentioned less than expected, more than expected as well as not trusted and strange.

TABLE (6)

Reveals the relation between general characteristics of the study subjects and internet use. It can be observed that, A significant relationship were found regarding fathers' and mothers' educational levels, where (X2 = 61.2, p=0.001, X2 = 75, 0.001), respectively while fathers' and mothers occupation (X2 =19.4, p=0.001 and X2 =10.4, p=0.001 respectively).

Table (1):- Number and percent distribution of the study sample according to their socio - demographic characteristics

Socio-demographic characteristics	No (n=250)		t (P)
	No	%	
Student's age: 17 - < 19 19 - 21	 129 121	 51.6 48.4	3.42 (0.042)
Mean ± SD	25.00±14.61		
Father data: Level of education: - Illiterate/ read & write - Basic education - Secondary education - University or more	 15 64 104 67	 6.0 25.6 41.6 26.8	 1.26 (0.43)
Mean ± SD	50.0±56.0		
Occupation: - Retired - Working	26 224	10.4 89.6	3.82 (0.032)
Mean ± SD	25.00±13.08		
Mother data: Level of education: - Illiterate/ read & write - Basic education - Secondary education - University or more	 22 87 91 50	 8.8 34.8 36.4 20.0	1.92 (0.31)
Mean ± SD	50.0±36.8		
Occupation: - Worker - Housewife	 60 190	 24.0 76.0	6.70 (0.0026)
Mean ± SD	208.0±69.4		

t (P): t- Test &P for t Test

*: Significant at P ≤0.05

Table (2):- Number and percent distribution of the study subjects according to their use of selected media

Use of selected media	No (n=250)		t (P)
	No	%	
Household appliance: ** Radio TV Telephone or mobile Computer Internet (connection or wireless)	 90 250 250 200 250	 36.0 100 100 80.0 100	 6.70 (0.0026)
Mean ± SD	83.2±27.8		
Radio: Listening to radio daily: - Yes - No	 80 170	 32.0 68.0	2.78 (0.22)
Mean ± SD	125.0±63.6		
Hours a day listening to radio: o 0 o < 2 o 2 <	130 100 20	52.00 40.00 8.00	2.78 (0.22)
Mean ± SD	50.0±25.5		
Most preferred programs: ** Quran and related program	 100	 40.0	5.02 (0.015)

Songs & music	89	35.6	
Sports	33	13.2	
Talk show, news	100	40.0	
Mean ± SD	32.20±12.84		
Watching TV:			1.67
- Yes	200	80.0	(0.34)
- No	50	20.0	
Mean ± SD	125.0±106.1		
Hours a day watching TV:			2.50
o 0	50	20.0	(0.13)
o 2-<3	150	60.0	
o <3	50	20.0	
Mean ± SD	33.3±23.1		
Most preferred program: **			5.25
Religious channels	100	40.0	(0.0033)
Movies & series	100	40.0	
Sports	20	8.0	
News	90	36.0	
Health & talk shows	150	60.0	
Scientific & scientific fiction, news	80	32.0	
Mean ± SD	36.00±16.78		

t (P): t- Test &P for t Test
*: Significant at P ≤0.05
** More than one answer

Table (3):- Number and percent distribution of the study subjects according to internet use

Internet use	No (n=250)		t (P)
	No	%	
Ever use the internet:			
Yes	200	80.0	1.67
No	50	20.0	(0.34)
Mean ± SD	50.0 ± 42.4		
Access location:			2.17
Home	160	64.0	(0.16)
Friend's house	40	16.0	
Relative's house	50	20.0	
Mean ± SD	33.3±26.6		
Email account:			1.32
Yes	220	88.0	(0.41)
No	30	12.0	
Mean ± SD	50.0±53.7		
Hours a day using the internet:	20		1.43
< 2	30	8.0	(0.29)
2-<5	200	12.0	
<5		80.0	
Mean ± SD	33.3 ±40.5		
Activities: **			
- Playing games	100	40.0	5.32
- Emailing	150	60.0	(0.0031)
- Chat with friends	20	8.0	
Mean ± SD	41.33 ± 19.4		
- Searching health issues& News	150	60.0	7.74
- Searching general knowledge	100	40.0	(0.0000)

- Searching fashion, cooking programs and songs	50	20.0	
Mean ± SD	46.41± 24.73		
- Spelling &Medical terms	90	36.0	1.67 (0.34)
Mean ± SD	50.0± 42.4		

t (P): t- Test &P for t Test
*: Significant at P ≤0.05
** More than one answer

Table (4):- Number and percent distribution of the study subjects according to reproductive health topics searched on the internet and other sources of their information

