

**Accessibility and utilisation of reproductive health information among youths in
Songwe and Chunya districts, Tanzania: a longitudinal study**

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Abstract

Most youths in Songwe and Chunya Districts dropped out from school due to unplanned pregnancies, and some are infected by sexually transmitted diseases. Thus, it was assumed that, reproductive health information was not accessible to youths in the study area. Data for the study were collected twelve years from the previous study on the related title and topics. The aim was to study the trends on accessibility and utilisation of reproductive health information among youths in the study area. The specific objectives were to evaluate youths' awareness on matters related to reproductive health, to identify sources frequently consulted and factors constraining access. The study employed a mixed method approach for data collection methods and analysis. Also, the study was underpinned by Wilson's (1999) model of information behaviour. A total of 128 respondents participated in the study through questionnaire, interview and focus group discussion. Results show that most youths in the study had little awareness and access to reproductive health information available in different sources. The mostly preferred sources by youths were peers and friends followed by reading from published and unpublished sources. Furthermore, the mostly accessed information was preventive measures on sexually transmitted diseases. Hence, in conclusion, youths in the area had little awareness and access to reproductive health information, and rarely used the rarely accessed information. Therefore, for awareness creation on the matters and making sure that youths use the accessed information, recommendations have been provided to youths, parents, teachers and government.

Keywords: Family planning; Maternal health; Reproductive health information; Sexually transmitted diseases; Youths.

Introduction

Health of citizens is the foundation of countries' development. According to Gunduz and Yahaya (2018) if individuals within the country are healthy, their role in innovation and development would increase. Hence, healthy citizens have been considered a key to sustainable development of the countries (UNDP, 2018). This has also been stated by the 2030 Agenda for Sustainable Development Goals particularly goal number three (3) which focus on ensuring healthy lives and promote well-being for all at all ages. Thus, in far reaching socio-economic development of a country like Tanzania (which as according to the last Population and Housing Census of 2012, a population of 44,928,923 persons), healthy citizens particularly youths are highly required for innovation and development as earlier stated (Gunduz and Yahaya, 2018; Jackson, 2010).

It is unfortunate that, the world now and Tanzania in particular experiences increased deaths due to pregnancies at early ages, abortion, maternal complications and sexually transmitted diseases (STDs) such as HIV/AIDS pandemic (Bertozzi, *et al.* 2006; UNFPA, 2006). Youths who are the pillars of development in the country are the ones severely affected by the situation. Of paramount interest in the light of the increased incidences of deaths, is the assumption that youths are uninformed about matters related to reproductive health (RH) including the causes and prevention measures of such death (Ngilangwa, *et al.* 2016). Hence, accessing and utilising RH information among youths is of great concern.

Therefore, in 2000, the government of Tanzania declared HIV/AIDS a national disaster. Since then, both government and Non-Governmental Organisations (NGOs) joined their efforts for awareness creation. Thus, while the government of Tanzania established the Tanzania Commission for AIDS (TACAIDS) to provide leadership and coordination of all actors (Maliyamkono and Mason, 2006); the NGOs including *Chama cha Uzazi na Malezi Bora Tanzania* (UMATI) and Marie Stopes for that purpose were established. Hence, since their inception, UMATI and Marie Stopes has been directing their efforts in providing the RH education to youths specifically on the aspects of family planning, maternal health and safe-motherhood. In 2000, education on measures to combat STDs

specifically the HIV/AIDS pandemic became part of their organisations programmes (Meena, 2000). Therefore, several interventions and initiatives including campaigns such as making RH education a topic in school curricula, *Afya ya Uzazi* festivals, Zero maternal deaths and *Ishi* campaigns for HIV/AIDS prevention were initiated (Hunt and Mesquita, n.d.; Maternal Health, n.d.; World Health Organization, 2001). Currently, the RH and HIV/AIDS services in Tanzania are coordinated by the Ministry of Health and Social Welfare in its two separate units, namely, the National AIDS Control Programme and the Reproductive and Child Health Section (Mutalemwa, *et al.* 2013).

To achieve the ministerial health objectives of ensuring all children have access to education including the RH education, the government has been emphasising provision of education in whatever the form, but specifically the formal schooling. Thus, free primary and secondary education was established. Despite all these initiatives, experience show that most school-age children around mining areas of Songwe and Chunya districts do not join schools, while those in schools sometimes dropout after few years of their study. Instead they engage in money-earning activities such as gold-mining, fishing, bee-keeping and hunting (Jackson 2010). Additionally, they are attracted to the pleasures in modern bars and clubs of local brews, where they spend a lot of money and time drinking and engaging in unsafe sex. In fact, people who earn money in gold-mines of Songwe and Chunya districts, locally known as '*Wabongozi*', spend most of their incomes in drinking and paying for sex with prostitutes of different ages (Jackson 2010). All these result in unplanned pregnancies, pregnancies at early ages, abortion, maternal complications, dropping out of school, STDs and spread of HIV/AIDS infections. Therefore, many death cases in Songwe and Chunya districts are attributed to inadequate knowledge of RH. It was observed that people's knowledge about RH and the sources of information on RH are inadequate.

