People Living with HIV as Instructors for Medical Students: A Pilot Study in HIV Counseling and Testing

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Abstract: Many gaps exist in HIV medical education. In response, medical students initiated a study involving people living with HIV as Patient Instructors for medical students in an HIV counseling and testing simulated clinical encounter. Four medical students, four clinical preceptors and five Patient Instructors participated in a series of simulated clinical encounters. Students performed pre-test counseling, point-of-care HIV testing and delivered test results with post-test counseling to Patient Instructors under preceptor supervision. Preceptors and Patient Instructors provided feedback to students. Focus groups were conducted to evaluate this initiative. Patient Instructors found they could meaningfully contribute to medical education, felt safe, and relived past experiences in a more positive way. Students valued individual feedback. Both groups found the experience a realistic and worthwhile learning exercise that enhanced skills beyond HIV medicine. With considerations to minimize vulnerability, Patient Instructors can be valuable learning resources, benefiting both learners and instructors.

Keywords: Medical education, community-based participatory research, HIV counseling, patient instructors, simulated clinical encounters.

INTRODUCTION

Despite the growing complexity of HIV care and increasing need for HIV-trained physicians, training in HIV care is often inadequate [1-4]. Studies of medical students [5], residents [6, 7], and practicing physicians [8, 9] have found that many healthcare professionals are not able to provide effective HIV counseling and improved training is needed [10-14].

Innovative models in medical education have the potential to enhance competencies in HIV care and the management of other sexually transmitted infections [4]. Evidence suggests that interactive and workshop-based models are more likely to improve education and clinical outcomes compared to didactic teaching [15, 16] and are more effective for improving medical students' performance in sexual history inquiry and obtaining consent for HIV/sexually transmitted infection testing [17].

A Patient Instructor model involves patients as active participants in healthcare professional training. As active participants, Patient Instructors move away from their role as patients receiving direct medical care and move into the role of educator based on their lived experience and knowledge of their disease. Studies have found benefit of this model for learners [18-24] and the teacher role improves quality of life, strengthens relationships with physicians and provides a sense of empowerment for Patient Instructors [25, 26].

Following the declaration of the Greater Involvement of People with HIV/AIDS Principles, people living with HIV (PHAs) have had a growing role as partners in HIV research, policy and programming [27, 28]. Although limited in numbers, studies have found that involving PHAs as facilitators of small group tutorials for medical students had a positive impact on their teaching skills, self-awareness, and personal understanding of HIV [29, 30].

Medical students, medical educators, PHAs and community organizations collaboratively developed and piloted a student-initiated simulated clinical encounter (SCE). This encounter involves PHAs as Patient Instructors for undergraduate Canadian medical students performing HIV-counseling and point-of-care testing.

METHODS

Experiential learning theory was the guiding conceptual framework used in this research. This theory is based on the premise that learning occurs and meaning is formed through direct experience and reflection upon this experience [31-33]. This study aimed to construct experiences that were realistic and interactive from which participants could derive meaning.

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Study Populations

Five PHAs were recruited from the Speaker's Bureau program of the Toronto People With AIDS Foundation and trained as Patient Instructors. They had extensive experience speaking in public about living with HIV and represented a group unlikely to be harmed by study participation. Four Clinical Preceptors trained in HIV care were recruited from a pool of residents and physicians affiliated with the University of Toronto. The Clinical Preceptors had previous experience teaching medical students and clinical experience providing primary or specialist care for people living with HIV. Four third-year Medical Students who had completed an extra-curricular elective in HIV care were recruited [34]. To further ensure the safety of the people living with HIV during their involvement, a trained HIV counselor independent of the study was available for support. This study was reviewed and approved by the Research Ethics Board of the University of Toronto.

Study Intervention: An Interactive Training Workshop

Patient Instructors received training including a description and demonstration of the SCE and a session on supportive feedback facilitated through the University of Toronto Standardized Patient Program. Clinical Preceptors were briefed on the SCE process and the HIV point-of-care test kit.

Medical Students participated in two SCEs supervised by one Clinical Preceptor with a different Patient Instructor for each SCE. In the first SCE, the Medical Student was introduced to the Patient Instructor who wished to be tested for HIV. The student provided pre-test counseling, performed a point-of-care HIV test and delivered the result of the positive HIV test with post-test counseling. The Patient Instructor answered questions about HIV risk, medical history and social history, referencing their actual personal experiences. In the second SCE the Medical Student was instructed to skip the point-of-care HIV test and deliver a negative HIV test result. Following each SCE, the Medical Student received feedback from the Patient Instructor and Clinical Preceptor.

Data Collection and Analysis

Following the SCEs, two focus groups were conducted - one included the Patient Instructors and the other included the Medical Students. Focus groups were audio-taped and transcribed verbatim. Data were coded manually. Two members of the research team (medical students) identified codes independently and iteratively. Codes were compared, consensus was achieved and codes were grouped into emerging themes. A third researcher (medical education researcher) read the transcripts and agreed with the analysis.

RESULTS

Thematic Analysis of the Patient Instructor Focus Group

Analysis of the focus group of Patient Instructors revealed three overarching themes: 1) meaningful contribution to medical education, 2) a SCE as a safe environment, and 3) reliving past experiences.

