Role and contribution of peer educators in youth-friendly health services in Ethiopia: evidence from programmatic experience with a peer education intervention

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Abstract

Background: Ethiopia has been integrating peer education program as a key element of its adolescent and youth reproductive health program. The aim of this study was to describe the roles and contributions of peer educators in promoting healthy behavior, generating demand for and uptake of youth-friendly services (YFS), and serving as change agents in their communities.

Methods: A facility-based mixed method cross-sectional study was conducted from May 6-21, 2019. Exit interviews were conducted with 353 YFS clients and key informant interviews were done with 56 sampled individuals who had previous experience with peer education and YFS. A descriptive statistic was used to analyze the data using SPSS v.20 and qualitative data were analyzed manually and summarized based on emerging themes.

Results: Of the 353 YFS clients, 61% were female, 65% were single, and 52% were in school. More than half of the respondents (61%) had never heard about YFS before coming to the health facility on the day of the survey. Among those who had heard about YFS (39%), the most common source of information was peer educators (38%) followed by 30% school clubs, and the remaining respondents (32%) were from parents, siblings, colleagues. Furthermore, the study also indicated that most of the respondents (78%) were aware of the work of peer educators, of which 45% had met with a peer educator and 55% knew about peer educators. The key informant interviews revealed peer educators were respected for sharing health information with their peers and for their willingness to provide community services.

Conclusions: The findings show that peer educators play an important role in their communities by providing and dispensing different sexual and reproductive health information. More efforts need to be put towards reaching out-of-school youth so that they too can benefit from the program. [*Ethiop. J. Health Dev.* 2021;35(SI-5):37-44]

Key words: peer educator; peer education; youth-friendly health service; adolescent and youth health service; Ethiopia

Introduction

In Ethiopia, the second most populous country in Africa, where adolescents and youth aged 10-24 constitute one-third of the total population, there is growing attention to the health of adolescents and youth (1,2). Improvements in the provision of reproductive health services and increased school attendance have enabled the country to enter the third stage of the demographic transition, which is marked by low death rates and a decrease in birth rates (3). Foundations laid in health, including sexual and reproductive health (SRH), can positively influence social, political, and economic development, and the ability of the country to reap the benefits of the demographic dividend (3). Healthy adolescents and youth are key assets and social change actors, with great potential to contribute to families, communities, and the nation now and in the future (3,4).

The strategic framework of the National Adolescent and Youth Health Strategy is guided by the principles of ensuring the meaningful participation of adolescents and youth in their individual healthcare, enabling them to make the health system accountable, and encouraging them to deliver on their social responsibilities through community voluntary activities (5). Peer education is one component of the strategy's service delivery mechanisms, where peers serve as sources of information and education and create demand for health services (1,2). In recent years, peer education programs have grown in popularity and practice in the field of health promotion and disease prevention (5-7). In Ethiopia, peer education programs were widely implemented during the HIV/AIDS epidemic, during which adolescents and youth were engaged with HIV and AIDS clubs after having peer education and life skills training with close follow-up and mentoring (8).

Global evidence provides mixed evaluation results on the effectiveness of peer education programs in changing behavior (9, 10). Results challenging the effectiveness of peer education to influence the behavior of beneficiaries indicate its limited use in information dissemination and suggest integrating peer education programs within holistic interventions (10). They also suggest that refining and limiting the scope of practice for peer educators to sensitization and referral may make them more effective agents in their communities (10,11). In contrast, it has also been documented that peer education programs support young people in developing positive group norms and making healthy decisions about sex, sexuality, and other developmental endeavors (12). These results argue peer education training benefits adolescents and youth by equipping them with knowledge about sexual health topics, providing greater familiarity with community resources, increasing feelings of connectedness to school, and raising awareness of perceived cognitive and behavioral changes that could transfer to preventing other risky behaviors (13,14). Others argue peer education programs have enormous variation and their evaluations should therefore be carefully tailored to specific contexts (6, 9, 13). Most beneficiaries agree that peer education allows peer educators themselves to improve their confidence and communication, leadership, and interpersonal skills and to avoid risky health behaviors (10,15).

