

PROCESS EVALUATION OF CURRICULUM BASED SEXUAL AND REPRODUCTIVE HEALTH EDUCATION AMONG FIRST YEAR STUDENTS IN ARBA MINCH UNIVERSITY: QUALITATIVE STUDY

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ABSTRACT

INTRODUCTION: Curriculum based sexual and reproductive health education is one of the effective strategies to prevent youths from risky sexual activity. However, providing this education for youth in higher institution requires exploration from the perspective of youths, providers, and key individuals which will help improving and continuation of this education.

OBJECTIVE: The aim of this study is to evaluate a process of curriculum based sexual and reproductive health education among first year students in Arba Minch University, Ethiopia.

METHODS: Qualitative study was conducted among the first year Arba Minch University students. Focus group discussions were conducted with selected students' representatives. In depth interviews were conducted with instructors who teach this course and key informant interviews were conducted with different stakeholders who participated during course curriculum developments. Interview guide was used to collect data. The data was analyzed through thematic content analysis method.

RESULTS: In this study, we identified five main themes. The main themes are contents of the course which have four subthemes, mode of delivery of the course which have two subthemes, barrier for implementation with four subthemes, acceptability of the course that have two sub themes and perception on course nomenclature with two sub themes.

CONCLUSION: Finding of this study revealed that this course was an important and essential course for youth. However, mode of delivery of the course, lack of coordination and lack of comprehensiveness of contents may affect effectiveness. Therefore, for better effectiveness of this course, it requires strong coordination with different stakeholder.

KEYWORDS: Curriculum based sexual and reproductive health, qualitative study

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INTRODUCTION:

According to world health organization (WHO) youths are key population group characterized by physical, mental, and psychological change¹. Youths are the largest population there were 1.80 billion people between the ages of 10 and 24 years, of them 70% are living in developing countries². In Ethiopia from the total population 20.04% were between 15-24 years^{2,3}.

Most of youths in higher institution practice unprotected sex, even if they are joining for academic reason^{4,5}. Reports show that worldwide youths are at a high risk of HIV infection, accounting for 20% of new HIV infections⁶. Seventy nine percent of these infections occur in sub-Saharan Africa (SSA)⁶. Also youths were vulnerable to unwanted pregnancies each year 7.4 million and 3 million girls experience unintended pregnancies and unsafe abortions, respectively⁷.

In Ethiopia, higher education institutions host youths aged between 19-24 years and they are the largest segment of the population^{4,8}. However, separation from their parents exposes them to sexual and reproductive health problems⁹. These problems put youths at risk for morbidity, mortality and limiting their educational and employment opportunities^{7,10}. To solve those problems, Ethiopia started making sexual and reproductive health and HIV prevention information and services accessible to youths especially for those in higher learning institutions through curriculum based education on sexual and reproductive health since 2016 in Ethiopian Universities⁹. Despite the fact, there is no study conducted on its process evaluation on curriculum based sexual and reproductive health education among first year students in Arba Minch University, Ethiopia.

METHOD

Study Design and Setting: A qualitative, phenomenological study was carried out at Arba Minch University in February 2018.

Data Collection Procedures: To extract the required information, discussion guide was prepared in relevant local languages (Amharic). The focus group discussions, key informant interview and in-depth interviews were

conducted by experienced MPH professionals who were fluent in Amharic Language. The data collectors were trained on how to conduct key informant interview, focus group discussions (FGDs) and in-depth interviews (IDIs). Before beginning discussion, participants were informed about the purpose of the study and voluntarily to participate in this study. The participants were encouraged to share their genuine ideas and discuss freely in the session. The participants' nonverbal expressions were noted in addition to recording their verbal responses. After completing the discussion, the moderator summarized the discussion and key points with the participants to check for accuracy. A total of five FGDs were conducted among purposely selected students' representative and able to speak Amharic language. The FGDs had 6 to 10 participants in each group. On average, an estimate of 50 to 90 Minutes was taken to conduct one FGD. Four in-depth interviews were conducted with both men and female instructors. Key informant interviews were conducted with cross cutting issue directorate and HIV mainstreaming officers.

