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Research Article

Communication Strategies of *Programa Geração Biz* in Nampula and Maputo

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Abstract

Background: Studies show that Mozambican adolescent sexual and reproductive health (SRH) risks such as early marriage, early pregnancy and STI/HIV and AIDS remain unsolved, despite the implementation of the *Programa Geração Biz* (PGB) countrywide. The PGB is an adolescent SRH programme implemented by the Mozambican Government in 1999 to solve adolescent SRH issues. This programme uses peer educators, called *activistas* in Portuguese, to transmit SRH messages to their peers across the country. Studies point to a lack of research and analysis of health campaign communication strategies. Therefore, this study seeks to examine if the continuing adolescent SRH risks are related to the programme communication strategies.

Objective: examine the communication strategies used by the PGB peer educators to transmit SRH messages to adolescents in Nampula and Maputo provinces.

Methods: non-participant observation, in-depth interviews, focus group discussions and document analysis. Research questions were based on the McGuire Communication/ Persuasion Model, and data analysed thematically using Nvivo Pro11.

Results: interpersonal methods are used to deliver preventive messages. PGB communication strategies do not use theory and depend upon peer educators and their trainers' personal experiences. Sociocultural and evidential approaches are often ignored.

Conclusion: The communication strategies of the PGB need to use theory, sociocultural and evidential approaches in order to improve its efficacy.

Keywords: Adolescents, Peer educators, Sexual and reproductive health, Programa Geração Biz

Background

Sexual and reproductive health (SRH) needs of the young generation are a priority in Mozambique. In 1999, the Government created the *Programa Geração Biz* (PGB), an adolescent sexual and reproductive health (SRH) programme to improve adolescent sexual and reproductive health, including prevention of HIV and AIDS and other sexually transmitted infections (STIs). As well, the programme's intention is the prevention of unwanted pregnancies, avoidance of early marriages and pregnancies, ensure family planning as well as teaching negotiation skills when dealing with a partner about practicing safe sex (1, 2, 3). At that time, the primary adolescent SRH issues were early marriages, early pregnancies and HIV/AIDS and other sexual transmitted infections (STIs). For example, 56.6% of girls under 18 years old were married, 40% of girls were pregnant before they reach 17 years old and 13% of adolescents between15 and 24 were HIV positive.

The Programme combines a multi-sector approach with interventions in schools, communities and health centres – through the Adolescent-Friendly Health Services (SAAJ[1]). Intervention programmes in schools fall under the jurisdiction of the Ministry of Education and Culture, and its primary aim is to train peer educators. In Portuguese, student educators are called *activistas*[2] and it is their mandate to address all issues related to undesired pregnancies, under-age marriages, and STIs.

PGB peer educators share the age characteristic (youth) as a link between the

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[2]Peer educators or activists

educators and educated [1]. The peer educators provide information and advice [2] related to the main SRH issues to adolescents and youth.

After 18 years of PGB implementation, the programme has achieved substantial progress. An estimated total of 1.3 million people in Mozambique have been reached by PGB. It uses 6.957 peer educators to deliver SRH messages to adolescents [3]. Among others, the inclusion of out-of-school youth in the target population has made it a relatively uncommon and hence pioneering intervention. Nonetheless, various challenges have been encountered in terms of programme effectiveness. Although isolating and measuring the impact of one program is a difficult matter, one might in the case of such national, comprehensive long-term interventions expect overall improvement of SRH. Data indicates that many youths, representing 44% of the country's population [4] continue to be exposed to risks related to their sexual and reproductive health (SRH). These include untimely marriage, early pregnancies, STIs, HIV and AIDS, unsafe abortions, childbirth outside health centres, etcetera [5-7]. For example, data indicate that 44% of Mozambican girls have experienced pregnancies before they reach 17 years old. Also, 8.7% of HIV infected persons in Mozambique are youth between 15 and 19 years old. Of these, 6.2 % are female and 2.5% are male [8]. Despite the implementation of the PGB countrywide and the progress achieved, these figures indicate that adolescent sexual and reproductive health (ASRH) problems remain.

Mozambique, with 27.128.530 inhabitants, has varied multi-cultural communities constituting approximately 24 ethno-cultural groups. Therefore, it can be asked if the continuing adolescent sexual and reproductive health issues are also related to the programme's communication strategies. It is necessary to examine if the programme communication strategies have taken into account the country's complex cultural realities and diversitie.