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The United States Agency for International Development (USAID)'s Transform: Primary Health Care Activity, implemented by a consortium led by Pathfinder International in partnership with the Ethiopian Ministry of Health, has been working to improve the health of adolescents and youth using an integrated package (16). This package includes demand generation and referrals through peer educators, and preventive and curative health services, including SRH at facilities with youth-friendly services (YFS) that align with the World Health Organization (WHO) guidelines (17). As part of the integrated package delivered by YFS-trained health care providers at designated YFS units of health facilities, a volunteer cadre of peer educators participate in demand creation and refer adolescents and youth to the facilities. The peer education program works in collaboration with district health offices, health facilities, and schools. School club coordinators, in areas where there is a facility with YFS, are also aware of the peer education program and its objectives and they participate in the recruitment, training, deployment, and monitoring of peer educators.

Peer educators are recruited by health center heads in collaboration with the respective kebeles (the lowest administrative unit in Ethiopia, with an average population of 5,000) under the health center's catchment areas. Recruitment is based on a pre-set criterion as follows: 1) interest in working with young people, 2) willingness to provide voluntary services, 3) good reputation in the community and school, and 4) free from substance abuse. Most of the health centers have 25 peer educators working with them, with an equal proportion of young women and men, and a 20% representation of out-of-school adolescents and youth. Peer educators are expected to provide health messages and counseling in their communities, schools, and health facilities through coffee ceremonies and making referrals to YFS facilities. They also support the community by making YFS facilities clean, attractive, and safe while also planting trees and flowers and creating vegetable gardens. However, there is insufficient evidence about the role and contribution of peer educators in the health system. This study sought to describe the roles and contributions of peer educators in promoting healthy behavior, generating demand for and uptake of youth-friendly services, and serving as change agents in their communities.

Methods

Study setting and period

USAID Transform: Primary Health Care project implemented in collaboration with the Ministry of Health since 2017, has supported over 416 YFS to improve adolescent and youth health. Benefiting nearly 53 million people, Transform Primary Health Care strengthens the management and performance of Ethiopia's national health system by improving the service delivery process across the continuum of primary health care, improving household and community health practices and healthcare-seeking behaviors, and strengthening program learning to impact policy and activities related to the prevention of child and maternal deaths. The study was conducted in selected YFS facilities located within USAID Transform: Primary Health Care implementation regions and focused on the role and contribution of peer educators in adolescent and youth health. The data was collected from May 6 - 21, 2019.

Study design

Facility based mixed method cross sectional study was employed in four agrarian regions, namely Oromia; Amhara; Southern Nations, Nationalities, and Peoples' (SNNP[1®]); and Tigray of Ethiopia. The source and study population of this analysis was adolescents and youth who were 10-24 years old and attended YFS facilities during the study period. The quantitative data focuses on adolescent and youth clients (the beneficiaries of peer-educators), while qualitative interviews targeted YFS providers; health facility heads; district maternal, newborn and child health (MNCH) coordinators; and school club coordinators to explore additional information.

Sampling size and sampling

The selection criteria for the districts chosen for the study were being a USAID Transform: Primary Health Care Activity implementation district and having at least two health centers with separate YFS service units. Two districts with YFS services were selected randomly from each region. Two health centers with separate YFS service units were then chosen from the selected districts by simple random sampling. In the selected health centers, exit interviews were conducted for adolescents and youth ages 10-24 who attended the YFS facilities during the study period. The number of exit interview participants was determined based on sample size calculation using single population proportion formulas, assuming a 50% proportion, an alpha of 0.05, and a 5% marginal error. After adding 5% of the calculated sample size to account for non-response, 403 adolescents and youth were considered. The exit interview was completed through consecutive sampling until an adequate sample was obtained (18).

Of those eligible but who did not respond, 25 (6.2%) refused to participate, 20 (4.9%) withdrew after beginning the interview or had incomplete surveys, and 5 (1.24%) were wrongly recorded in the exit interview and were dropped from the analysis. The data was analyzed with a final sample of 353 clients with a response rate of 87.6% and were included in the final analysis.