Data analysis: All collected data were recorded, translated, and transcribed verbatim. Transcripts were coded and analyzed thematically using open code software version 3.6.2. Each research team independently read the codes. To resolve any differences in coding discussion was done with research team. A final consensus agreement was reached on the coding.

Data quality assurance: To assure the quality of data we used strategies like data trustworthiness, data credibility and dependability.

Ethical consideration: Ethical approval letter was obtained from the institutional review board of College of Medicine and Health Sciences in Arba Minch University. Written consents from all participants were obtained after being fully informed about the objectives and procedures of the study. The confidentiality and privacy of participants were actively protected.

Results

Participants

In total, 56 first years Arba Minch university student representative participated in focus groups. The number

of participants in each focus group ranged from 6 to 10. Participants ranged in age from approximately 18 and 24 years, with mean age of the participants was 19.48 ±1.13years. Four in-depth interviews were conducted with both men and female instructors. Two key informant interviews were conducted with different stakeholders. Key themes and sub themes identified in this study. Content analysis of the transcripts identified the following five main themes, each of which embraces two

to four sub-themes. Theme 1: Contents of the course, Theme 2: Mode of delivery of the course, Theme 3: Barrier for implementation, Theme 4: Acceptability of the course and Theme 5: Course nomenclature. Each category is presented and discussed in detail with appropriate descriptions and quotes cited in the text to support the categories using elements of paradigm model which is analytical tool.

Table 1: Key themes and sub themes identified in this study

Main theme	Sub theme
Theme1	Content of the course comprehensiveness of the contents content based on local social asset stake holder involvement logical order of the content
Theme2	Mode of delivery of the course students' view on mode of delivery of the course Instructors' experience on mode of delivery of the course
Theme3	Barrier for implementation shortage of Human power lack of collaboration with student service lack of awareness among department heads managing the course by two college
Theme 4	Acceptability of the course students' experience on the course Instructors' view on potential impacts
Theme 5	Course nomenclature Instructors' view on course nomenclature students' views on course nomenclature

THEME1: CONTENTS OF THE COURSE

The first main theme was the contents of the course, with four sub-themes: Comprehensive of contents, contents were developed based on local social asset, stakeholder involvement and logical order of the contents.

Sub-themes: Comprehensiveness of the contents

Most of the participant of the FGD said that the content of the course was comprehensive and included all the content required for freshmen students to meet the objective of the course which was abstinence promotion. One of participant said "I think the content is sufficient for me as per the semester based course. It includes each transmission and prevention methods of HIV. However, the contents on STI somewhat small it does not include all STI in briefed way. The objective of the course was abstinence promotion, but it is better to include the need of freshman university students, rather than telling him not to be relaxed, better to tell students all alternatives" (P1, FGD3).

In addition to the above one of our study participant said: "The content is little for me, because most of the students are at fire age, so this course should provide enough information for those students and I did not think the course is comprehensive. It is theoretical. The content is also minimal for me" (P7, FGD3).

Another point mentioned by the participants was this course lacks the most important topics. In this regard, one of the participants said: "I think there are some things, however still it lacks some other things. Basically it has HIV/AIDS, some part of sexual reproductive health like unintended pregnancy and STI, early marriage. However, it lacks main contents require for youth example substance abuse. Substance abuse should be included in this course focusing on prevention methods and predisposing factors" (34 years instructor). Another finding from FGD also support this finding they said: "substance abuse should be included because most of

the time university students were affected by substance abuse than HIV in really. I think most educated people keep themselves from HIV, but they did not keep themselves from substance abuse. So it will be better to include substance abuse at portion”(P3, FGD4).

Sub-themes: Logical order of the contents

Most of the study participants said that it is better if we begin from life skill section of the course. One of our study participants said: “Initial this course given at first yearAt the beginning it was better if we start by life skill section... because this course is given for freshman students there are lots of problem. For example in life skill section there were a lot of things....including study methods.....,but this means don’t mean HIV section was not important. SRH and HIV section was very important for female because the come they separate from their family during this time.....So I think it was better if life skill come first”(P4, FGD4).