Reproductive health topics visited by the study subjects **	No (n=250)	
	No	%
Puberty	200	80.0
Adolescence period/ Adolescence pregnancy	180	72.0
Menstrual cycle	180	72.0
Contraception	90	36.0
Violence	60	24.0
Fitness or exercises	150	60.0
Parenting	150	60.0
Diet / nutrition / Health information	200	80.0
Mental health	60	24.0
Reproductive cancer	70	28.0
Breast self-examination	200	80.0
Menopause period	150	60.0
Abortion	100	40.0
Premarital counseling	200	80.0
Reproductive health information	130	52.0

Sources	No (n=250)		t (P)
	No	%	
Have other sources:			8.27
Yes	200	80.0	(0.0002)
No	50	20.0	
Sources:**			
Parents	22	8.8	
Doctor / nurse	40	16.0	
Booklets / magazine	20	8.0	
School books	40	16.0	
Teachers	30	12.0	
TV / Radio	20	8.0	
Friends	40	16.0	
Mean ± SD	12.11±3.88		

t (P): t- Test &P for t Test
*: Significant at P ≤0.05
** More than one answer

Table (5):- Number and percent distribution of the study subjects according to reasons of preference of the internet and their opinion about the reproductive health information on the internet

Reasons	No (n=250)	%
Prefer internet search		
Yes	220	88.0
No	30	12.0
Reasons		

Privacy	100	40.0
Variety of information	80	32.0
Ease of use	73	29.2
Useful	54	21.6
Easy to read	51	20.4
Visually appealing	50	20.0
Trustworthy	47	18.8
Relevant	46	18.4
Accurate	45	18.0
Unlimited / unrestricted	35	14.0
Opinions*		
Helpful	108	43.2
Suitable	100	40.0
Simple	70	28.0
Limited	55	22.0
Fulfill my needs	53	21.2
Useful	43	17.2
Less than expected	13	5.2
More than expected	15	6.0
Not trusted and strange	9	3.6

* More than one answer

Table (6):- Relation between general characteristics of the study subjects and internet use

Socio - demographic characteristics	Ever use the internet		Never used the internet		Total		χ^2 (P)
	No.	%	No.	%	No.	%	
Father's educational level:							61.2 (0.001)*
Illiterate/ Read & write	25	12.50	25	50.00	50	20.00	
Basic education	25	12.50	15	30.50	40	16.00	
Secondary	50	25.00	10	20.00	60	24.00	
University or more	100	50.00	0	0.00	100	40.00	
Mother's educational level:							
Illiterate/ Read & write	10	5.00	20	40.00	30	12.00	75 (0.001)*
Basic education	30	15.00	20	40.00	50	20.00	
Preparatory / secondary	80	40.00	7	14.00	87	34.80	
University or more	80	40.00	3	6.00	83	33.20	
Father's occupation:							19.4 (0.001)*
Retired	26	50.00	20	54.00	127	50.80	
Working	174	50.00	30	46.00	123	49.20	
Mother's occupation:							10.4 (0.001)*
Housewife	70	35.00	30	60.00	100	40.00	
Worker	130	65.00	20	40.00	150	60.00	
Total	200	100%	50	100%	250	100%	

* Significant $p \leq 0.05$

Discussion:-

Adolescence is a transitional stage of physical and psychological human development that generally occurs during the period from puberty to legal adulthood. As a result, adolescent reproductive health is an increasingly important component of global health (Lane 2017). The key concern about the health of this population is the extent to which they have access to resources that promote their development.

The present study was conducted to explore adolescents' utilization of Websites as a source of reproductive health information. According to the results of the current study, it can be noticed that, no statistically significant difference was detected regarding their socio-demographic characteristics (Tables 1). Also, the study findings revealed that the

majority of adolescences 80% used the internet, While 88% of them reported having an e mail accounts. Access locations most commonly used were at home used by 64 %. Regarding duration of using the internet it was found that, 80 % of them reported using the internet for more than five hours daily (Tables 2, 3 & 4)

The results of the current study demonstrated that reproductive health topics most commonly searched by study subjects was (80%) puberty, premarital counseling and fitness or exercises followed by adolescence period and menstrual cycle visited by nearly three fourth respectively. Also, breast self-examination and menopause visited by 60% of them. Seeking health information online may be attributed to cheapness, availability, ease to use and confidentiality of the online resources.