Literature recommend future studies should focus upon theoretical approaches, communication strategies and channels utilised in health campaigns [7,8].

Thus, the aim of this study was to analyse the communication strategies used by PGB peer educators to deliver SRH messages to young people in Maputo and Nampula provinces.

This study's theoretical framework builds on an adapted version of four input factors of McGuire's Communication/ Persuasion Model [9], namely: source, message, channel and receiver. The model provides an effective means of analysing health campaign communication strategies [10-12], since the input factors provide options for health message educators to select and manipulate when delivering health messages. This in turn, can assist health educators and practitioners in identifying and considering the best strategies to bring about positive outcomes to health campaigns [9].

Methods

Study design

This was a qualitative multiple case study [13] conducted between April 2015 and August 2017 in two provinces of Mozambique, namely: Nampula and Maputo.

Study settings

The study took place in four schools located in the provinces of Nampula and Maputo. In Nampula, in the Northern region of the country, two schools were selected: one in the capital city Nampula (Escola Secundária 12 de Outubro) and the other in Rapale District (Escola Secundária de Rapale). In Maputo, in the south region of the country, two schools were selected: one in the capital city Maputo (Escola Secundária Francisco Manyanga) and one in Moamba disctrict (Escola Secundária de Moamba). The two provinces were selected because they are the most affected by adolescent SRH issues. For example, 17% of girls, under the age of 15 are prematurely married in Nampula. Maputo province has the highest prevalence of HIV/AIDS among those aged 15 to 49 living in the southern region of the country. It accounts for 20% of the national incidence of HIV/AIDS [14].

Study sample

This study used 84 individuals purposively selected from the PGB in the two provinces. The inclusion criteria were to be to be a peer educator or an adolescent of the PGB, and to have residence in Nampula or Maputo provinces. Peer educators were only selected if they had at least one year of fieldwork experience. Adolescents were only selected if they had attended the programme for at least two weeks. Only adolescents between 12 and 17 years old were selected because they were considered to be the peer educators' priority target group.

(Table 1) provides an overview of the main respondents' characteristics.

Data collection

Data was collected using in-depth interviews, focus group discussions, non-participant observations and document analysis. Thus, in-depth interviews were realised with PGB project officers and peer educators with more than two years of fieldwork.

Focus group discussions were held with the peer educators (sources of messages) and adolescents (receivers of messages). Non-participant observation was accomplished through the observation of peer educators' activities when delivering health messages to adolescents.

Finally, an analysis was made of the three main documents promoting sexual and reproductive health in Mozambique. All these methods and sources were applied to explore PGB communication strategies in Nampula and Maputo.

Table 1: Participants Characteristics

Participants	Number of participants	Age range	Educational background	Period of time within the PGB	Gender		Location of participants		Cultural groups
					M	F	Cities	Districts	
Peer educators	39	18 - 27	Secondary education/ high school	1 – 10 years	12	27	26	13	Makhuwa/ Changana
Adolescents	39	12 - 17	Secondary education	2 weeks – 4 years	12	27	26	13	Makhuwa/ Changana
Project officers	6	25 - 35	undergraduate	1 – 3 years	3	3	6	0	Makhuwa/Changana
Total	**84**				27	57	58	26	

The research questions were also framed using the four input factors of the McGuire Communication/Persuasion Model as presented next:

Sources of messages: What channels do they use to transmit messages? What are the peer educators' characteristics? What cultural challenges do peer educators identify when delivering health messages? How do they deal with these identified challenges? Do peer educators take into account the sociocultural background of adolescents when delivering health messages?

M**essages:** What types, arguments and style of messages are used by peer educators to deliver messages? What language is used? What non-verbal communications are used? The features of effective communication are: accuracy, availability, balance, consistency, cultural competence, evidence-based, reach, reliability and repetition. But what features of effective communication strategies are actually present?

C**hannels:** These are means or methods used by peer educators to deliver health messages. However, are they adequate to ascertain reality and context?

Receivers: How do adolescents describe/characterise peer educators? What types of messages do they receive? What are the channels used by peer educators to deliver messages to them? What cultural challenges do adolescents identify when receiving health messages?

Data analysis

After data collection, the information was transcribed and then the interviews were translated from Portuguese to English. In a few instances, only the important/useful excerpts of an interview would be translated. It is important to denote data was mostly collected in Portuguese and sometimes in the local language (Makhuwa), with the help of a native speaker.