The qualitative key informant interviews were conducted with people who had experience in YFS services and awareness of peer educators' roles in their communities. With quantitative data collection, 56 key informant interviews were conducted: 16 YFS providers, 16 health facility heads, 8 district MNCH

[1] ®*During the time of data collection, Sidama and South-west region was part of SNNP and in this study, the term "SNNP" is used to refer three regions (Sidama, SNNP, South-west)".*

coordinators, and 16 school club coordinators were identified from facilities and districts which implemented YFS.

Data collection process

Quantitative data from the exit interviews was collected using a structured questionnaire that was prepared in English and translated into regional working languages (Tigrigna, Amharic, and Oromifa) with 353 participants who visited YFS selected for the study on the day of data collection. Along with participant demographic information, the exit interviews elicited participants' views on peer educator services received during the visit preceding the interview, previous experience, and knowledge about peer-education practice. Twelve data collectors who were fluent in the regional working languages were selected for data collection and four supervisors with experience in YFS facilities and awareness of peer educators were selected for supervision. Training, consisting of mock interviews and practical exercises for both data collectors and supervisors, was conducted over a four-day period in May 2019. The questionnaires were pretested in Weliso district YFS health center in Oromia region, and further refined to ensure they were clear and could be understood by both the data collectors and respondents.

The key informant interviews were carried out using an interview guide by data collectors with qualitative study experience and fluency in the regional working language. The instrument covered general description of YFS, the standards, and its challenges; YFS service availability and utilization; the referral system (intra- and inter-referrals); engagement of peer educators in demand creation and referral; and community engagement as part of social responsibility.

Data processing and analysis

The quality, accuracy, and completeness of the collected data were assessed using range plausibility and cross-validation checks. The quantitative data was entered into EPI-Data version 3.02 for Windows and exported into SPSS version 20 for further analysis. Descriptive statistics (table) was used to summarize the quantitative data.

The qualitative data analysis (key informant responses) was audio-recorded, transcribed verbatim in local languages (Amharic, Oromifa and Tigrigna) and translated into English before starting the analysis. Thematic analysis was used to analyze the data in three phases: preparation, team organization and reporting the summary result in each team. The first phase of the analysis started with careful reading of the data multiple times to become immersed in and familiar with the data. In the organization phase, each transcript was read carefully by the first author who highlighted the theme text (*words or phrases*) that appeared to describe the phenomenon under the study *(role, contribution, and perception)*. The highlighted theme text was openly and manually coded with descriptors. The other author read the data to confirm the descriptive codes. These codes were revised, and the codes that emerged from the revision were jointly reviewed before they were integrated into the analysis. The other authors collaborated with the first author to review, discuss, and agree on the final code categories. The final analysis was summarized manually based on agreed emerging themes.

Ethical considerations

Ethical approval was obtained from the Amhara, Oromia, SNNPR and Tigray Regional Health Bureau IRB committees, and administrative clearances were also secured from the selected health facilities. Each respondent provided informed verbal consent after being told the purpose and procedures of the study. All respondent identifiers were kept confidential, and data were anonymized.

Results

The mean age of the respondents was 18 years (mean=18.0, standard deviation (SD)= ±3.6), and approximately 55% of the respondents were in the 16 to 20-year-old age bracket. Most of the respondents (62%) were female and 52% of them were in school. Most of the respondents were currently single/not married (67%), and 33% were married or living with their sexual partners (Table 1).

Table 1: **Characteristics of exit interview respondents using youth friendly service in Amhara, Oromia, Tigray and Southern Nations, Nationalities and Peoples regions of Ethiopia**

Characteristics	*N (%)*
Sex (n=347)	
Male	133 (38.3)
Female	214 (61.7)
Age group in year (n=353)	
<16	78 (22.1)
16-20	194 (55)
>20	81 (23)
Mean age (years	18.0 ±3 .6
Marital status (n=346)	
Single	230 (66.5)
Married	116 (33.5)
Educational attainment (n=348)	
In-school	182 (52.3)
Out-of-school	166 (47.7)