However some of FGD participants said that order of the course content was ok and HIV section should be the first chapter of the course. One of study participant said that “HIV topic should come before life skill for me this is appropriate because the course of HIV is important to alarm us” (P5, FGD3).

One of our IDI instructors said that “If the course is sexual and reproductive healthHIV is sub content of SRH because SRH has several elements among those STI from it HIV was one of the part.so I did not support HIV as a big chapter. If the course is Sexual and reproductive health for adolescent we can start with big picture of SRH that means it cover from adolescent up to maternity. This SRH have two parts clinical aspects and public aspects. We should focus public aspects which focus on health promotion rather focusing on clinical aspects because it applied by professionals” (32 years instructor).

Sub-themes: Contents of the course should base on local social asset

Most instructors teaching this course said that this course was not designed based on our local social asset. One of instructor said that “I did not think that this course included our social values. In our culture pre-marital sexual intercourse was not acceptable in our culture even in our religion, but when we teach about family

panning or Pregnancy prevention options we say that it was positive.....I think if you practice pre-marital sexual intercourse you will be affected by HIV and Pregnancy, but if we teach the prevention methods I think if you practice it you can prevents by those methods.....Other than that, pre-marital sexual intercourse was no longer positive in the our culture and not recommended in our community.....” (32 years instructor).

Another instructor teaching this course said that “I think it doesn’t include all our social values. The content was current issue like HIV, SRH and gender. I think it was both western culture as well as our Ethiopian culture. For example IV drug users. In our country there were some people who were IV drug users which were in secret. It is better to teach a lot of things. So some of documents were directly western culture” (34 years instructor).

Sub-themes: Stakeholder involvement during curriculum developments

Finding from key informant interview done with cross cutting directorate director said that “during the development of this course involves different stakeholders and experienced professional like Vice-presidents of university, public health expertise and curriculum professionals” (54 years old male). Also HIV mainstreaming officer also said that “different stake holder were involved during course development” (30 years old female).

However, one of instructor said that “I think at development of this curriculum professional were not involved. When we see the curriculum there is three topics, but the aim of this course is to create comprehensive knowledge. I think those topics were not compressive because the contents even overview, but not detail” (29 years old instructor).

THEME 2: MODE OF DELIVERY OF THE COURSE

Mode of delivery of the course was the second main category with two sub-categories like students’ view on mode of delivery of the course and instructors’ experience on mode of delivery of the course

Sub-themes: Students’ view on mode of delivery of the course

Many males and females (in many FGDs) said that way of

delivery of this course was delivered in different teaching methods rather than focusing on finishing the course. Many males and females (in many FGDs) said that way of delivery of this course should be student centered focus on providing change in behavioral. One of our study participants said: "I think the mode of delivery of the course is not enough to bring behavioral changes because it lacks practical sessions. It was still necessary to do a practical example especially on life skill it was just theoretical that was only reading the slide" (P9, FGD5). Another point mentioned by the participants was the most instructors' were dependent only on handout. In this regard, one of the participants said: "most of the instructors were dependent on the handout only I did not have more information both in life skill and HIV because they did not show any practical things....." (P10, FGD5).

Most of males and females (in many FGDs) said that this course should be given by experienced teachers. One of our study participants said that "Most instructors teaching this course do not have confidence because most of them teach for one or two days..... (10:10). But, this course should taught for with long period of time because it is important for knowing ourselves. If it is we it should not be given within one or two days." የምናውቅበት እስከ ሆነ ድረስ ሰፊ ብሎ ነው መሰጠት ያለበት ግን በአንድ ቀን በሁለት ቀን እንደዚህ አድርገው ሸፈፍነው ይሄደሉ::ሸፈፍነው የሄድነው subject ደግሞ ተሸፋፍኖ መሄድ የለበትም::የሀይወት ጉዳይ እስከ ሆነ ድረስ" "In general this course lack quality" (P1, FGD4).