This occurred when some adolescent participants from Rapale district in Nampula did not feel comfortable speaking about sexuality in Portuguese.

After data transcription and translation from Portuguese to English, it was necessary to extract essential information using a systematic and verified process before starting the coding. All nonessential words were stripped away. Next, transcribed materials were coded and its content analysed thematically, as a manifest analysis, using Nvivo Pro11. Content analysis is "a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use" [15]. In manifest analysis, the researcher endeavours to stay close to the information provided by the participants, describing what the informants actually say [16]. Nvivo Pro11 helped to visualise data and its analysis.

Data analysis was related to McGuire's Communication/Persuasion Model and relevant literature. Some direct quotes were retained to illustrate key points for each theme and question. Each participant's direct quote was given a fictitious name. Short paragraphs were written to summarise each finding before writing the main results.

In addition, three primary documents guiding the communication strategies for Mozambican health campaigns on HIV and AIDS were analysed. Those documents were: the national strategic plan for HIV and AIDS response - *PEN IV* [17], the communication strategies on HIV and ADIDS - *Estratégias de Comunicação sobre o HIV/SIDA* (2)*)*, and the PGB peer educator's handbook - *Manual do Activista do Programa Geração Biz* in Portuguese (3).

Ethical considerations

Ethical clearance for this study was granted by the Mozambican National Committee of Bioethics for Health as well as the Committee of Bioethics of the Faculty of Medicine and Maputo Central Hospital. The reference numbers were 45/CNBS/2016 and CIBS FM&HCM/016/2016. I also obtained written informed consent from all participants. Anonymity and confidentiality were safeguarded and interviews were conducted in locations requested by the respondents.

Results

PGB communication strategies in Nampula and Maputo provinces were obtained from the four input factors of the McGuire's Communication/Persuasion Model: sources of PGB health messages, messages delivered in the PGB, channels used, and receivers of PGB health messages.

The findings were organised thematically. These are the themes: The sources for message transmission in the PGB; adolescents SRH messages transmitted in the PGB; channel used by peer educators for PGB message transmission; receivers of the PGB SRH messages.

The sources for message transmission in the PGB

All participants of this study agree PGB health messages are transmitted by peer educators, called *"activistas"* in Portuguese:

"The peer educators constitute the heart of the programme. Without peer educators, the programme does not work" (Project Officer Mateus, IDI, Maputo province, 2017).

PGB peer educators in both provinces have many years of experience in their activities. For instance, they have between one and ten years of fieldwork to their credit.

On one hand, the data reveals the majority of adolescents or receivers of sexual and reproductive health messages, from both capital cities and villages in both provinces without doubt consider peer educators' role models. This is because they possess knowledge and confidence as these excerpts reveal:

"Peer educators are people with more knowledge on sexual and reproductive health issues and they want to share that knowledge with us (Adolescent Shanaze, FGD, Maputo city, 2017).

"We like peer educators. They teach us many things. They keep us from going on the wrong track" (Adolescent Berta, FGD, Nampula city, 2016).

Conversely, a few adolescents admitted that sometimes they felt peer educators lacked knowledge and were disrespectful of people and their community by openly discussing sexuality:

"I've always refused to go to PGB. I used to say that the PGB peer educators and their messages are offensive, they insult. I look at the PGB messages as insulting" (Adolescent Alice, FGD, Nampula city, 2016).

"The locales and ways used by peer educators to disseminate messages should be different. They should not call you in the crowded places. This is because when you talk to them, your colleagues ask questions about the conversation and you do not have any answer" (Adolescent Fernando, FGD, Maputo city, 2017).

Viewing peer educators as having lack of respect for people and their community may result from cultural mores. In such communities, sexuality is mostly taught by adults. Adolescents may discuss these matters privately of course, but in these communities when it comes to a public setting where an individual teaches a group this individual should be an adult (which in the case of teaching may far exceed the legal age) and already experienced, trained or initiated in the matter. As a result, some adolescents and adults in these communities do not want to listen or are not open to the peer educators' messages on sexual issues:

"Elder people sometimes do not want to listen to our messages because they say we are too young to have such knowledge" (Peer educator Ruth, FGD, Maputo city, 2017).