More than half of the respondents (61%, n=215) had never heard about YFS before coming to the health facility on the day of the survey. Among those who had heard about YFS before the date of the survey, their main source of information was Peer educators (PEs) 38% (n=52), followed by 32%(n=44) were parents, siblings, colleagues; and school clubs were also mentioned by the remaining respondents (30%, n=54). On perception and understanding of the role of peer educators, most of the respondents (78%, n=275) were aware of the work of peer educators, of which 45 % (n=125) had met with peer educators and 55% (n=150) knew about peer educators. Clients who reported ever meeting peer educators (n=125) were asked additional questions to understand their experience. The most common place that respondents had met peer educators was school (67%, n=84), followed by the YFS unit in the health facility (18%, n=22). Clients who reported ever meeting a peer educator were asked if they have seen peer educators providing health messages, of which 85% (n=106) of respondents reported they had seen peer educators providing health messages, and when asked about their attitude towards peer educators, 67% (n=84) of respondents are helpful, 64% (n=80) of their information is pertinent, and 44% (n=55) mentioned they were role models. Respondents who knew about peer educators (n=275) were asked if they liked the overall work of the peer educators, and 43%, (n=119) responded affirmatively (Table 2).

Table 2: **Awareness, perception and experience encountered with peer educators among adolescents and youth surveyed in Amhara, Oromia, Tigray and Southern Nations, Nationalities and Peoples regions of Ethiopia (n=353)**

	N (%)
Awareness of PEs (n=353)	
Don't know about peer educators	78 (22.1)
Know about peer educators	150 (42.5)
Have meet a peer educator	125 (35.4)
Adolescent and youth who met PEs, were asked about where they met them (n=125) *	22 (17.6)
At YFS Facility	84 (67.2)
In school	14 (11.2)
In the community	5 (4.0)
In the neighborhood	
Perception of adolescents and youth who have met a PEs(n=125) *	
Peer educators are helpful	84 (67.2)
Peer educators are role models	55 (44.0)
They provide pertinent information	80 (64.0)
They are not different from us	2 (1.6)
Adolescent and youth who met a PE, if ever seen PEs providing health messages(n=125)	
Yes	106 (84.8)
No	19(15.2)
Adolescent and youth seen a PE providing a health message, further asked where (n=106) *	
Schools	89 (83.9)
Health center	30 (28.3)
Community gathering	35 (33.0)
Other places	3 (2.8)
Have you seen PEs working in this facility on the date of the survey?	
Yes	44(12.5)
No	309(87.5)
Adolescent and youth seen PE working in the facilities, were further asked type of activities they were doing (n=44) ^	
Guiding young people for services	21 (47.7)
Providing health education	12 (27.3)
Supporting YFS providers	6 (13.6)
Simply sitting around the facilities	5 (11.4)

*Percent exceeds 100 as more than one response was possible.

^ Among 44 respondents who indicated every having seen peer-educators working in a health care facility.

Qualitative findings

The average age of the key informant interview participant was 28 years, and both male and females were participated (Table 3).

Table 3: **Characteristics of Key informant interview respondents (n=56) from Amhara, Oromia, Tigray and Southern Nations, Nationalities and Peoples regions of Ethiopia**

	Female (N)	Male (N)	Age range	Mean age
YFS provider	10	6	23-44	28
Woreda health office	3	5	28-48	36
Facility head	3	13	27-43	32
School club coordinator	2	14	27-43	32

The qualitative analysis was categorized into three themes *(role, contribution, and perception).* The successes of peer educators were described by YFS providers and facility heads. Almost all YFS providers and health facility heads agreed that peer educators had contributed to increased client flow to the health facility. Some even suggested that they may have contributed to the reduction of unwanted pregnancy and other reproductive health problems among young people in their catchment areas.

"*The role of peer educators in health service delivery is very significant. In our health center, peer educators have brought many changes. Since they started their voluntary services, young people living in the area are coming here to get service in the center designated for them. Many young people know about the YFS in the health center, and they come whenever they need to get services. Peer educators are closer to the community than health service providers and they can reach many people with health messages." (YFS provider)*

Reflecting on the support of PEs for adolescent and youth needing YFS services; one of the key informants described the role of peer educators as follows:
"*They (young people) are engaged in the YFS service provision mainly as peer educators. They (PEs) teach and counsel their peers in schools and at the community level. This is after they receive training provided by us (health facility) in collaboration with the district MNCH officer. They teach and advice their peers and report back to us what they accomplished" (Facility Head).*

Other key informant interviews (facility and district head) echoed the views of the exit interviewees, remarking on the key role played by peer educators in the community:
"Had it not been the peer educators' involvement together with the service providers, we couldn't have proceeded a single step forward especially for YFS service provision. Nowadays, because of the increased number of clients, the YFS service providers have been providing services to many adolescent and youth clients and they stay long after working hours. This is made possible due to the effort of the peer educators. If we compare the performance of the YFS before and after the peer educators' involvement, it is easy to rate their importance as excellent." (*District MNCH coordinator*).

