

Health Care Provider Communication Styles during an Adolescent HIV Care Training

Intervention in Kenya:

A qualitative analysis

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Abstract

Health Care Provider Communication Styles during an Adolescent HIV Care Training Intervention in Kenya: A Qualitative Analysis

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Introduction:

Adolescents living with HIV (ALHIV) have low retention in care compared to other age groups. In Kenya, ALHIV reported health care stigma and fear of judgment as major causes. Health providers similarly identified their own values and beliefs as potential barriers to effective communication with ALHIV. Better understanding of provider communication strategies and empathy expression is required for future patient centered communication training efforts.

Methods:

This qualitative study was conducted within a stepped-wedge randomized controlled trial designed to evaluate a clinical training intervention utilizing standardized patients (SPs) to improve provider skills of communication and empathy when caring for HIV positive adolescents and young adults (AYA) in Kenya. The training involved didactic sessions in adolescent care and communication skills, followed by 7 videotaped encounters with SPs portraying different ALHIV cases. This analysis focused on 48 out of 200 video sessions. Directed content analysis of the sessions and code counting were conducted to identify providers' variable communication styles and empathy expression.

Results:

Analysis revealed that early and ongoing investment in rapport building, non-judgmental behaviors, and empathy expression were critical for ensuring effective socio-emotional communication. Sensitive topics and medication-focused discussions were common barriers to achieving patient-centered communication, and lastly, ineffective non-verbal and verbal communication strategies negatively impacted information collection, information sharing, and development of shared plans of care.

Conclusion:

There is a need to address providers' communication challenges with ALHIV in order to increase linkage and retention in care. Patient-centered communication trainings should address stigmatizing statements, as well as non-verbal and verbal communication strategies, to promote high-quality, adolescent-friendly, HIV care.

Abbreviations and Acronyms

ALHIV	Adolescent Living with HIV
AIDS	Acquired Immune Deficiency Syndrome
ART	Anti-Retroviral Therapy
AYA	Adolescents and Young Adults
HCP	Health Care Provider
HIV	Human Immunodeficiency Virus
MOH	Ministry of Health
NV	Non-verbal (communication)
SPEED	Simulated Patient Encounters to Promote Early Detection and Engagement in HIV Care for Adolescents
SP	Standardized Patient
WHO	World Health Organization
AFS	Adolescent Friendly Services
LMICs	Low- and Middle-Income Countries

Introduction

Adolescent HIV care

In 2016, 2.1 million adolescents age 10-19 years were living with HIV worldwide(1), with the highest burden in low and middle income countries (LMICs)(2). Kenya comprises 5% of the global adolescent HIV prevalence, with an estimated 110,000 adolescents living with HIV(ALHIV)(3). High rates of loss to follow-up from HIV care and poor viral suppression among adolescents weakens the substantial ongoing efforts to control the epidemic.

Physical, cognitive, and emotional changes occurring during adolescence create distinctive health care needs for provision of accessible, high quality services that respect their privacy and growing autonomy. Adolescents often describe judgmental provider behaviors as a significant barrier to engaging in care(4)(5). To address these needs, the World Health Organization (WHO) has highlighted core requirements for the provision of “Adolescent Friendly Services” including having supporting policies and laws, well-equipped health facilities, health provider skills and behaviors, supportive communities, and the awareness of service availability among the adolescent population (6).The WHO also identified three domains for adolescent health care and emphasized the core competencies required for each (7).The first domain stresses knowledge of adolescent health, development, and effective communication. As governments adopt adolescent friendly guidelines, health care providers must be adequately prepared to care for adolescents.

Health communication

Health communication is defined as human interaction in the health care process. It is the process by which we inquire about, understand, and share health-related information(8). The communicated message consists of two related dimensions: content (basic information sent) and relationship (the feelings expressed when content is sent, such as empathy). Both verbal and nonverbal signals are used to convey messages (9).