Adolescents SRH messages transmitted in the PGB

All participants of this study revealed the messages shared by PGB peer educators in the two provinces are primarily preventive. They are about protection from HIV and AIDS, STIs, how to use a condom, negotiate skills with a partner, as well as avoiding early marriage and pregnancy. The following quotations from both adolescents and peer educators illustrate this clearly:

"We learn to avoid early pregnancy and delay first sexual relation. I also learned that at home, when the man says, "I want many children", for example, five children, I learned that a person who can decide is not only up to the man. Two people can decide how many children they want to have. The woman has also the right to decide. This means that if a person gets married, she would still have rights. I learned this, if a person gets married, she can have reproductive rights at home, not those things they say in the community that woman has no right to decide anything" (Adolescent Lilia, FGD, Rapale district, Nampula Province, 2016).

However, the predominant messages delivered to adolescents by the PGB in both provinces stand in opposition to many traditional practices of the Makhuwa and Changana cultures. Delaying first sexual intercourse; evading early marriage, avoiding early pregnancy, and condom use fly in the face of cultural tradition which encourages all of these except the use of condoms. Participants explained it in this way:

"…What we learn here [in the PGB] is not accepted in our communities" (Adolescent Linda, FGD, Rapale district, Nampula province, 2016).

"Well, I'll talk a little about girls. In the initiation rites they instruct girls by saying that you're big. You can hold any kind of man…Then, the peer in PGB says you have to delay your first sexual intercourse; you have to leave sex for later. This is already confused. It makes confusion in our minds. We do not know if we will take the example of a peer educator or will take the home example" (Adolescent Marta, FGD, Rapale district, Nampula Province, 2016).

"It is not possible to put meat in plastic, chew it and have it taste good, he says. He believes he cannot have sexual relations using condoms because he will not feel what he wants to feel" (Adolescent Pedro, FGD, Nampula city, 2016).

"Many families here in Moamba say daughters are born to marry. She does not need to go to school. They force them to marry at an early age; that is before finishing high school" (Peer educator António, FGD, Moamba district, Maputo Province, 2017).

Peer educators' and adolescents' responses show PGB health messages are mostly delivered in Portuguese and sometimes in the two local languages, Makhuwa and Changana. Occasionally, one of the local languages spoken in Nampula is used when adolescents have real difficulty understanding Portuguese. However, in the presentation of a role play (theatre) about SRH topics, the languages predominantly spoken by the inhabitants of the two provinces are used:

"We use mainly Portuguese language and sometimes Makhuwa which is the local language in Nampula" (Peer educator João, FGD, Nampula city, 2016).

"We mostly use Portuguese for speech, and sometimes we use Changana for role play (theatre) on SRH issues" (Peer educator António, FGD, Moamba district, Maputo Province, 2017).

Peer educators in both provinces use a handbook called "*Manual do Activista do PGB*" – meaning the PGB peer educator's handbook. It is their main educational tool and is made up of 11 chapters of relevant adolescent sexual and reproductive health issues. It starts with briefings on how to present health messages and ends with how to use the provided materials for communicating health messages:

"We have the peer educator handbook. I use it to prepare myself. I take it with me and some magazines to help me" (Peer educator Davety, FGD, Maputo city, 2017).

"The PGB peer educator's handbook is the guide for peer educators' work (Peer educator Basílio, FGD, Moamba district, Maputo Province, 2017).

Additionally, non-verbal communication is employed by peer educators to help deliver health messages. This includes videos, CDs, flyers and posters. For example, in the capital cities of Nampula and Maputo, there are posters and flyers in the safe corners. Two specific posters are available in both cities. Poster one is entitled "you have the right to use a condom" and poster two is named "I take care of myself. I love myself. I use condoms." However, between the two capitals cities, Maputo has more posters and flyers because it has the financial support of AMODEFA – *Associação Moçambicana para o Desenvolvimento da Família*, a non-governmental organisation which promotes SRH:

"We use materials such as flyers and posters to deliver SRH messages to adolescents. Most of our training and posters are provided by AMODEFA" (Peer educator Ronaldo, FGD, Maputo city, 2017).

Contrastingly, peer educators and my own observations pointed to the fact there is a dire a lack of these non-verbal communications available in the villages of both provinces:

"One of the biggest challenges for me is related to lack of work materials" (Peer educator Basílio, FGD, Moamba district, Maputo Province, 2017).