Literature review

Literature on awareness on reproductive health related issues in East Africa and Tanzania in particular (Chepkoech, Khayesi and Ogola, 2019); Kyilleh, *et al.* 2018; and Mbeba, *et al.* 2012) show that, less attention is given to RH education among youths as compared to

adults. Thus, this is seen as a factor that constrained youths' awareness on the matter. Also, there were imbalances in provision of RH education among youths based on their gender (females and males). Sex education has been focusing on female adolescents to prevent them from risks of early pregnancies and attempts to abortion (Abdul, Gerritsen, Mwangome and Geubbels, 2018; Soltani, Sattari, Parsa and Farhadian, 2017; Mutalemwa, *et al.* 2013; Presler-Marshall and Jones, 2012). Although RH education have been directed to women, still women's ability to access information and use the RH services in place is questionable. This is because the sexual activities of women in reproductive age of about 15-45 years old including secondary school adolescents are very high as they begin at early age without having knowledge on the methods of safe-motherhood and preventive measures against STDs (Abdul, *et al.* 2018; Mutalemwa, *et al.* 2013; Presler-Marshall and Jones, 2012).

Studies including Abdul, *et al.* (2018), Soltani, *et al.* (2017), Mutalemwa, *et al.* (2013) and Presler-Marshall and Jones (2012) show that reasons for playing sex among teenagers included experimenting, body feeling, copying others and being forced or raped. On the other hand, literature including Chepkoech, *et al.* (2019), Soltani, *et al.* (2017) and Gondim, Souto, Moreira, Cruz, Caetano and Montesuma, (2015) show that there are challenges on the information sources that youths consult to obtain RH information. In many societies, particularly in Tanzania, parents and guardians fear to impart knowledge on RH to their children because of their traditions, taboos and beliefs. They believe that children will acquire such knowledge from schoolteachers, mass media (i.e. television and radio) and their peers (Chepkoech, *et al.* 2019; Wanje, *et al.* 2017; Soltani, *et al.* 2017). This does not only leave youths at high risk but also parents and guardians contravene the basic principles of human rights to information.

Furthermore, literature show that factors affecting accessibility and utilisation of RH information include lack of communication between parents and their children on matters related to RH, lack of knowledge on the matters and cultural restrictions (Chepkoech, *et al.* 2019; Soltani, *et al.* 2017; Mbeba, *et al.* 2012; Mmari, 2002). It is within this context therefore, that it is of great interest to examine youths' awareness on matters related to

RH, determine sources and the degree of access to and use of RH information by youths in secondary schools, evaluate youths' level of satisfaction of information from such sources, and determine factors affecting access to and use of the available RH information by youths in Songwe and Chunya districts, Tanzania.

Theoretical Framework

This study is informed by Wilson's (1999) model of information behaviour. The model is a variation of Wilson's (1981) model of information-seeking behaviour. The Wilson's (1999) model outlines various areas covered by what Wilson's (1981) model proposed as an alternative to the then common 'information needs. Wilson's (1999) model of information behaviour suggests that information-seeking behaviour arises as a consequence of a need perceived by an information user. In order to satisfy that need, the information user makes demands upon formal or informal information sources or services. Such demand may result in to success or failure in retrieving relevant information. If successful, the individual then makes use of the information found and may either fully or partially satisfy the perceived need. On the other hand, fail to satisfy the need an individual have to reiterate the search process. Furthermore, Wilson's (1999) model of information behaviour shows that part of the information-seeking behaviour may involve other people through information exchange and that information perceived as useful may be passed to other people, as well as being used (or instead of being used) by the person himself or herself. The model is diagrammatically presented in Figure 1.

The strength of this model lies on the fact that it focuses on the information seeking processes, information user behaviour, and the ways in which information may be transferred, retained and exchanged with other users. In the process of seeking Wilson's (1999) model provides three views of information seeking namely: the context of the user/seeker, the system engaged (either manual or machine), and information sources. However, it is the weakness of the model that information use had received little attention nor has much attention been devoted to the phenomenon of the informal transfer of information between individuals. The two attributes (information use and informal transfer) are very common and crucial among peers especially in the study of this nature.

Additionally, another limitation of this model is that it provides no suggestion of causative factors in information behaviour and, consequently, it does not directly suggest hypotheses to be tested which is contrary to the truth of this study which have some test of relationship among variables.