Accumulating evidence has linked effective communication to better health outcomes, increased patient sharing of personal information, improved compliance, and better overall patient satisfaction(10)(11). Conversely, ineffective communication is related to incorrect diagnosis, inefficient care plans, and poor compliance, in addition to higher levels of complaints and malpractice claims(10)(11). Patient-centered communication, whereby patient perspectives are the foundation of health care decisions, is directly linked to improved health care quality (12). Moreover, culture is a fundamental part of effective communication and how providers communicate differently with patients across cultures should always be considered (8).

The intersection of health communication and adolescent HIV

Communication with adolescents about HIV is a complex task due to the specific nature of the adolescent stage, social sensitivity of sex as a topic, and the stigma and misconceptions commonly associated with HIV. Adolescence is a unique developmental stage characterized by mood swings, identity formation, peer influence, and sexual desires and initiation(9). Adolescents, their providers, and parents/caregivers are often uncomfortable and concerned about discussing these topics (13). Providers have also identified their own values and beliefs as potential barriers to effective communication. Helping providers overcome barriers to effective communication with

adolescents and training them in patient-centered approaches may improve overall health care quality and support adolescent linkage to and engagement in HIV care.

The use of standardized patients in communication training and evaluation

Standardized patients (SPs) are actors trained to depict interactive medical encounter simulations. They have been successfully used in training and assessment of communication skills of providers since the 1960s and are considered a safe substitute for real patients, offering providers an opportunity to practice a wide variety of challenging scenarios (10).

Our team is conducting a randomized controlled trial in Kenya to evaluate the use of SPs in improving communication competencies of providers providing services to ALHIV; Simulated Patient Encounters to Promote Early Detection and Engagement in HIV Care for Adolescents (SPEED). Through analysis of videotaped SPs clinical encounters, this study aims to describe and categorize Kenyan health care providers' communication strategies and empathy expression towards ALHIV during SP encounters, compare how providers' communication style and messaging changes with different case topics and levels of complexity, and identify key communication strategies used by health care providers that may positively or negatively influence adolescent retention in HIV care. Identification of effective communication strategies and non-verbal interaction behaviors can improve our understanding of training needed to support provision of adolescent friendly services and achieve improved patient outcomes.

Methods

Study design

This analysis is nested in a stepped-wedge randomized controlled trial designed to evaluate a clinical training intervention utilizing SPs to improve health provider skills of communication and empathy when caring for adolescents and young adults (AYA) living with HIV in Kenya. The training involves didactic sessions in adolescent care, communication skills, values clarification, and motivational interviewing. Lectures are followed by rotations with 7 videotaped adolescent scenarios with SPs (4). This qualitative analysis of provider-SP interactions involved a content analysis of 48 videotaped training sessions (14). Videos were an average of 15 minutes long.

Study population and sites

The parent study enrolled providers from 24 public health facilities providing HIV testing and treatment to adolescent clients in Nairobi and western Kenya. A total of 30 providers from six clinics in the first wave of the intervention were included in this analysis. The providers' population included a diverse array of clinical staff, including clinical officers, counselors, doctors and nurses. Peer counselors were not included.

SPs encounters

Professional actors were recruited and trained to portray 7 different case scenarios of adolescents living with HIV (ALHIV), covering common concerns and experiences related to engagement in HIV care such as family planning, HIV status disclosure, sexual identity, violence, and substance

abuse. The SPs were trained to reveal scripted information based on the providers attitudes and behaviors during the interviews. During encounters, providers communicated with SPs and tried to elicit the reasons of the visit and their main concerns, and develop the appropriate care plan. Providers were aware that they are being observed and that they are interacting with professional actors which probably influenced their behavior.