Sub-themes: Instructors' experience on mode of delivery of the course

One of instructor who teaches this course said that "I did not think this course included multiple teaching methods. Because most of the instructors were overloaded and applied most as a lecture methods. Most of the instructors have five and six sections and apply the simplest method rather to give chance for student to discuss, role play even it did not promote self-learning" (32 year old instructor). Another instructor said that "Different teaching methods were included in the course curriculum. However, it was difficult to apply it due to large class size like Eighty students to apply group

discussion for 80 students even the class room was not adequate although in the module it included different methods" (34 year old instructor).

THEME 3: BARRIER FOR THE IMPLEMENTATION OF THE COURSE

Sub-themes: Lack of collaboration with students' services

Most of males and females instructors participated in IDI said that for better effectiveness of this course there should be integration between student services and course delivering instructors.

One of instructor said that " This is good idea by making SRH clinic as one department or opening SRH clinic in each campus was good.....However I only teach the student they can get those service form the clinics. Also in the campus there is guiding and counseling service that was provided by psychology department. In SRH course we teach about testing and counseling, guiding and counseling section, but we refer the student.....So SRH course coordination office or our college should appoint one focal person in each service.....(32 year old instructor).

Sub-themes: Shortage of Human Power

During the in-depth interviews, finding from instructors who teaches this course mentioned that "By this condition I did not think we keep the quality, even there may be quality comprise, but it provide information that will reduce exposure status. To apply continuous assessment it was challenging due to large class size as well overloaded of the instructors. In generally being overloaded of the instructors will compromise the quality...." (34 year old instructor).

Sub-themes: Lack of Awareness among department heads

Most of student participant in the FGD said that most of the schedules were in afternoon. One of our study participants said that "Most of the time our schedule was from 9:00 up to 11:00 local time. I think about the schedule they should think critically even I don't think the schedule was not planned because most the class was in the afternoon which is boring, most of the student were absent from the class because they will be easily tired" (P7, FGD2).

For better effectiveness of this course one of our study participant said that” I think lack of value was one of problem of this course for example in our campus most of students gives value for another course not for HIV.....Also those instructors should be experienced to delivery this course. Furthermore to be more effective better to have school clubs focusing on life skill and reproductive health” (P4, FGD3).

As one of the instructors who participate in IDI said that “ In generally the weak side were related to administration, lack of focus for the instructors who teach this course, lack of transportation, lack of office for instructors and lack of awareness in administrative of the campus because they think of it as unnecessary” (32 year old instructor).

One of the instructor said “For improvement of this course delivery the first may be department managers should be aware about this course and should prepare the schedule series. In order to teach student well that means to do class room discussion, role paly, to show video and to show people experience the department head should prepare schedule in sequence order if possible all the three hour should be within one day”(29 year old instructor).

Sub-themes: Being managing by two college

Most of student participant in the FGD said that being managing this course by two colleges was one of the challenges to implementation of this course. One of our study participants said that, “While we begin HIV section it is good time, but life skill was not started timely. I don’t know the reason it may be shortage of teacher, but we start at end of the semester which means only two week is reaming to end semester even for two days which highlight only. So the timing is not correct because immediately after we finish the HIV lesson we should start the life skill lesson” (P1, FGD4). Another participant also said:” I think there is misuseage/ inappropriate usage of time between HIV and Life skill teacher because we lost all most one months after we finish Hive course to begin life skill portion” (P1, FGD3).

THEME 4: ACCEPTABILITY OF THE COURSE

Sub-themes: Teachers’ view on the potential impact of the course

Finding from IDI interview conduct with instructor said that, “This course is very necessary!!! It is necessary. Also this course should start at high school at 9th, 10th, 11th and 12th grade by including substance abuse in order to prevent those adolescents from substance abuse and Sexual reproductive risky behavior at early. I think this course was definite necessary” (32 year old instructor).

Another instructor also said that, “ It is necessary for the students other than other course because it will give baseline information that may help for their lifelong as well university was new environment for them previously lived with their families this may put them for different thing this course may help them as prevention way” (29 year old instructor).