In the context of this study, Wilson's (1999) model of information behaviour has been used to illuminate and provide theoretical lens for understudying youths' awareness and needs on reproductive health information, analysis of information sources frequently consulted by youths. Specifically, the model has been used to lens out on reproductive health information access and use, and the ways such information is transferred through formal or informal sources of information which influence use or not to use of some information. Therefore, the model is useful in addressing challenges facing youths in their ways to seeking, accessing and utilising reproductive health information.

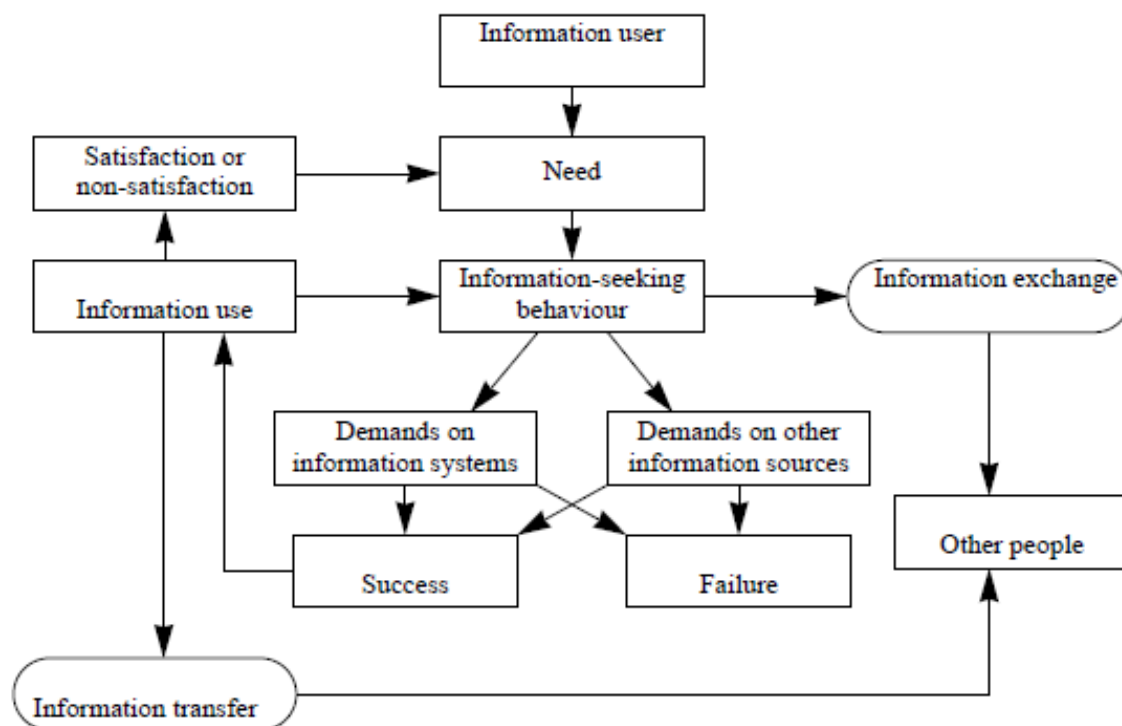


Figure 1: Wilson's (1999) Model Information Behaviour

Research methods

This study was informed by the longitudinal survey design in which data were collected at two times, in 2008 and 2020 (Gay, Mills and Airasian 2012). Of which a retrospective (follow-up) survey was carried out in 2020 involving repeated observations on the study conducted in 2008 on the same topic, population and location. The aim was to study the trends, dynamics and development on accessibility and utilisation of reproductive RH among youths ten years after the 2008 study (Connaway and Powell, 2010).

The population for this study were secondary school students in Chunya and Songwe districts. Chunya and Songwe districts were involved in this study because of their similarities in terms of socio-cultural and economic activities. Such activities include mining activity which has brought similar impacts to the districts specifically in people's health and formal schooling. Before 2012 the two districts were one district, namely, Chunya. The purposive sampling technique was used to involve the four earliest secondary schools in the districts. The involved schools were Mkwajuni and Kanga Secondary Schools from Songwe district, and Lupa and Chunya Secondary Schools in Chunya district. In presenting findings in this article, the four schools were coded as school A, B, C and D. The schools were involved in this study because most youths of the reproductive age were assumed to be in schools. Therefore, it is in this context the term 'youth' is used interchangeably with student (a scholar in secondary school). Furthermore, the towns and schools involved in this study were chosen to establish the notion of location and ownership representation. Mkwajuni and Chunya Secondary School owned by private organisations whereas Lupa and Kanga Secondary Schools were the public schools. Hence, youths' views and opinions from different socio-cultural and economic standing were also captured and represented.