Sampling and sample size

During the first training, the study collected 210 videos from 30 providers (7 video-recorded case encounters per HCP). For this analysis, 12 providers were randomly selected for video review. From among all available case scenarios, four were purposively selected for review because they represented varying levels of difficulty and complexity (Table 1). The same four videos were reviewed for each of the 12 providers, for total of 48 videos. We believe that this sample size allowed us to reach saturation, with no more new themes emerging form the data.(14)

Table1. Description of SP Cases

Case number	Case description	Level of difficulty
Case 1 "Base Case"	Middle adolescent male or female Adherent to ART Sexually inactive Open to share information Agreed with most of the providers' agenda	Easy
Case 2 "Fertility Desire"	Older adolescent in a discordant relationship Adherent to ART Strong social support and a good job Wants (partner) to get pregnant	Medium
Case 3 "Disclosure"	Younger adolescent boy brought by older adolescent sister Both are living with HIV The sister does not reveal her status and is bringing the boy for care Issues of disclosure of HIV status and adherence	Difficult
Case 4 "Sexual identity"	Middle adolescent male who identifies as gay Reluctant to disclose sexual identity Issues of depression and adherence	Difficult

Conceptual framework

Adolescent friendly services were defined using the WHO quality of care framework (6)(15), emphasizing patient-centeredness as an essential component. Patient-centered communication, an essential element of patient centeredness, was defined as a process that involves: 1) identifying and acknowledging the patient perspective, 2) recognizing the patient within context, 3) achieving common understanding of patient concerns and desired outcomes, and 4) mutual participation in decision-making.

Communication frameworks of interest

Communication outcomes of interest were drawn from Roter's Interaction Analysis Systems (RIAS) (15), an analysis framework designed to identify patient-centered communication strategies. It classifies providers-patient communication into 37 mutually exclusive and exhaustive categories and is considered a flexible and practical tool that is sensitive to varying medical contexts (16)(16). Additionally, the Calgary guide, a communication skills training guide identifies 71 evidence-based patient communication process competencies (10). Those competencies fall under specific domains such as establishing rapport, exploring patients' problems, understanding patients' perspectives, building relationship, shared decision making and forward planning. Although not specifically applied in Kenya, both RIAS and the Calgary guide have been validated for use internationally (15)(17).

Communication outcomes of interest

Based on the elements of communication involved in providing patient centered care, our analysis focused specifically on providers' expression of empathy, passing judgment verbally or non-verbally, tactfulness, building rapport, verbal and non-verbal communication, identifying SPs' cues and the effective use of open and close-ended questions. Empathy was listed as one of the critical communication skills for the physician. Defined as the ability to fully understand the other person's condition and feelings and communicate that understanding to the person, it is expressed by stating and acknowledging the patients feeling during the interaction and it is considered a substantial part of the relationship(8). Tactfulness refers to being polite or considerate when asking or providing sensitive/embarrassing information. Building rapport was defined to include both providers attempt to initiate a relationship and the continuation of that through socio-emotional talk such as offering support, complementing and praising SP when appropriate. Cues were defined as hints that are expressed verbally or non-verbally to express emotional discomfort or concerns(18).

Data analysis

Directed content analysis (19)(16) and code counting were used to identify key elements of communication (both verbal and non-verbal) used by providers during SP encounters. Codes were developed deductively based on the key communication concepts outlined in the RIAS and the Calgary guide. Additional codes were developed inductively based on the parent study objectives and key attributes of communication present in these specific SP encounters that were not yet captured by existing codes. Definitions for each code were created to ensure consistent application of codes across transcripts. A final version of the codebook was developed through an iterative process of testing and refining codes while reviewing video segments to ensure all key elements of communication were captured.

The final codebook was applied by 2 coders to all HCP videos. Videos were coded directly, using ATLAS.ti version 8 software, without transcribing the verbal component to capture both verbal and nonverbal elements of the interaction. Within ATLAS, video files were played with different speeds, and segments of interest were selected as quotations. During the first phase of analysis, two coders (MA and SL) independently reviewed and coded videos. During the second phase of analysis, coders reviewed each other's application of codes and noted disagreements with code

application. Eighty five percent of videos, including all difficult and medium-difficulty scenarios, were reviewed by a secondary coder. Following review, disagreements in code application were resolved through group discussion between coders and the larger study team. Analysis focused on describing verbal and nonverbal behaviors of providers during each interaction and linking them to patient-centered versus disease/provider-centered approaches. To assess the different occurrence of communication attributes we used code counting. First, we clearly identified negative and positive communication codes that belong to the same communication domain. We next used code co-occurrence tables in Atlas.ti to compare the frequency of each code within specific cases and across different case scenarios. Analysis also identified challenging points of communication for each provider individually, as well as across providers.