"The importance of peer educators in the facility and community is high. They play a great role in changing the attitude of the people on different health issues by providing regular health education and focusing on current and existing health problems in the area. You know, because of shortage of health staff, the health center can't provide health education on regular bases as they do. Peer educators who live in the community, with the community and they [are] aware of health issues of families, friends, and the community. As a result, HIV testing increased, and the rate of HIV transmission has decreased more than before". (*Facility head*).

The peer educators are also involved in social responsibility activities. Almost all peer educators are tasked with cleaning, planting trees, and gardening at their respective YFS areas. They grow vegetables like carrots, cabbage, green peppers, and fruits trees like mango, avocado, and papaya. The fruits and vegetables are used by mothers in maternal waiting homes who are awaiting their delivery in the health center, and children who have malnutrition and have been admitted to stabilization centers in the facilities. Depending on their community's needs, they are involved in other social responsibility activities as well. Key informant interview participants described incidences where peer educators were involved in tuberculosis case detection, provision of support to pregnant women and laboring mothers, helping the elderly, and performing cleaning and other tasks in homes of people in need.

> *"As part of social responsibility, peer educators have taken many activities like blood donation, supporting pregnant women to attend their delivery at the health center, awareness creation on health issues in the community using drama and songs, plant trees, participate in Clean, Attractive and Safe Health facilities (CASH) activities, and supporting people in need in the community…."* (YFS provider).

"In addition to educating young people they participate in different voluntary activities like tree planting in the health center, cleaning the environment and helping elders." (Facility head)

"*If a student has any health problem, the peer educators tell me, and we refer the person in need to YFS. We work with the YFS focal person very closely, especially when we face a student with a health issue''. (School Club Coordinator).*

The peer educators face resistance from community members due to lack of full understanding of their role. School peer education program coordinators have expressed how parents are sometimes uncomfortable allowing their children to work as peer educators. Some peer educators have been criticized for teaching

others 'as if they are any better' than their friends. Other community members have perceived the peer education program as having a negative impact on their reproductive health.

"Since peer educators are from the community, they are well known. Sometimes the community does not give them attention. The peer educators try their best to convince the community repeatedly. I also advise them (to the community members) not to be like that and listen to what the peer educators say." (YFS Provider)

"Sometimes the community does not see it positively and complain to us when we teach youth about AYSRH and the YFS. Some people think it will lead the young people to think about sex. They say, 'you are encouraging them to start to think differently [about sex] by providing boys with condoms and informing girls about abortion care services.' On the other hand, when the youth give health education to the community and at schools, local administrators provide support to them. In any case, there is misconception about the service by the community. It is getting better compared to how it was in the beginning; repeated efforts have worked in changing the community attitudes a little bit." (Facility Head).

Discussion

This study was an effort to address the gap in our understanding of adolescent and youth needs and problems in low-and middle-income countries. Though there are reports indicating the limited effectiveness of the peer education program in different countries and settings (10), the peer education program led by Pathfinder International is unique and incomparable to others in the context. Youth centers located in our intervention area are different by design, purpose and incomparable with our Peer Educators Programing which is one way of ensuring youth engagement and social accountability. The peer education program was made an integral part of a youth friendly service package which has other components such as community work (engagement in social activity) facilitating its effectiveness, and as it's a volunteer service, there is no incentive.