Sub-themes: Students’ experience of the intervention

Many males and females (in many FGDs) said that this course was necessary during this time especially for university student. One of our study participants said that “it is hundred percent necessary!!!. I have learned a lot, especially in life skill. Especially about peer pressure...I had two friends who were dismissed. They did not come second semester because they were lost their time with graduating class students. Most of the time graduating class students start relationship especially with fresh students. Those fresh students start to pass even the off the class..... I just see the consequence on my friends by this time they already dismissed due to them did not have enough results to continue. Also she said in Amharic” “ሁልጊዜም የሚቀድመው ህይወት ነው”. እኛ በህይወት ስንኖር ነው ትምህርት ሁሉም ነገር የሚቀጥለው እና እኔ ነገር ደግሞ ለህይወታችን በጣም አስፈላጊ ነው::እኛ ታመን መቼም አንማርም ወይም ደግሞ ብያንስ አርግዘን እዚህ ግቢ ውስጥ ቁጭ ብለን አንማርም::ለሁሉም ነገር የሚቀድመው ነገር ነው ሌላው ነገር ከሱ የሚቀጥል ነው የሚመስለኝ” (P4, FGD4).

Another study participant also said that “This course help me to develop a sense of self confidence for the coming 3 years in the campus. It is just that we believe in what we believe in we should resist if we just do not want to do that (27:36)” (P6, FGD5). “Similarly, another

study participant said that “Life skills help me to make open communication, goal setting and personality like making judgment is not true way because every person have its own personality. Also it helps me how to manage time effectively” (P2, FGD2). Furthermore, one of our study participant said that “really after taking the course the knowledge helped me to strengthen my behaviors not to be engaged in risky sexual behaviors” (P5, FGD5).

THEME 5: COURSE NOMENCLATURE

The last category was naming of the course, which contains the two sub-categories students’ views on course nomenclature and teachers’ view on course nomenclature

Sub-themes: Students’ views on course nomenclature

Almost all the focus group participants were not satisfied by the name of the course and recommend being comprehensive name based on naming standards. One of our study participant said that “when you want to buy a book, you will buy after you read the title if the title is attractive you will buy it.” so this name don’t fit with this course. አይመጥንም። እኔ የሆነ ጊዜ ቤት HIV እየተማርኩ ነው ስላቸው ሰው በጥሩ ነገር አያየውም (P4, FGD4)”. Another study participant also said that “I think the name of this course should be changed. For example we call the instructors by HIV which may affect psychology of the teacher. So I think it is better to change this name to one of health related name...” (P5, FGD4).

Sub-themes: Teachers’ view on course nomenclature

Finding from one of IDI participant said” the course name was the most boring. It was difficult even for calling the name. Therefore, RH professional should give good name for this course. This name is statement I think it doesn’t follow naming criteria because it include the entire chapter” (34 year old instructor). Another instructor said that “Normally, this course has three chapters like HIV, SRH and life skill. Almost those were SRH. So better if we call it by SRH” (32 year old instructor).

DISCUSSIONS

In general, this qualitative study explored the view, perception and experiences of on process of curriculum

based sexual and reproductive health education intervention. It focused on examining the view, perceptions and experiences of students’ and instructors’ on the intervention in Arba Minch University. According to the participants in this study, this course is vital for the life of youth in higher institution. In this discussion, we identify themes emerging from this qualitative study and reflect on how these interventions can be strengthened, specifically.

The finding of this study revealed that the content of curriculum based sexual and reproductive health education was not comprehensive which lacks the most important topics like substance abuse that was one of predisposing factors for any risk sexual behaviors. The content was not detailed focusing on behavioral changes activities among youths in higher institution. This finding is not consistent with study conducted in South Africa and Chain^{11,12}.

Furthermore, the content of curriculum based sexual and reproductive health education was based on our local asset. However some of the topics like sexuality, premarital sexual intercourse and trans- gender were a taboo in most of our community and against the religious norms. Also promotion of family planning especially, condom use among young people remains a controversial topic, surrounded by myths and fear. This finding is supported by study conducted in Uganda and other study conducted in developing country^{13,14}. This also supported by national adolescent and youth strategy of Ethiopia in which said that comprehensive sexuality education curricula should be based social asset, age appropriate and promote abstinence among youths¹⁵.