Although, number of elements in the population was not pre-established, the study expected to involve a sample size of 136 respondents in the distribution of 120 students, 8 parents and 8 teachers. Participants were included through probability and non-probability sampling techniques. The probability sampling technique through simple random technique used to confine students to the study. In this case a ballot system was

used; where in each class (from form one to form six) a researcher wrote two sets of numbers in pieces of paper and folded them. The first set matched the total number of female students while the other matched a total number of male students in the class. According to the categorised sets, students in the class except class leaders (monitors) would pick out numbers from these sets. In each category, two students picked the first two even numbers participated by responding to the questionnaire provided that they were willing to participate. Thus, four students from each class by the distribution of two females and two male students participated in the study. This method helped a researcher to avoid bias in selecting samples for the study. Hence, 80 copies of questionnaire with both closed and open-ended questions were administered to 80 students to provide their responses, however, only 72 copies of the filled questionnaire were returned.

The non-probability sampling through purposive technique was used in selecting two members from each class. The members selected by this method participated in focused group discussion. Each focused group discussion session comprised of 8 to 12 participants. The participants were class leaders who did not participate in responding to the questionnaire. Thus, 40 students in the group of class leaders participated in four focused group discussion sessions, one from each school. The rationale behind this selection was based on the fact that being leaders they would most likely have sufficient information and courage in expressing their ideas/opinions openly.

Also, purposive sampling was used in selecting two teachers in the position of discipline or academic Master/Mistress from each of the selected schools who participated in interview. The teachers were purposely interviewed because of their positions at schools. It was also assumed that teachers would have enough information about accessibility and utilisation of RH information among students in their schools. On the other hand, parents were involved in the study through purposive sampling technique where those who had been involved in child bearing and upbringing were confined to the study. Two parents from the place where the selected school was located were purposely selected to be involved in a study. Therefore, 8 parents and 8 teachers participated in a one to one face to face interview, hence, 16 interview sessions were conducted.

Content analysis was used in analysing qualitative data collected through the mentioned methods. A systematic examination of data for the purpose of identifying patterns and frequency of ideas before grouping to their respective thematic areas was performed (Neuman, 2014; Guest, MacQueen and Namey, 2012). Then, such data were systematically coded to produce numerical descriptions that were statistically analysed using the Statistical Package for Social Sciences (SPSS) where descriptive statistics was used. The Chi-square test was used to determine whether there were associations between two categorical variables or not. This helped in ascertaining the understanding of respondents' perceptions on awareness on matters related to RH, identification of sources, their accessibility and use of information, and the factors constraining access and use of the available RH information.

Results

Demographic information and social status of the respondents

Demographic information and social status of respondents in this study were sought to establish their impacts in various topics of this study. The findings show that out of 136 expected, the response rate for this study was 128 (94%) responses. This is because out of 80 administered questionnaires, only 72 (90%) questionnaires were returned. The distribution of the returned 72 questionnaire show that 12 (17%) were from Chunya Secondary School, 13 (18%) from Mkwajuni Secondary School, 23 (32%) from Lupa Secondary School, and 24 (33%) from Kanga Secondary School. Also, 40 youths were involved in the study through focus group discussion sessions by the distribution of 8 (20%) from Chunya Secondary School, 8 (20%) from Mkwajuni Secondary School, 12 (30%) from Lupa Secondary School, and 12 (30%) from Kanga Secondary School. Lupa and Kanga secondary schools had many participants because the schools had Form one to Form six compared to Mkwajuni and Chunya which had only from one to Four classes. Eight (8) teachers participated in this study through interviews, among them two were from each school. Similarly, for parents, two were drawn from each town. In terms of gender, out of all 128 respondents, 61 (48%) were females while 67 (52%) were males. This means that there was almost equal gender representation and that views from all gender were also captured.

On the age of youths involved in this study through both questionnaire and focus group discussion sessions, results show that of all 112 youths, 56 (50%) had their age ranging between 14-17 years (teenagers) followed by 40 (36%) ranging between the age of 18-24 years (early adult) and 16 (14%) with the age of over 25 years (adult). This is an indication that, the study was able to capture the majority of youths in their early and late adolescence. At the age of teens to adult, youths experience body changes including development of their reproductive organs which increase desire to participate in sexual practises. For the case of 8 teachers and 8 parents who participated in the study 7 (43%) ranged between the age of 25 to 35 years while the other 7 (43%) aged between 35 to 45 years and 2 (14%) were above 45 years of age. Since teaching profession involves counselling and guiding students for their career in future, ages of teachers and parents in the visited schools and towns indicated experience in counselling and guidance and thus satisfactory to meet the needs of this study.