Ethical approval

The SPEED study was approved by the Institutional Review Board (IRB) at the University of Washington Human Subjects Research Committee (51926 E/J) and University of Nairobi/Kenyatta National Hospital Ethics Review Committee (KNH ERC) (P476/06/2016). Participants provided written informed consent and all SPs signed a confidentiality agreement.

Results

Provider characteristics

Overall, a total of 12 providers and 48 videos were included in this analysis. The majority of providers were female (64%), with an average age of 32 years. Providers represented a range of cadres, including clinical officers (58%), counselors (25%), and nurses (16%).

Frequency of communication strategies

While negative non-verbal (NV) communication occurred infrequently (14%), more than half (56%) of providers missed SPs’ non-verbal cues such as visible expressions of depression or discomfort (Figure 1). Providers fully introduced themselves 62% of the time. Those who didn’t fully introduce themselves most often failed to mention their role.

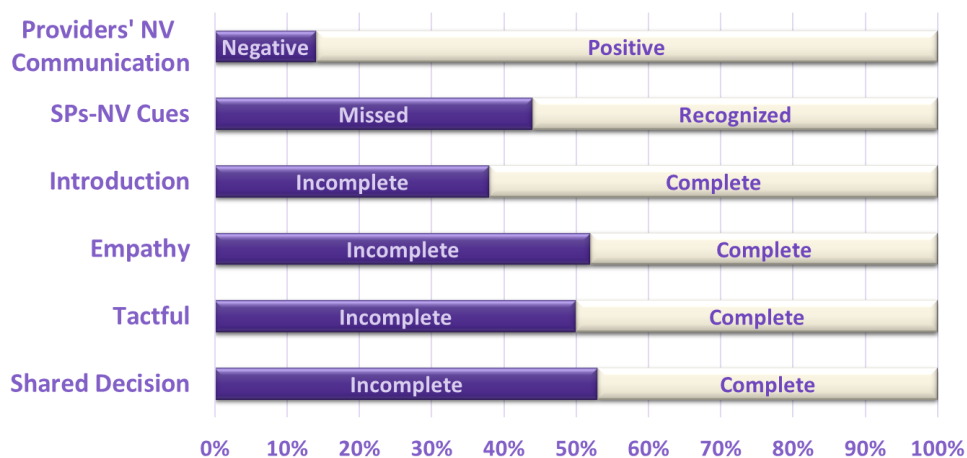


Figure 1. Frequency of communication strategies

Providers did not demonstrate empathy 52% of the times and were tactful when addressing sensitive topics in only 50% of the time. Moreover, shared decision-making was completed in a little over half of the cases (53%). Providers' communication strategies also varied across case scenario. We found that interaction with the medium difficulty case (fertility desire) had the highest proportion of encouragement, supportive behavior, social chat and shared decision making. In contrast, within the difficult disclosure case, providers used verification of information the most. On the other hand, providers failed to express empathy while interacting with difficult cases (47% in the disclosure case and 30% in the sexual identity case) and sent negative non-verbal communication messages most frequently during the sexual identity case. Providers also missed and/or ignored caregivers' cues and failed to reach a mutual decision mostly with issues of disclosure. Additionally, providers made judgmental statements in nearly half (47%) of the encounters.

Qualitative Themes

Analysis of SP encounters elucidated three major themes related to patient-centered communication domains. First, we found that early and ongoing investment in rapport building, non-judgmental behaviors, and empathy expression were critical for ensuring effective socio-emotional communication. Second, sensitive topics and medication-focused discussions were the most common barriers to achieving patient-centered communication. Lastly, our analysis identified that ineffective non-verbal and verbal communication strategies negatively impacted information collection, information sharing, and development of shared plans of care.