The current finding is relatively consistent to the study of (Borzekowski *et al*. 2002) who found that; 90% of the youths in the US reported having gone online and 63 % have done this in Ghana. Moreover, the current finding is relatively similar to the study of (Naghshbandi 2007) the study indicated that the Internet access at home and email accounts ownership for all the categories of respondents. Also the study in line with (Lenhart *et al*. 2005) who had found that, 87% of U.S. teens aged 12-17 use the internet, by contrast, 66% of adults use the internet.

Furthermore, it relatively matches with the study of (Naghshbandi 2007) the study indicated that, the majority of the in-school adolescents (72%) accessed the Internet services through the Internet cafes, 43% used the school facility, 15% home facility, while 13% and 9% respectively reported that they used Internet facilities in friends' homes and other family members. The reason for this pattern of access was investigated further by an oral interview, and it was discovered that the adolescents preferred locations where they would enjoy unsupervised access.

The present finding is also partially in accordance with the study of (Ybarra *et al*. 2006) who had reported a lower proportion (38 %) of Ugandan adolescents who have looked for health information online. Also, not in harmony with the study of (Lenhart *et al*. 2005) who had found that, 31% use the internet to get health information.

The current finding also partially agree with that of (Naghshbandi 2007) He reported a crucial question that emerges in this study is whether the Internet is actually an appropriate way to reach adolescent girls in Owerri and probably in other urban cities in Nigeria? This question arises in view of the fact that the study suggests that most of the study participants do not primarily use the Internet for reproductive health information. The list of the study participants who have sought on-line information on various topics does not show that even 50% of respondents indicated seeking online information on any of these topics.

As in all communities, the number of channels available might limit the utility of televisions and radios, just as telephone might not provide visual and other accoutrements necessary to enhance engagement and interactivity. But the Internet gives the girl a high degree of interactivity, offers a secret, non-punitive, confidential and easily accessible space to find sensitive information. Moreover, the commercial based services often guarantee security and privacy of information; are cheap, available and accessible, and the skill required to use the service is no more difficult to acquire.

Also, the current study shows that the majority of study subjects' is equipped with *TV, telephone and internet* 100%, while *computer* was available for 80 %. Only one third were listening to *radio,* only 8% of them listen for more than 2 hours daily and 40% *preferred* Quran and related program, while one fifth listening TV for more than three hour and three fifth *preferred* to listen health and talk show. *No statistically significant difference* was found between study subjects regarding use of selected media.

The present finding revealed that the majority of adolescences had looked for information about premarital counseling, Diet / nutrition / Health and puberty. This is not amazing and may be attributed to the popular observation that the parents do not tend to communicate about reproductive health with their adolescence in most Arabic communities, due to culture practice. Also, the findings of the current study revealed that adolescence period, menstrual cycle, parenting, menopause, adolescence pregnancy and fitness or exercises. This may be attributed to the minor role that mass media and educational curriculum played in covering these areas; while contraception, violence, mental health, reproductive cancer and abortion were looked by a small proportion of the adolescents.

Also, other sources of reproductive health information used by adolescents included, doctor / nurse, school books and friends followed by teacher, parents and booklets and magazines. This means that adolescents are still at stage

of life when they require guidance regarding the choices they make about their health, and the internet could create a new role for parent's teachers and care provider in informing and counseling as well as guiding young people information choice.

In addition, the current finding is partially in accordance with (Ybarra et al. 2008) They found that (81%) adolescents indicated they turned to parents, teachers, and other adults while around half read a book/went to the library (56%) or turned to siblings and friends (50%) for information about health and disease. (38%) indicated that they used the computer and Internet to search for health information. Older versus younger respondents tended to rely upon siblings and friends for all types of health questions. On the other hand, younger versus older youth were significantly more likely to turn to parents, teachers, and other adults for their questions about sexual health.

Moreover, it relatively matches with the study of (Naghshbandi 2007) where they observed that other source of information's as parents (66.22%) and teachers (56.15%) are the two sources most used to the in-school girls, friends (63.18%) and the Internet (55.19%) were reported by the out-of-school youth as the two most used sources of information to them.

Furthermore, the present finding, is also relatively falls in line with the study of (Gray *et al*. 2006) about "Adolescents and the internet, where they found that adolescents are using the Internet in order to find health information on a range of subjects. Search engines are the primary strategy for such searches. The quality of the online experience is often limited by health/online literacy skills.