Furthermore, it was thought that parents' level of education and youths' religious affiliation might have an impact to their understanding of RH. Thus, through questionnaire respondents were asked to state their parents' level of education and their religious affiliation. Results about parents' education level show that of 72 youths who returned the filled questionnaire 7 (10%) of them asserted that their parents had bachelor degrees while 13 (18%) declared that their parents had diplomas, 17 (23%) affirmed that their parents had secondary education, and 35 (49%) stated that their parents had primary education. Hence, there was no significant difference between the male and female parents of the respondents in this category. On the basis of religious affiliation 57 (79%) of the respondents were Christians and 15 (21%) were Muslims. This is attributed by the fact that the study area is basically Christian dominated. On the other hand, the low level of education among parents is a reflection that due to the nature of economic activities many people dropped out of schools and engaged in such activities as earlier stated. Hence, few people in this study area went for further education than primary education.

Youths' awareness on matters related to reproductive health

During the four focus group discussion sessions involving 40 students in the study area, it was observed that most students had very little proficiency in describing the concepts related to 'reproductive health'. Those who tried to describe ended up mentioning HIV/AIDS and maternal complications as the key aspects of RH. On the other side, teachers were familiar with the three aspects of RH such as family planning, maternal health and safe-motherhood, and prevention of STDs. Furthermore, when teachers were asked to state if their students were also familiar with it, results show that out of eight teachers only 3 (37%) acknowledged that their students were aware of RH specifically on family planning and preventive measures against STDs, and the other 5 (63%) had the views that their students were aware of preventive measures against STDs.

Therefore, when youths were asked to establish their familiarity on the aspects of RH, the following results on the basis of multiple responses of 72 respondents were observed: 13 (18%) were familiar with family planning, and mentioned condoms, pills, calendar rhythm, the injectable followed by intra-uterine device, female sterilisation, vasectomy and mucus as among the family planning methods; 63 (87%) were familiar with family planning and preventive measures against STDs, and 8 (11%) were familiar with family planning, preventive measures against STDs, and maternal health and safe-motherhood. This indicates that many youths in the area of this study were not fully packaged with all aspects of RH such as family planning, preventive measures against STDs, and maternal health and safe-motherhood. Instead most of them were aware of only two aspects of RH such as family planning and preventive measures against STDs. Therefore, the follow-up question was asked for youths to state the degree of agreement on the need for a full package of RH information. Results show that out of all 72 responses through questionnaire, 9 (13%) responses agreed that there was the need for a full package of RH information whereas 63 (87%) responses perceived strongly need for it. This is an indication that youths perceived the need for a full package of RH information.

Sources frequently consulted for reproductive health information

Through questionnaire, respondents were asked to state the sources that youths frequently consulted for accessing RH information. On the basis of multiple responses of 72 youths, 13 (18%) utilised peers and friends followed by 11 (15%) who read books. The details of other sources with their percentages out of 72 multiple responses has been presented in Figure 2.

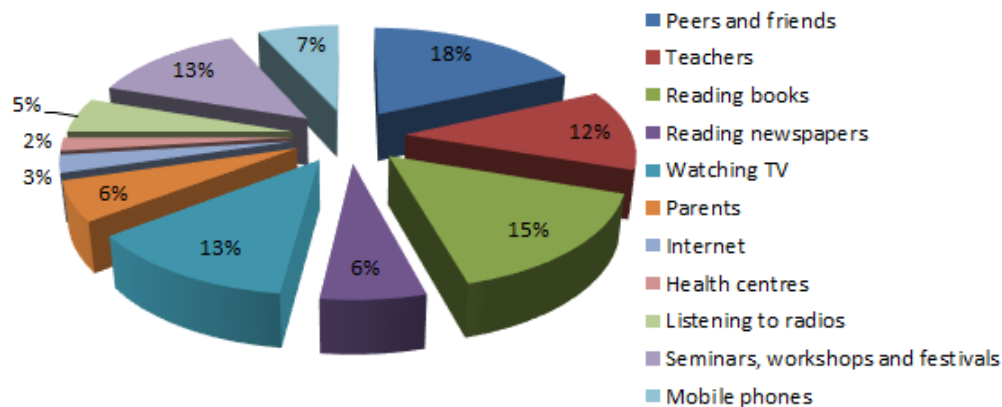


Figure 2: Sources of RH information frequently consulted by youths

The findings were complemented by the responses from focus group discussion where other sources such as teachers and parents, radios and televisions and sometimes newspapers were frequently mentioned. However, about 75% of 40 participants during focus group discussion were of the opinion that the frequently consulted sources by youths in school were peers and friends, teachers and reading books. Reading newspapers, watching TV, parents, Internet and health centres were found to be the least mentioned sources of RH information to youths in this study.

The findings indicate that youths consulted various sources of information to satisfy their RH information need. Thus, youths were further asked to state if the existing sources satisfied their RH information needs. The findings show that out of 72 responses through questionnaire had the following views: 42 (58%) respondents were satisfied with the sources they consulted while 30 (42%) were not satisfied.