Early and ongoing investment in rapport building, non-judgmental behaviors, and empathy expression were critical in insuring effective socio-emotional communication

Building rapport

Few providers had welcoming, free-flowing conversations with SPs. Those who did, generously used complements and encouraging phrases, and displayed relaxed behaviors, such as laughing, demonstrating that they were at ease connecting with SPs. While all providers used social chat to build rapport, most questions eventually linked back to medication adherence. All providers asked about the SP name early on, and a few called SPs by their names during the encounters. Many providers asked about adherence immediately following greeting the SP, and when learning of non-adherence, initiated counselling immediately. SPs confronted with early adherence counseling became defensive, limiting the information they were willing to ultimately share with the HCP.

While many Providers addressed SPs respectfully, one provider used otherization statements many times during the encounter. Provider: *“that’s why we normally tell you people to take your medication.”*

Almost all providers inquired about the SP social network in order to identify adherence challenges and learn more about the types and amount of support they are getting. However, providers sometimes focused on parents or family members only, missing other possible networks. Other times, questions about social support were significantly delayed which negatively impacted proper counselling and individualized care plans development.

Verbal and non-verbal judgment

Judgment was observed as a full spectrum of responses, from minimal nonverbal surprised expressions to frank confrontational statements. The majority demonstrated judgement in a mild to intermediate way and a minority as intense reactions. Judgment was often manifested in reaction to perceived SP behaviors.

Non-adherence or refusal of referral for more services generated one provider's response of, "*So you just want to be coming and going?*"

Interacting with the gay-identified youth was particularly difficult for some providers. One provider asked, "*Is being HIV positive [what] motivated you to be a gay?*"

In another interaction, the provider tried to encourage disclosure, but continued to emphasize heterosexuality as the desired norm.

Provider: "*Why don't you perform well in school?*"

SP: "*Because I am worried about what my mom will do if she gets to know that I am gay*"

Provider: "*Aha, Okay, so you feel worried? So how do you feel is it the right thing or the wrong thing? Because now you feel you are worried and your mother will react about you being a gay. Now don't you think it's a wrong thing to do?*"

SP: "*No it's not*"

Provider: "*It's not the wrong thing to do? Again, if you think you are okay and you feel it's not a wrong thing to do, I think you can even disclose to her. Can you disclose to her that you are gay?*" (smiling)

SP: "*I don't know how she is going to react*"

Provider: "*So, you are planning to tell her as so?*"

SP: "*I don't know what I am supposed to do*"

Provider: "*I believe you can change to a heterosexual relationship*"

Another provider calmly asked a gay SP, "*Would you mind stopping that and finding a girlfriend instead of your fellow man?*"

At times, providers showed a delayed or latent judgmental response, where they expressed support and were non-judgmental as their first reaction to SP judgement-provoking attributes but later gave judgmental comments while counselling the SP about the same topic. For example, although one HCP was nonjudgmental and supportive when the SP first disclosed his sexual orientation, he asked him later if he has the will power to get out of it. Then he told him that we need to pay for the consequences of our actions. Additionally, some providers who initially expressed judgment, adopted a more positive attitude later on during the same encounter.

When asking about sexuality, one HCP asked the question "*do you have a girl friend or a boyfriend as well? and here I mean someone you are intimate with*" she asked with a wide smile and when he replied "yes, I have a boyfriend" her facial expression changed to a frowned face. While not verbally judgmental, her non-verbal communication manifested judgment. Yet, she recovered and showed empathy and support later.

Sexual orientation was not the only difficult topic for providers. There were several who struggled with HIV prevention with positives, attributing blaming statements to the SP. Discussing the intention to conceive in a discordant relationship, one provider asked, *“Aren’t you worried that she will get infected?”*

While most providers demonstrated some form of judgment, a few adopted strongly supportive and accepting attitudes toward SPs in response to common judgment provoking statements. For example, when the SP disclosed his sexual identity as being gay to one of the providers, she still encouraged him and showed understanding, maintaining eye contact during her response.