However, some non-verbal communication such as genital replicas used to deliver health messages about the penis and vagina are considered offensive in the Makhuwa and Changana cultures. In these societies, showing intimate parts is entirely offensive. In Changana, they use the expression *"masingita"* which means "shameful/lack of respect/insulting":

"We sometimes cannot use some of our demonstrative materials such as models of the vagina and penis because people consider them insulting. They say "masingita" which means it is shameful, lacking of respect and insulting in Changana. As a result, some people do not believe us, in our messages, because we discuss sexuality openly" (Peer educator António, FGD, Moamba district, Maputo Province, 2017).

"…the demonstration of how to use condom openly is a challenge… People say we are encouraging sex…. (Peer educator João, IDI, Nampula city, 2017).

The SRH messages delivered by peer educators cover seven out of the nine features of effective communication strategies suggested by Healthy People (2010). These are: accuracy, availability, balance, consistence, reach, reliability, repetition. For instance, the adolescents in this study can describe and explain what they have learned in the programme without any difficulty.

However, at the same time, two features stand out as problematic: sociocultural approach and evidence-based information.

Peer educators fail to take into account sociocultural approaches and they rarely provide substantiating evidence when conveying health messages. For instance, peer educators do not utilise the cultural background of adolescents when delivering health messages. Instead, they only criticise some traditional practices, as illustrated in the following excerpt:

"We try rescuing those who are not there yet, rescue with this information, we encourage even those who arrived there; we tried to explain not to follow the wrong path from the initiation rites. We tell them to: respect their parents, use condom, not to give up going to school and use contraceptive methods" (Peer educator Sandra, 2016).

Channels used by peer educators for PGB message transmission

Channel is the means through which the message is transmitted. It is what links the speaker and accommodates the medium, such as vocal-auditory or gestural-visual (Green, et al, 2009; Berry, 2007).

The participants' answers and personal observation indicate interpersonal communication is the preferred method used by peer educators to deliver PGB health messages in both provinces. Interpersonal communication occurs on the personal level and includes one-on-one and small group communication:

"We use campaign face-to-face, speech, theatre, showbiz and debates to deliver ASRH messages in the PGB (Peer educator João, FGD, Nampula city, 2016).

In group communication of health messages, all peer educators in both provinces pass on health messages to boys and girls together:

"Interviewer: When you transmit sexual and reproductive health messages to adolescents in the PGB do you separate boys and girls?

All peer educators: No, we do not separate them" (FGD, Maputo city, 2017).

All participants' answers also indicate individual conversations do occur after a group conversation when an adolescent has a health issue needing further discussion in private.

Such individual conversations are held in a place called *"canto seguro"*, which means safe corner. Within this safe corner, the topics presented in group are discussed in greater detail for a deeper understanding of the adolescent's health issues. If the peer educator notes the adolescent has a health problem or needs to receive more health advice, he/she sends him/her to Adolescent-Friendly Health Services (SAAJ):

"When an adolescent needs treatment or further explanation on a health issue, we send him/her to SAAJ" (Peer educator Monique, FGD, Maputo city, 2017; Peer educator João, FGD, Nampula city, 2016)

Participants of the study pointed out that peer educators use theatre as a strategy to deliver health messages in the programme. In addition, very few peer educators from Nampula province disclosed they use oral short stories as a strategy to deliver PGB health messages.

Receivers of SRH messages in the PGB

The receivers of PGB sexual and reproductive health messages in Nampula and Maputo are adolescents and mostly from the Makhuwa and Changana cultural groups. They are students attending the selected four schools in Nampula and Maputo provinces. As an example, all peer educators in both provinces confirmed they deliver health messages to adolescents. In addition, adolescents' responses confirmed they received health messages from peer educators. Their answers are also reflected in other input factors previously presented.

Discussion

The objective of this study is to examine PGB communication strategies used in Mozambique's Nampula and Maputo provinces. This is based on four input factors of McGuire's Communication/ Persuasion Model - source, message, channel and receiver. It further looks into strategies used by peer educators to deal with cultural challenges encountered while delivering the programme's health messages.

Data generated from this study confirms the sources of PGB messages are peer educators who are viewed by some adolescents as having some degree of knowledge, credibility and confidence. However, other adolescents perceive peer educators as lacking expertise in at least some areas. When peer educators deliver messages on sensitive cultural topics such as sex and sexual issues some adolescents perceive them as having no respect for others. They tend to believe peer educators lack cultural knowledge and should not be trusted.