Youths' access to and use of reproductive health information

Respondents were further asked to state if they had access to RH information or not. Results show that out of 72 respondents 22 (30%) reported to have access to the RH information available in their localities while 50 (70%) stated to have no access. Furthermore, information from interview sessions with teachers and parents revealed that out of 16 participants, over 90% were of the opinions that youths had access to RH information but did not make use of it. This is in line to Wilson's (1999) model that the successful accessed information and perceive satisfactory to the need, will then be used but unsatisfactory such information will not be used.

The Discipline Masters in School A and B and three parents from the four visited towns had the view that youths are been provided with the RH information but they ignore it when it comes to the issue of using it. This is an indication that parents and teachers' understandings for the youths' RH information need are quite different from the reality in the side of youths themselves. Maybe parents and teachers are unfamiliar that the accessed information are unsatisfactory to youths' information need (Wilson, 1999).

During focus group discussion sessions, participants were asked to state the frequently accessed aspects of RH information, the low access on family planning aspects, and maternal health and safe-motherhood was also noted. On the aspects of RH that youths had access to, responses through questionnaire show that out of 72 most of youths 40 (55%) had access to information on preventive measures against STDs and HIV/AIDS; followed by family planning and safe motherhood as the details indicates in Figure 3.

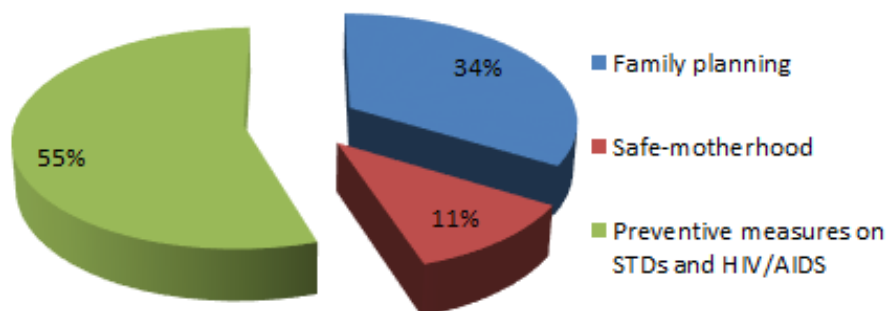


Figure 3: Aspects of RH that are frequently consulted by youths

When youths were required to rate the quality of information on aspects of RH frequently accessed, the results on the basis of multiple responses indicate that more than a half of 72 youths who participated in the study through questionnaire, 32 (50%) rated information on family planning as excellent, a few 13 (18%) stated that information on safe-motherhood was excellent and over half 52 (72%) noted that information for the prevention of STDs and HIV/AIDS was excellent. The details of youths' responses are presented in Table 1.

Table 1: Distribution of respondents in rating the quality of RH information N=72

Family planning	Frequency	%
Excellent	36	50
Fair	11	15
Very poor	11	15
Good	7	9
Poor	7	49
Total	72	100
Safe-Motherhood		
Fair	19	26
Very poor	17	24
Excellent	13	18
Poor	13	18
Good	10	14
Total	72	100
Prevent STDs (HIV/AIDS)		
Excellent	52	72
Fair	9	13
Good	7	10
Poor	3	4
Very poor	1	1
Total	72	100

The test was carried out to see if there were association between accessibility of the available information on RH against youths' sex, and parents' level of education. The results indicate that the association was not statistically significant at 0.290 ($p < 0.05$). This implies that youths' awareness and knowledge of accessing RH information do not directly relate to one's sex. The finding also indicates that parents' level of education did not show any statistically significant association with the youths' access to the available RH information as Chi-square test indicates in Table 2. The value is 0.951 ($p < 0.05$) for mothers and 0.859 ($p < 0.05$) for fathers. The result implies that the levels of education of youths' parents had no impact on accessing RH information. Thus, lack of knowledge

depended on individual's sources of knowledge and skills of accessing such information from the available sources.

Table 2: Chi-Square tests for association between parents and level of education

	For Mother's Level of Education			For Father's Level of Education		
	Value	df	Asymp. Sig. (2-sided)	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.345 ^a	3	.951	.304 ^a	2	.859
Likelihood Ratio	.351	3	.950	.285	2	.867
Linear-by-Linear Association	.139	1	.710	.189	1	.664
N of Valid Cases	62			62		

Youths who stated to have no access to the available information on RH in their localities were further asked to clarify about what were considered to be the barriers in accessing such information. Results show that poor infrastructure in these two districts, inadequate health centres, socio-cultural factors (taboos), and instability of mobile phone networks were the main factors. Also, the current developments in ICT give information users a wide range of sources to choose from in accessing RH information. However, inadequate information searching skills among youths and insufficient budgets for the government and NGOs to facilitate various family planning and safe-motherhood programmes/campaigns in rural areas posed a problem.