“First I would like to applaud you and congratulate you that you were able to share this thing with me today, I know you have been holding it back for a long time and I can tell that it was eating you up and you fear what if your mom comes to know about it”

The provider also followed up later on, offering to contact his mother and help him disclose to her.

Empathy expression

While Providers were mostly welcoming and kind to the SPs, they had challenges in acknowledging SP emotions, showing understanding towards the SP’s feelings, or expressing their own feelings. Only a couple of providers explicitly asked about the patient feelings regarding their HIV status and medication.

Some providers used suggestive questions to inquire about feelings, asking SPs how they feel by saying “so you’re good now?” without really giving SP chance to voice how they are feeling and blocking further feeling expression. Failure to demonstrate empathy was particularly noticeable in certain occasions; when providers inquired about how the SP first came to know their HIV status, the answer was usually filled with difficult emotions and little or no empathy was shown. One provider inquired about stigma, *“Do you feel stigmatized because of the HIV?”* and even when the SP admitted that he is struggling with it, the provider did not acknowledge the response and moved to the next question.

An exception was one provider who expressed empathy by acknowledging how difficult it was when the SP first learned about his status and then inquired about his current emotional status.

“You ran away, it really made you feel bad about it, but have you been able to cope with the situation lately?”

Sensitive topics and medication-focused discussions were the most common barriers to achieving patient-centered communication

Conversations around mental health and sexuality proved exceptionally difficult for providers, often resulting in awkward discussions or failing to engage in discussion when signs of distress or new information was provided.

In trying to address mental health issues, some providers asked if the SP is feeling low or depressed, while only a few explored the SPs’ hobbies and joyful activities and whether that had changed, and a small group started by bluntly asking if the patient had suicidal ideation. It

appeared difficult for many providers to counsel and develop a shared plan with SPs who were depressed.

Inquiring about sex and sexuality appeared to be one of the more challenging topics providers addressed during encounters. Many providers only inquired about opposite sex partner in the format of boyfriend/ girlfriend and did not use gender-neutral terms. Additionally, the question about having a boyfriend or girlfriend was mostly the sole indicator of sexual activity, and providers did not assess sexual activity outside of a relationship. Several providers asked the SP "*Are you in any relationship?*" but did not explain what kind of relationship they meant.

The majority of providers were polite when inquiring about sensitive topics such as sex, sexuality, or symptoms of sexually transmitted infections. Many prepared the SP to expect sensitive topic discussion while others asked sensitive questions and apologized or confirmed the sensitive nature of the question afterwards.

A small number of providers appeared very embarrassed to ask sensitive questions. One provider pointed to the genital area of SPs while smiling saying "there" to avoid explicit naming, which was confusing and uncomfortable to SPs. Another provider identified that the SP has a boyfriend, asked "*what do you two do together,*" and suggested many activities except sexual activities, therefore missing that the SP was gay.

Providers tended to stay focused on discussions of medication, where many of them spent a considerable amount of time inquiring or counselling about ARVs; this oftentimes was at the expense of discussing other important related topics. One provider spent most of the encounter asking questions and counselling about the medications but never asked why the SP was not taking them and failing to uncover the SP's history of depression.

Ineffective non-verbal and verbal communication strategies negatively impacted information collection, information sharing and development of shared plan of care

Non-verbal communication

Most providers generally demonstrated positive non-verbal communication behaviors, frequently making eye contact and using appropriate body posture and voice tone, however some expressed judgment nonverbally. One provider was continuously smiling during the encounter, which was often inappropriate in relation to topics discussed. She asked the caregiver about her HIV status while playing with her hair, then laughed when the caregiver told her she is not taking her drugs.

Although some providers recognized SPs' nonverbal cues, a considerable number missed them, mostly due to lack of eye contact with the SPs while replying to important questions. Providers responded in two ways to SP cues, either respecting and addressing them, or completely ignoring them. In the disclosure case, while negotiating disclosure with a caregiver, providers appeared to be ignoring the caregivers' cues and nonverbal messages of concern and discomfort.