Single, female, and in-school adolescents and youth accounted for the majority of the YFS clients in the survey. In this study, slightly greater number of in-school as compared to out of school adolescents and youth were found to use YFS during the exit interviews. The recruitment and deployment of peer educators to health centers were favors in-school adolescents. A previous study in Ethiopia has shown that out-of-school youth are less likely to use adolescent health services (19). Although some health facilities claimed to include out-of-school Adolescents and youth as 20% of their peer educators, there is still a need to be intentional in efforts to make the peer education program more inclusive of out-of-school adolescents and youth during selection and enrollment of peer-educators.

The overwhelming majority of adolescent and youth clients who participated in the exit interviews had not heard about YFS before coming to the health facility. There might be adolescents and youth who came to the facilities and used YFS services but had not realized that the facility is a YFS facility, or they could not appreciate the difference between the YFS and non-YFS services. Most of the respondents who heard about YFS from PEs claimed to have met them at their school because majority of peer educators are recruited from nearby schools and work actively in schools, whereas the out-of-school youth may not have access to information on YFS services. This is supported by a previous study conducted by Population Council that shows a small proportion of adolescents and youth had heard of youth-friendly health services (12). However, this study's finding confirmed that among those who have ever heard about the YFS service, peer educators were found to be the top source of information on YFS services.

The selection and deployment processes of the peer education program described in the key informant interview data supports exit interview findings. Facility heads and YFS providers who participated in key informant interviews felt strongly that peer education has contributed to the increased client flow in the YFS units of their respective facilities. This finding is supported by other study, which stated that peer educators positively influence their peers in health service utilization (19).

In Ethiopia, adolescent, and youth communication with parents on reproductive health issues is limited. A previous study in Ethiopia showed that most young people do not discuss reproductive health issues with their parents and expressed a preference to discuss with their peers (20). The limited adolescent and youth/parent communication observed in other studies in Ethiopia is also prevalent in our study (21). When this is combined with the negative perception expressed towards reproductive health information being shared with young people by school club coordinators interviewed in the study, it confirms the widely held belief that adolescents and youth have limited access to accurate information about reproductive health. Our findings show that peer educators have the potential to fill this gap if they are provided with regular updates on SRH and other health information, conduct regular review meetings to evaluate their work, receive technical feedback on their ideas, and have their efforts recognized. Stakeholders interviewed also felt that peer educators (and the YFS they are associated with) should allocate budget to conduct coffee ceremonies to educate the community and provide transport allowances when they come for review meetings.

Effective reproductive health services for young people should include key partners such as parents and community members (23). Developing a well-defined strategy that enables the community to understand the reproductive health needs of adolescents and youth, and the potential role the peer education programs can play is one possibility. As part of YFS service and peer education program establishment, a sensitization workshop was conducted for parents, community gate

keepers, sector office representatives, and all health facility staffs – from guards to top management – to introduce YFS services and the peer educators' role in demand creation and referral to health services. This created an opportunity for parents and community members to better understand the functions of the peer educators and YFS services and provide support to enable peer educators implement their day-to-day activities in the community. As parents or community members, they can constantly look after the peer educators' work, mentor, and support them with resources (finance, used clothes, food items etc.) while they are trying to support the needy (elderly and orphans) members of the community.

Study limitations

Both the qualitative and quantitative analysis highlights important findings to support evidence about the role and contribution of peer-educators in the Ethiopian health system, but the study was not without limitations. The study did not take the multistage nature of the sampling procedure into consideration. The study used a small sample size which did not consider regional stratification. The study was focused on facility users and did not include non-users, which creates a gap in understanding whether the peer educators are reaching non-users and effective in generating demand among non-users. The study doesn't present the YFS service utilization that can help to triangulate with the key Informant Interview report. Another limitation of the study is in relation to exit interview participant awareness and experience. Respondents may have used a YFS facility, but know them as health centers, and may have met with peer educators, but may have considered them to be facility staff.

Conclusion and recommendations

Peer educators play a vital role in creating awareness about adolescent and youth SRH in their respective communities, which has ultimately improved knowledge of YFS service availability and utilization. Besides improving health care seeking behavior of adolescents and youth, peer educators have also contributed to several different social responsibilities. However, further research is recommended to understand the gender effect/difference on the role and contribution of PEs in health service demand generation.

Declarations

Competing interests

The authors declare they have no financial or personal relationships which may have inappropriately influenced them in writing this article and declare they have no competing interests.

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