The current finding is also relatively consistent with the study of (Gray *et al*. 2006) the study indicated that many students cited difficulties in accessing health information online. Functional health literacy challenges included, for example, spelling medical terms correctly and being able to construct questions describing symptoms accurately. Critical challenges included discerning relevance of information retrieved by search engines and knowing which sites to trust. Interactive challenges included the appropriate application of health information to address personal health concerns within their local neighborhood.

In addition, the present finding is relatively congruent with the (Hansen *et al*. 2003) about" Adolescents searching for health information on the Internet: an observational study" They concluded that this study provides a useful snapshot of current adolescent searching patterns. The results have implications for constructing realistic simulations of adolescent search behavior, improving distribution and usefulness of Web sites with health information relevant to adolescents, and enhancing educators' knowledge of what specific pitfalls students are likely to encounter.

Also, the present finding matches with that of (Naghshbandi 2007). The study indicated that more than 73% of the girls reported having ever used the Internet; more than 74% and 68% of them being in-school and out-of-school respectively. The in-school girls (43.9%) reported having home access more than the out-of-school (5.6%) although the out-of-school have used the Internet for finding reproductive and related information more than the in-school.

Using the Internet for information seeking is also however fraught with many dangers and could be counterproductive for youth when unguided. First, adolescents are still at stages in life when they require guidance regarding the choices they make about their health. An unguided reliance on the Net denies parents and other care givers the opportunity to vet and control the information their daughters receive from the chaotic nature of information content of the Internet. Furthermore, an unguided reliance on the Net for health information sidelines parents and teachers and other care givers who sometimes possess skills that are more suitable, both in curriculum and in local content, for adolescent education

The findings of the present study revealed that, access locations most commonly used were at home used by about two thirds followed by relative's house. However, Internet, especially when located in the home, could create a new role for care providers, parents and teachers in informing and counseling as well as guiding young people's information choices. But the low use of home Internet for information reported here might mean that parents and adults have not incorporated the Internet as a strategy for adolescent health education. Adequate enlightenment is required to break information and communication gaps that exist between parents and children regarding using the Internet for reproductive health issues. (Naghshbandi 2007).

Reasons cited for internet preference as a source of reproductive health information included privacy, relevant and variety of information, ease to use and read, visually appealing and costless. This results could be explained by the fact that, young people are concerned about their privacy and are being monitored or in some other way feeling inhibited by community. Moreover, the internet gives the adolescents a high degree of interactivity, offers anonymous, non-punitive, confidential, easily accessible pace, to find sensitive information and no skill is required to use this technology for information.

The findings of the present study showed significant relationship between internet use and level of parents' education. These findings could be explained by the fact that, higher education leads to more awareness and use of the new technology such as the internet. Although concern is raised about the quality of online health information and many people are optimistic about the internet as a source of information to young people the findings of the current study revealed that, opinions about the reproductive health information found online seen as helpful, suitable, simple and fulfill the needs. This draw the attention of parents, family members and teachers to give the opportunity to adolescents to discuss the sensitive topics and emphasize the role of the mass media and school curricula to help them to reach accurate, relevant and effective information about their reproductive health. (Borzekowski *et al*. 2006 , Bundorf *et al*.)

Finally, we can say that, the information technology, such as the Internet, is expected to play a critical role as a source of information. Adolescence is a critical period of human development often characterized by confusion, mixed interpretation and understanding of adult behaviour and environment, enthusiasm and a desire for experimentation, especially with reproductive health topics. Access to information and communication services is available and accessible as well as now seen as a universal right so, the key concern about the health of young people is the extent to which they have access to resources that promote their development. (Wikipedia 2017).

Conclusion And Recommendations:-

IN THE LIGHT OF THE CURRENT STUDY FINDINGS, IT CAN BE CONCLUDED THAT:

The use of Internet is not the first choice of source of reproductive health information for adolescence. The source is however; more commonly used at home than other access locations. Also the study provides a useful snapshot of current adolescent searching patterns and enhancing educators' knowledge are likely to encounter such as spelling and medical terms.

In the light of the study findings, it is recommended that:-

1. Exploring the challenges faced when adolescents search for online reproductive health information and health issues.
2. Counseling program for adolescence: what they want to know in regard reproductive health information or topics, what they actually gained and who provide it?
3. Further studies are still needed to assess the impact of software filters on ability to access health information and the medium's potential to help and harm adolescents.