These attitudes held by some adolescents are a reflection of community taboos around sex, sexual issues and cultural norms. For them, only adults and elders should speak about these matters.

Studies do recognise peer educators play an important role in effective health message delivery [19-21], Thus, the PGB has based its strategies on peer educators for effective message delivery as suggested in the literature. However, in contrast, this study discloses that some adolescents do not view peer educators as the most suitable choice to deliver ASRH messages because they are young and openly discuss sexuality. This situation may also be exacerbated because peer educators look down upon local customs. This is especially so when it concerns the matter of who can talk about sex or teach SRH issues**.** Therefore, this research contradicts findings of other studies, contradicts the dominant consensus and thereby adds to the body of literature. The choice of utilising peer educators in some communities does tend to conflict with cultural norms regarding who is allowed to teach SRH issues.

The messages transmitted by PGB peer educators to adolescents are preventive messages about protection from HIV/AIDS, use condom, avoid early marriages and pregnancies. Communicated PGB messages are not only within the line of studies about adolescent health interventions [22,23], they also are consistent with the government documents for promoting SRH and preventing HIV/AIDS in Mozambique PGB [1,18].

However, this research discloses three of the principal PGB health messages, namely: seek to delay first sexual intercourse; avoid early pregnancy and marriage; and the use of condoms; are not in accordance with the cultural traditions of the Makhuwa and Changana. Early marriage, early pregnancy and non-use of condom are considered normal practices in the two cultures.

PGB health messages are mainly communicated in Portuguese. Makhuwa and Changana, the two main local languages spoken in Nampula and Maputo are occasionally used for SRH messaging, or when peer educators perform roles in a theatre production, or when adolescents struggle to understand Portuguese.

Peer educators and adolescents indicate their difficulties are not only related to language but also health terminologies. For example, all peer educators from Nampula stated when translating PGB health messages from Portuguese to Makhuwa each peer educator uses different health idioms to refer to the same health terminologies in Portuguese. They do this because they do not have a peer educator's handbook. Without the handbook containing health terminologies translated into Makhuwa or Changana, they must improvise.

Studies recommend the best means to deliver health messages in a health intervention should be in the receivers' native language [12,24]. Thus, the PGB does have a handbook for peer educators, but it is written in Portuguese. However, peer educators sometimes have no alternative but to use Makhuwa and Changana to deliver health messages. This, in turn, results in peer educators skipping topics when they have difficulty translating messages to the intended language.

In the PGB, interpersonal communication is the channel used by peer educators to pass on health messages to adolescents. It has long been a high-ranking topic of study in public health communication and is especially recommended for health campaigns [24,25]. Interpersonal communication refers to one-on-one as well as communication in small groups. This interaction always occurs on the personal level.

The most common type of intrapersonal communication is face-to-face interaction between two or more people [26]. In the PGB, interpersonal (face-to-face) methodology is used by peer educators to deliver health messages to adolescents. This was achieved in the four schools in the two provinces mainly in two ways – group and individual. Group messages are delivered in classrooms and schoolyards while individual counseling occurs privately following classroom or schoolyard instruction. However, this only happens when an adolescent requires further explanation of SRH issues.

Both face-to-face interactions – individual and group – are typically delivered as a two-way process. This is where both senders of messages – peer educators, and the receivers of messages – adolescents, interact with each other, sharing ideas and information [26].

The interpersonal teaching method used to deliver health messages by peer educators is advantageous and appropriate. Behaviour change is enhanced because both the source of information and the receivers of the message are physically present [27,28]. Moreover, this form of communication is considered beneficial in building strong relationships between individuals participating in the interaction as it enables both to feel closer and connected.

Additionally, face-to-face interaction enables individuals to observe the other person's body language and hear their tone of voice. Both are considered valuable cues for capturing the true meaning of the message. Both types of interpersonal methods – individual and group – are used by PGB peer educators. They are considered adequate to incorporate context and reality. This allows both the source of the messages (peer educators) and receivers (adolescents) to share ideas in a "normal" conversation [26,28].

The theatrical entertainment-education strategy used by the PGB is an orientation based on the 2003 communication strategies for delivering ASRH messages in Mozambique [18]. This is also included in the PGB peer educator's handbook (3) and in the national strategic plan for HIV and AIDS response – PEN IV [17]. Thus, the PGB strategy to use theatre to transmit health messages to adolescents seems to be wholeheartedly accepted by adolescents, the receivers of health messages.