Verbal communication skills

Several important observations came up related to verbal communication strategies and the way questions were asked. Many providers frequently asked suggestive questions where socially

desirable answers were implied such as, “*you have consistently used condoms with your girlfriend?*” and “*you have never missed your medications?*” When one SP responded that he drinks alcohol, the provider asked: “*But you don’t get drunk? you don’t forget yourself?*”

In addition, many providers extensively used closed-ended questions, and a few misused open-ended ones. A few providers asked their question using the format “*tell me what you know about*” but still followed with a closed ended question, not giving the SPs the opportunity to openly respond. One provider often asked open-ended questions and verbally encouraged the SPs to use their own words, but he framed the questions as “*tell me your story about (almost everything)*” which was impractical. He also used long introductory sentences before asking questions; as a result, he never had enough time to finish the interviews.

Moreover, a few providers presented poorly framed questions, which were confusing. The framing issue was more noticeable around sensitive topics like condom use or sexual activity. One provider asked about condom use using a scale question that was not explained well, and followed that question up with “*You always use condoms?*” A few providers asked positivity biased questions, such as “*How did the support group help you?*”

Providers’ impatience was another important finding, where many failed to adequately wait for the patient to respond to their questions. Others did not provide sufficient encouragement, with the extreme form of rapid “machine gun” questioning emerging occasionally. For example, one provider commented, “*You are not smiling, you are not even talking aloud. Why aren’t you smiling? Is there something you can tell me may be about you not smiling and not talking well? Do you have a challenge?*”

Inattentive listening often expressed itself in relation to name, where it was rarely used, age, where it was repeatedly inquired about, some information volunteered by the SP and even SP’s responses to specific important questions such as HIV status. For example, after a long discussion with a SP who has a male partner the provider said, “*next time please come with he or she!*”

Counseling skills

The most frequent counselling patterns were counselling monologues when providers started and carried on with a one-way conversation without adequately checking the patient views or understanding. Redundant counselling on one topic at the expense of addressing other important issues or inadequate counselling on important issues were also observed. A minority of providers provided a short summary of the agreed-on plan. Only a few asked explicitly after giving chunks of information: “*Do you understand?*”, “*Do you have any questions?*” or “*is this clear?*” Yet, a notable observation was that SPs were often not given enough space, time or sufficiently encouraged to reply.

Assumption-based counselling also emerged, where many providers used readymade counselling templates without investing in exploring the patient perspectives, thoughts, and feelings about the issue. It was commonly seen that a non-adherent patient was told about the significance of setting alarms or the substantial importance of ARVs in prolonging life, assuming that they lack the knowledge, while in fact the cause of non-adherent was clinical depression.

While one SP was deeply concerned about the reaction of his mother about his sexual orientation, the provider made a lot of statements about a mother's love, though he didn't have enough background on the SP's home life to make these statements with certainty.

Shared decision-making

Concerning shared decision-making, finding common ground, and tackling conflicting agendas, providers tried to reach a shared plan about the timing of next visit, the best time to take drugs, and referral for other services, in addition to disclosure. While many providers tried to reach mutual agreement about the timing of the next visit, only some explicitly asked about the feasibility of the suggested time with regard to SPs' school schedule. Only a couple openly discussed the challenges of acquiring transportation fees and any other potential barriers. One provider consistently suggested 3-month next visits regardless of the case urgency. Others suggested partner testing or joining in clinic visits, which was not followed by a feasibility check with the SP.

At times, providers dealt with discrepancies in perspectives and/or agendas, by expressing judgment and suggesting treatment plans in an authoritative way, such as "I would like you to stop taking alcohol." These comments were not followed with offers for support or referral. Referrals for identified problems also posed a challenge. One provider disregarded the patient's main complaint, concern about revealing his sexual identity to his mother and depression, yet the provider instead emphasized that the problem is his poor adherence to medication. A few providers attempted to avoid discussing difficult topics, and suggested referral to other different services without offering a reason, which hampered the development of a shared plan. One provider decided to refer the SP despite the caregivers' reluctance, stating "*kindly please my dear it will only take a few minutes*", however there was less evidence of empowering SP's decision-making capacity with provision of important information in addition to being kind.