References:-

1. Borzekowski, D.L., & Rickert, V.I. (2001). Adolescent cybersurfing for health information: a new resource that cross barriers. Arch Pediatr Adolesc Med Issues,155(7):813-817
2. Borzekowski,D. L., Fobil, J.N., & Asante K.O. (2006). Online Access by Adolescets in Accra: Ghanaian Teens' Use of the Internet for Health Information. Dev Psychol,42, 450-8. DOI: 10.1037/0012-1649.42.3.450
3. Bundorf, M.K., Wagner, T.H., Singer, S.J. & Baker, L.C. (2006). Who search the internet for health information? HSR: Health Serv Res, 41, 819-36. DOI: 10.1111/j.1475-6773.2006.00510.x
4. Caldwell, J.C., Caldwell, P., Caldwell, B.K., & Pieris, I.(1998). The construction of adolescence in a changing world: implications for sexuality, reproduction, and marriage. Stud Fam Plann Issues, 29(2):137-53.
5. Csikszentmihalyi, M. (2016, July 1). Adolescence. Retrieved from :https://global.britannica.com/science/adolescence
5. Currie, J. , & Reaban, P.B. (2003). Distance to Hospital and Children Use of Preventive Care: Is Being Closer Better and for Whome? Economic Inquiry; 41, 378-91. DOI: 10.1093/ei/cbg015
6. Gray, N.J., Klein, J.D., Noyce, P.R., Sesselberg, T.S., & Cantrill, J.A. (2005).The Internet: a window on adolescent health literacy. J Adolesc Health, 37, 243. DOI: 10.1016/j.jadohealth.2004.08.023

7. Gray, N.J., & Klein, J.D. (2006). Adolescents and the internet: health and sexuality information, 18, 519-24. DOI: 10.1097/01.gco.0000242954.32867.76
8. Hansen, D.L., Derry, H.A., Resnick, P.J., & Richardson, C.R. (2003). Adolescents searching for health information on the Internet: an observational study. J Med Internet Res, 5, e25. DOI:10.2196/jmir.5.4.e25
9. Lane, C. (2017, March 19). Adolescent Reproductive Health: The Challenge and Benefits of Delaying Sex. Retrieved from https://www.wilsoncenter.org/event/adolescent-reproductive-health-the-challenge-and-benefits-delaying-sex
10. Lenhart, A., Madden, M., & Hiltlin, P. Teens and technology: Youth are leading the transition to a fully wired and mobile nation. Washington (D.C 20036202-419-4500):Pew Internet and American Life Project. July 27, 2005.
11. Naghshbandi, E., Rizk, S., & Abed Elkader, W. (2004).Effect of an educational program reproductive health on knowledge and attitude of adolescent Saudi Girls. ASNJ Issues, 3(2), 20-33
12. Nwagwu, W. E. (2007). The Internet as a source of reproductive health information among adolescent girls in an urban city in Nigeria. BMC Public Health, 2458, 7- 354. doi: 10.1186/1471-2458-7-354
13. Program for Appropriate Technology in Health (PATH). (1999). Adolescent reproductive health: making a difference. Website,www.path.org/files/eol16_3.pdf, 15, 139. DOI: http://dx.doi.org/10.1016/S0266-6138(99)90010-4
14. WHO. (2017, March 1). Reproductive health, website, http://www.who.int/topics/reproductive_health/en/
15. WHO. Orientation program on adolescents' health for health care providers: the meaning of adolescence and its implications for public health. Geniva: WHO, 2001; 1-15
16. Wikipedia. (2016, July 18). From Free of the encyclopedia, Adolescence, Retrieved from https://en.wikipedia.org/wiki/Adolescence
17. Wikipedia. (2017) from Free of the encyclopedia. Critical period. Retrieved fromhttps://en.wikipedia.org/wiki/Critical_period. on: 6 March 2017.
18. Women's Refugee Commission . (2016, July 1). from WHO, Sexual & Reproductive Health, Retrieved from, https://www.womensrefugeecommission.org/srh/adolescent-sexual-and-reproductive-health
19. Ybarra, M.L., Kiwanuka, J., Emenyonu, N., & Bangsberg, D.R. (2006). internet Use among Ugandan Adolescents: Implications for HIV Intervention. PLoS Medicine; 3, 2104-2112.https://doi.org/10.1371/journal.pmed.0030433
20. Ybarra, M.L., Emenyonu, N., Nansera, D., Kiwanuka, J., Bangsberg, D.R. Health information seeking among Mbararan adolescents: results from the Uganda Media and You survey. Health Educ Res. 2008 Apr;23(2):249-58. Epub 2007 Jul 16. DOI: 10.1093/her/cym026