Respondents were asked to provide their perceptions on the role of information in managing youths' reproductive health. Among 112 youths who participated in this study (comprising the 72 who participated through questionnaire and 40 who participated through focus group discussion), about 85% of them agreed that RH information had a role to play in managing RH while 15% were unsure. On the other hand, all 8 teachers and 8 parents were of the opinion that access to and use of information is critical in managing RH. This implies that information is an essential tool in managing youths' reproductive health.

On the other hand, a question to test if there were any association between access to RH information and students' performance in schools was asked to both students and teachers. Results show that 100% of both 112 students and 8 teachers participated in this

study were of the views that access to RH would help to improve students' performance in school and the development of the districts as well. That a number of students who could have dropped out from schools due to early pregnancy cases and maternal complications would go through their studies and contribute their knowledge for innovation and development in future.

Furthermore, respondents were asked to state factors that constrained access to and use of RH information in its various aspects. A number of reasons were mentioned, such reasons included: lack of proper knowledge on the part of teachers and parents, and lack of initiative on the part of parents to disseminate RH information to their children. The reasons behind were parents' occupation, increased life complexity and some parents felt shy to speak out with children about RH because in some of Tanzania's traditions it is taboo. Additionally, untimely provisions of information, lack of money to buy some sources of information such as TV sets, newspapers and to pay for Internet services to marginalized rural people were among the constraining factors. Furthermore, poor access to newspapers, illiteracy in information searching techniques among youths and lack of proper understanding of problems surrounding youths in rural settings (including the language as most of the materials were packed in foreign language) were among the reasons. Health centres were among the least mentioned source due to the absence of health specialists in most health centres in these districts. The details are in Table 3.

Table 3: Factors constraining youths' access to and use of RH information (N=72)

Factor	Frequency	%
Taboos and cultural factors on the part of parents	45	62
Lack of adequate information in searching skills	37	51
Poor infrastructure (health centres)	36	50
Poverty (inadequate funds)	32	44
Inappropriate dissemination methods	29	40
Lack of RH information specialists	28	39
Lack of proper knowledge on the part of teachers and parents	14	19
Language of the materials packed information	14	19
Too much information	13	18

Time	6	8
Unavailability of information	2	3

Discussion of the findings

Demographic information of respondents

Demographic information and social status of the respondents was not part of this study's objectives. However, it was necessary to highlight this because such information might provide insights on impacts in accessing and utilising reproductive health information. In terms of gender, there was almost equal representation. Thus, views from all gender were captured as out of all 128 respondents in this study 61 (48%) were females while 67 (52%) were males. This small variation between large numbers of males as compared to females is attributed to the fact that most of the unreturned questionnaires were those administered to females.

In term of respondents' ages, results show that 64 (50%) of 128 participants were teenagers aging between 14-17 years, followed by 46 (36%) who are early adult, and 18 (14%) were adult (comprising teachers and parents, and the two students). This indicates that, the study was able to capture majority of youths in their early and late adolescence. Normally at the age of teens to adult, youths experience body changes including development of their reproductive organs which increase desire to participate in sexual practises. Hence, youths should be satisfactorily provided with RH information. On the other hand, since teaching profession involves counselling and guiding students for their career in future, ages of teachers and parents in the visited schools and towns suggested that they deserved to serve the purpose for counselling and guiding youths in schools.

Youths' awareness on the aspects of reproductive health

Determining youths' awareness on the aspects of reproductive health was a matters of concern as it was assumed that awareness may influence access to and use of RH information. Results show that youths in the study area had very little proficiency in describing the concepts related to 'reproductive health'. Among the aspects of reproductive health, most youths in the study area were aware of included HIV/AIDS as the key aspects followed by family planning than maternal health and safe-motherhood.

The reasons for the awareness in these two aspects (HIV/AIDS and family planning) were due to various campaign for combating HIV/AIDS and family planning than any other aspect.

Furthermore, lack of awareness on maternal health and safe-motherhood possibly was a result of unavailability of information, unreliable sources and even the fact that responsible individuals/organisations did not fully play their roles in educating children about RH due to various reasons. Such reasons include lack of initiative on the part of parents to disseminate RH information to their children, and shyness of parents to speak out with children on the RH matters for pretexting taboo. Other reasons included untimely provision of information, lack of money to buy some sources of information such as TV sets, newspapers and to pay for Internet services to marginalized rural people of Songwe and Chunya, poor access to newspapers, and illiteracy in information searching techniques among youths in the study area. This indicates that many youths were not fully packaged with all the aspects of RH information. The finding is contrary to Gondim's (2015) who found that youths had a relatively high awareness and accessibility to RH information. Additionally, youths perceived the need for a full package of RH information. This is in line to Wilson's (1999) model of information behaviour that information-seeking behaviour arises as a consequence of a need perceived by an information user.