Finding of this study revealed that curriculum based sexual and reproductive health education was implemented mainly in lecture methods. This finding was not supported by study conducted in South Africa¹⁶. International technical guidance on sexuality education publications, recommending that effective curricula use participatory teaching methods that actively involve learners and help them internalize and integrate information¹⁷. Our study suggested that ways of delivery of this course required different teaching methods. However, most of instructors who teach this course were using only lecture methods due to large class

size and overload of most instructors.

As our study participants stated, some of instructors who teaches curriculum based sexual and reproductive health education were directly familiar with the course contents and highly committed to teach this course. This finding was in line with other study conducted in Sub-Saharan Africa¹³. However, this finding is not supported by one study conducted in south Africa⁶. This could be explained by the fact that highly committed teachers feel the need to adapt the programme to suit the students' needs more than less committed teachers¹³. An alternative explanation could be that highly confident teachers could feel free to skip a lesson when they felt it was irrelevant or did not fit the setting compared with less confident teachers.

The most frequently mentioned barriers to implementation were personal, cultural, religious norms and beliefs, large classes' size and unavailability of student reference manuals were serious challenges for teachers implementing sex education. This finding is in line with other studies^{14,18}. In addition to above-mentioned factors, instructors mentioned, shortage of trained human power, lack of collaboration between student services and course coordination office and lack of awareness among department head were barriers for full implementation of this course. Similar findings are found in other studies in a Sub-Sahara African context^{14,18,19}.

Curriculum based sexual and reproductive health education program in higher institution was the most essential to make informed choices about whether to be sexually active or not, with whom and how to protect themselves from coerced sex, unintended pregnancy and STIs, including HIV. In focus group discussion students mentioned that "It is hundred percent necessary!". In the in-depth interviews finding also mentioned that "This course is very necessary. It is necessary for the students other than other course because it will give baseline information that may help for their lifelong. University was new environment for them. They previously lived with their families, This may expose them for different thing this course may help them as a protection". Also this course should start at high school at 9th, 10th,

11th and 12th grade by including substance abuse in order to prevent those adolescents from substance abuse and sexual reproductive risky behavior at early age. Furthermore, from an education point of view, the Ministry of Health (in collaboration with the Ministry of Education) promotes comprehensive sexuality and life skills education through the National School and higher education institutions (HEIs) to Increasing access to AYH information¹⁵. Africa. Also this finding was supported by qualitative study conducted in sub-Saharan Africa^{13,16,18}.

CONCLUSION AND RECOMMENDATION

Finding of this study reveal that this course was the important and essential for youth in higher institutions. However, mode of delivery of the course was mostly lecture methods rather than student centered. The main barrier for implementation of this course were lack of awareness among department heads, shortage of human power and lack of coordination with student services and the course name was also one of the challenges for implementation of this course. Furthermore, another challenge during the implementation of this course being two instructors forms different college. With regards, on the contents of the course most of the topics were the important for the youths especially in higher institution. However, the contents like premarital sexual intercourse, sexuality and trans-gender issues were not acceptable by local social cultural and religion. Furthermore, the contents like substance abuse were the most important topics, but those contents were lacking in this course.

In recommendation, all concerned stakeholders should strengthen implementation of basic curriculum based sexual and reproductive health education as the first step to protect and control sexual and reproductive health problems and to subsequently improving the behavior of youths in higher institutions. Motivating instructors, continuous monitoring and creating coordination with different reproductive health service should also be there. Effort should be made to equip the necessary materials and human power. Finally, Arba Minch University and other stakeholder should include

this course under curriculum both for regular as well extension students and closely collaborate with students' service like student clinic and counseling services and reproductive health clubs for better effectiveness of this course.

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AUTHORS' CONTRIBUTIONS

NB, SH and MS conceived and designed the study. NB and SH coordinated the running of the study. NB, TS, SS, SA, EZ, ND and ZT conducted data collection. NB, SH, WG, WG and EZ were participated in data analysis. NB and SH drafted the manuscript. NB, SH, MS, SS, TS, EZ, WG, SA, WG, ND and ZT contributed to the interpretation of the analysis and critically revised the manuscript. All authors read and approved the final manuscript.

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