Another method used to effectively deliver PGB health messages are oral short stories related to SRH messages. However, only four peer educators in Nampula employ this tactic even though verbal short storytelling is an especially effective method for transmitting knowledge in oral societies [29].

Most Mozambicans have one Bantu language as their mother tongue (93.5%) [30] and acquire knowledge by oral means [29]. Oral short stories are not only a good way to transmit knowledge on SRH, but also are a way to entertain young people while educative messages are conveyed to them. This is also in line with recommendations on community education addressed to young people [31].

Messages communicated by the PGB are clear and in line with Mozambican communication strategies regarding HIV and AIDS. The same is also true for the PGB peer educator's handbook and the PEN IV 2015 - 2019. However, this study demonstrates that PGB peer educators do not adhere to any sociocultural

approaches when delivering health messages to adolescents. For instance, peer educators deliver SRH information to boys and girls together without applying audience segmentation by gender. In the participants communities, boys and girls receive SRH information separately and never together [31].A sociocultural approach presents health messages in the context of the social and cultural characteristics of the target population [32-34]. Unfortunately, there is total absence of a culturally sensitive approach when peer educators deliver PGB health messages in both provinces.

A cultural sensitivity approach places emphasis on the creation of effective health messages which respond to the values and beliefs of the culture of the intended audience. Such an approach uses cultural characteristics of the target group as a guideline to develop appropriate messages [34].

Thus, it can be said PGB communication strategies do not presently contain any form of sociocultural approach. Nevertheless, the national strategic plan for HIV and AIDS response – PEN IV (2015 -2019) does recognise the need for adopting a cultural approach when promoting SRH and preventing HIV and AIDS. However, it does not indicate how the cultural approach can be inserted into current health campaigns.

This study shows that the communication strategies utilised in the PGB is not guided by a by a conceptual/theoretical framework. Instead, they rely on individual level theories, rather than recognising individuals as actors within a specific social context [35].

For instance, peer educators' responses included statements such as: "*we keep on advising adolescents not to follow the initiation rites orientations*", *"we insist with the messages"*; it can be concluded that not adopting a culturally sensitive approach is counterproductive. Ignoring participating adolescents' cultural background and only communicating by-the-book, PGB health messages will more than likely lead the programme to ineffectual outcomes.

Nonetheless, messages delivered by PGB peer educators do not present two key features for attaining effective health communication strategies. Although they do not use sociocultural and evidential approaches, they do present most of the features for creating effective communication strategies. These features are:

- accuracy – messages presented by peer educators to adolescents are valid as they address relevant sexual and reproductive health issues in the country, as well, they are clearly presented without judgement;
- availability – these health messages are available to adolescents – the beneficiaries of PGB messages – at schools whenever they need peer educators' advice. This is effective because peer educators are/were students at those same schools and are known by the student body.
- balance – despite the lack of an evidential approach, current health messages are considered appropriate enough to diminish some adolescent SRH difficulties. This is in spite of the fact peer educators are not taking culture into account; only health benefits and risks are presented;
- consistency – content of the messages remains consistent over time and they are compatible with other sources. However, there is a clear need to adjust messages to correspond with the cultures and realities of the target audiences;
- reach – messages are available to a large number of people in the target group because these statements are delivered in classrooms and schoolyards. Most school classrooms have between 70 and 80 students and most schoolyards can have 150 students or more;
- repetition – as recommended, delivery of health messages is repeated over time [36-42].

Limitations

This study presents some limitations as it did not look into what motivates some adolescents to continue in the PGB in the two provinces despite the cultural challenges identified. However, future research could fill this gap.

Another limitation is that the study's results may not be generalised to other parts of the country. However, future research could fill this gap.

Conclusion

This study showed that the PGB communication strategy in the Mozambique's provinces of Nampula and Maputo is neither guided by a clear theory nor does it have a culturally sensitive approach and evidential approaches as recommended by public health literature.

The PGB's communication strategies are based on interpersonal communication to deliver mostly preventive messages. However, these messages, however, are completely opposite from local community cultural traditions. Therefore, it is recommended to take into account sociocultural and evidential approaches, use theory, apply audience segmentation when socially sensitive topics are discussed and translate the PGB peer educator handbook into the local languages.

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