Discussion

This qualitative analysis investigated and described communication styles of providers caring for ALHIV in Kenya who were participating in a training program. The results of this study elucidate common barriers and facilitators to effective patient-centered communication with ALHIV. Effective rapport building, non-judgmental behaviors, and empathy articulation were critical facilitators while sensitive topics and medication-focused discussions were identified as common challenges. The study shed light on verbal and non-verbal communication styles and reflected on counselling practices, revealing when and how mutual participation in decision-making is observed.

The intent of this analysis is to identify specific behaviors and techniques for improvement and opportunities for remediation, rather than blaming or stigmatizing providers for actions or behaviors, or considering them as inherently rude or mean. Providing care for adolescents, communicating effectively, and recognizing and minimizing one's own biases are all incredibly difficult. However, with practice, skills like active listening and empathy expression can be learned(20–22), and providers can improve.

In the context of HIV, empathy expression is associated with improved medication self-efficacy(23). Similar to other studies conducted in LMICs, judgmental behaviors and lack of empathy expression from providers are identified as communication obstacles. Although we recognized a moderate level of lack of empathy expression among study participants, general avoidance of exploring emotions and responding to them may be related to culture, discomfort, and /or other contextual factors, such as the lack of available resources and system support.

Latent or delayed judgment expression, and alternating attitudes between judgment and other positive communication behaviors, may reflect the deeply seated biases and an inner struggle or intent by the provider to not cause harm. The values clarification exercise and peer feedback during group debriefing was found by the team to be particularly useful in addressing these biases, while avoiding narratives of shame and blame. However, it is challenging to overcome bias, and ongoing practice, workshops, or training are likely necessary.

A considerable emphasis on non-verbal communication components of patient-centered communication is found in the literature(10,24,25). While this study recognized providers' non-verbal communication as a strength, more consistency, especially with eye contact during conversations could further improve provider's non-verbal communication. Providers also need training to equally expect both verbal or non-verbal responses from adolescents. Identifying and addressing patient cues is an important skill(10). Although, we noticed that providers were generally able to identify the cues, they sometimes disregarded them, which translated to a significant communication block. Actively looking for patient cues and carefully addressing them (26) should be covered in provider training.

Finally, improvements in provider communication likely cannot be tackled in isolation or by training alone. Studies in diverse settings have consistently linked the health care environment and excessive work load to poor provider-patient communication(26). In addition to provider training, continuous efforts to improve overall adolescent-friendly domains, such as adolescent friendly spaces(27), sufficient staffing(28), and tailored visit schedules, could contribute to a larger positive impact on communication with ALHIV.

This study has strengths and limitations. Qualitative analysis of video-data can help identify training needs. Furthermore, the training approach used in the larger study included personal goalsetting, rehearsing challenging scenarios, and self-reflective practices (29,30), and specifically addressed key communication challenges in an innovative way. However, the participants in the training represent a small proportion of providers working with ALHIV in Kenya. Providers and SPs also communicated in English, therefore we were not able to assess potential impact of different language use on their communication. The observed encounters were preceded by a didactic training; therefore, the study participants were more prepared compared to their peers in real-world settings. The use of one camera in a fixed position limited our ability to capture all communication expressions. Moreover, providers were aware that they were being video-taped, which likely elicited a Hawthorne effect with resultant change of behavior. However, even this "best behavior" elicited major challenges in communication with ALHIV.

Conclusions

Accumulating evidence demonstrates that being an efficient communicator is a skill that can be learned and practiced; and that ongoing support of providers on patient-centered communication is needed. In addition to adolescent friendly efforts, future provider training may benefit from exploration of judgmental statements, more integration of non-verbal communication skills, and support and practice for providers in feeling more comfortable discussion sensitive topics.

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