Sources consulted by youth for reproductive health

Youths were asked to state the sources frequently consulted for reproductive health information. Results show that with all the mentioned sources, peers and friends, and reading books were the main sources for accessing RH information among youths. The results concur with Chepkoech's (2019), Soltani, *et al.* (2017) and Ngilangwa *et al.* (2016) who found that peers were the leading source that youths (both male and female) used for accessing RH information. However, it is unfortunate that peers and friends have proven failures because peers themselves are not trained and have no experience on the matter rather they just imitate from somewhere else and practices the hearsay. Hence, resulted to continued engagement in unsafe sex among youths. This is in line to Wilson's

(1999) observation that if consulted sources of information did not satisfy youths' RH information need will not be used.

On the other hand, although not mentioned as a leading source but reading books and schoolteachers have played a great role in informing youths about RH especially in the situation where parents are not open to their children. Since with the mentioned sources still the situation is not favourable, the government and other stakeholders in the provision of RH information are urged to re-think on the proper methods of delivering RH information, preferably the use of modern technologies with social media and networks.

Accessibility and utilisation of reproductive health information among youths

Results on accessibility and utilisation of reproductive health information among youths show that out of 72 responses through questionnaire reported that majority of the respondents 50 (70%) had no access to RH information. The result relates to the findings by Ngwenya (2016) that RH information was not adequately accessed both at school and at home from parents and teachers respectively. The reasons for lack of access to RH information included poor infrastructure, inadequate health centres and socio-cultural factors (taboos). That, in terms of infrastructure there were lack of a well-structured information infrastructure for public access to RH information. While very few families in the study area had television and radios, there were also no designated places as resource centre for RH information sharing. The socio-cultural factors (taboos) entails that parents felt shy to speak out with children about RH matters pretexting that it was a taboo for the African parent to speak the matters to the children. This opium is an outdated ideology and should not be entertained in this era where youths are surrounded with many health risks related to sexualities.

In understanding if youths who had access to RH information, utilised such information or not, questions were asked including ages that youths had during his/her first engagement in sexual intercourse and whether they were aware of the risks of the practices or not. Results show that most youths about 36 (50%) of 72 responses through

questionnaire had already engaged in sexual intercourse at their very early ages between 10-17 years without understanding on the RH matters and before they reached adult age (the recommended age for sexual intercourse). This is very dangerous for the future generation especially this time when there are a lot of sexually transmitted diseases and information explosion. This is consistent with Abdul, *et al.* (2018), Kyilleh, *et al.* 2018, Mutalemwa, *et al.* (2013), Presler-Marshall and Jones (2012), Mbeba *et al* (2012) and Jackson (2010) who found that youths engaged in sexual practices at their very early age without having a full package of RH information. This situation poses health risks to teenagers including risk of getting infected by STDs and HIV/AIDS, early pregnancies and subsequently maternal death due to maternal complications. Hence, this results in loss of energetic people to work for the national development.

Conclusion and recommendations

Conclusion

This article intended to examine youths' awareness on matters related to RH, determine sources and the degree of access to and use of RH information among youths in secondary schools, evaluate youths' level of satisfaction of information from such sources, and determining the factors affecting access to and use of the available RH information by youths in their localities. From the findings the conclusion has been that youths in Songwe and Chunya districts had inadequate knowledge on matters related to RH. Most of them were aware on matters related to STDs infections and spread of HIV/AIDS than family planning, and maternal health and safe-motherhood. This resulted to frequently engaging in sexual practises at their very early ages with multiple sexual partners without a full package of RH awareness and the consequences for the practises. Also, in the study area it was found that peers and friends were the key source of information that frequently used by youths for RH knowledge, followed with other sources such as reading books, reading newspapers, and seminar, workshops and conferences. However, towards accessing information from the mentioned sources the conclusion is made that youths were not satisfied with the sources as they encountered problems in accessing and utilising them.

Recommendations

Based on the findings of this study, the following recommendations are provided:

1. Government and non-government organisation should collaborate in enabling parents to create environment that allows them to speak out with their children about RH. More importantly, parents should create environment conducive for children to ask and express their ideas on matters related to RH.
2. The policy makers should use this information to create evidence-based health and educational policy. Policy makers should properly advise the government on establishing a specific subject in the national-wide education curriculum that focuses on RH and life skills. Preferably, the subject should be taught from early classes of primary education to secondary school levels for the purpose of promoting awareness to teenagers or youths on RH matters.
3. Stakeholders including parents, teachers, government and non-government organisations should plan and implement strategies for providing comprehensive RH education to youths by using various media including social media, radio and television programmes. And if possible through cell phone text messages and emails.
4. Individuals, public and private organisations should coordinate peer and friend's education by establishing camps. These camps should be focal points where youths with different socio-economic background gathered to discuss various RH related topics, with the facilitation of health workers, parents and teachers.

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