Meaningful Contribution to Medical Education

Patient Instructors found this SCE to be a way in which people living with HIV could meaningfully contribute to medical education. A meaningful contribution involved using past personal experiences and knowledge to teach medical students about HIV-related issues. This is in contrast to tokenism, where people living with HIV are invited to participate without recognizing their expertise and potential contributions, such as their ability to educate others and influence policy. The Patient Instructors felt empowered, seeing themselves as agents of change.

> I also found it very empowering 'cause to think that we're actually shaping the future for people that are going to come in after us – that they're gonna' walk in and get the test and come back positive. And how maybe somethin' we've said or we've done can change so that doesn't become a negative experience for those people.

They also felt respected as teachers for their knowledge and lived experiences, and valued as experts in HIV.

> I felt very respected too…in the fact that I was knowledgeable. And though, yeah you are a medical student and you know more about things medical than I do but I was valued. My opinion, what I thought I knew, my knowledge… And I felt very appreciated. And I also know others in our community, if they knew that they would go wild. Like, "Wow, someone is actually listening to us. Valuing our opinions."

SCEs as a Safe Environment

Patient Instructors felt that the SCE was a safe environment with the appropriate supports. A safe environment is one where participants felt free from discrimination and felt that adequate emotional and psychological support was available. They found that living with HIV for many years, as opposed to having been recently diagnosed, helped them to participate without feeling vulnerable. The presence of several other PHA-Patient Instructors created a network of support. They were reassured by the presence of a trained HIV counselor from a partnering clinic who was not participating in the SCE, but was present to offer support if needed. Meeting the research team prior to the SCE gave comfort to the Patient Instructors.

Reliving Past Experiences

Participants found that although they were prepared for the SCE, which was a constructed environment, the simulation nonetheless triggered a feeling of reliving their initial experience of HIV counseling, testing and diagnosis. They experienced similar emotions to their first testing experience. Some reactions included dissociation and hope for a negative test result.

> I found it surprising to me that I went back having the same feelings…that when she says that it came back reactive….that I glazed over…I didn't absorb anything after that. Exactly the same way 17 years ago that I did when I got my results. But it was interesting to see that, that still…it was the same. It was still the same reaction…and that I don't know if part of me was just hoping it would come back negative.

Several participants found the process of reliving past experiences of HIV diagnosis through a SCE to be therapeutic. They were reassured that medical students were taking initiative to improve their skills at HIV counseling and testing and also found this to be much more positive than their initial experience.

> So it's maybe been healing in that way, in the fact that in that the first time I got the results it wasn't exactly in a good way of getting it. And this time, this was how it should have been done the first time, which was really nice actually. So it made me feel much more comfortable...it feels like I took what was originally a really negative experience and it's now made it a more, pardon the pun, but a positive experience.

Thematic Analysis of the Medical Student Focus Group

Themes that emerged from the focus group of Medical Students included the value of the one-on-one environment of the SCE and individualized feedback. They found that feedback was particularly meaningful coming from individuals with lived experience with HIV.

> When a real patient says I would come back to you, you did a good job, that is the most meaningful feedback you can get.

Themes Common to the Focus Groups of Patient Instructors and Medical Students

Several themes that emerged common to both focus groups were: 1) the SCE as a realistic experience, 2) the development of skills extending beyond HIV medicine, and 3) general enthusiasm for the SCE.

The SCE as a Realistic Experience

Patient Instructors felt the experience was very realistic for them and for the Medical Students. Similarly, Medical Students compared this SCE to some of the other similar experiences they had received in their formal curriculum and found it to be more realistic.

> Yeah it somehow felt like a more representative interview than some of the other stuff we do.

The Development of Skills Extending Beyond HIV Medicine

Patient Instructors felt the SCE could help students in the delivery of bad news extending beyond the context of HIV and could help them to reflect on this process.

> Not just that but delivering anything else...being cancer or anything else… because it'll also be pretty traumatic for them. So it's also coping mechanisms for them. Like, "How do we do this? How do we give bad news to someone?"

Likewise, Medical Student participants felt the SCE helped them to develop competencies that could extend beyond HIV medicine, such as breaking bad

news. They also found it helped them with communication and interviewing skills, including asking sensitive questions.

General Enthusiasm for the SCE

The Patient Instructors were very supportive of this initiative and offered their commitment to future similar endeavours. They also noted that they had discussed the concept of this interactive teaching approach with other PHAs and found that there was great interest within the community to participate in a similar educational exercise for training healthcare professionals. One Patient Instructor expressed particularly great enthusiasm for this SCE:

> This was very important to be done…So thank you for doing this… Cause we know the value of this. We see the value of this.

Similarly, the Medical Students found this experience to be valuable and expressed interest in having this experience as part of the formal medical school curriculum. One Medical Student participant described the desire to have had this experience earlier in the course of medical school.

> …in my mind the first thing that pops up is why didn't I get a chance to do this sooner? … So we have had two years of training and this is the first time that we are actively engaging in a patient interview with an HIV-positive person.

Feasibility

The SCE was held on one afternoon in University of Toronto medical education facilities where four SCE occurred simultaneously. The SCE lasted for approximately 2.5 hours. Medical Students participated in a three-hour HIV counseling and point-of-care testing workshop prior to this study. Patient Instructors participated in a two-hour training session prior to the SCE, but also received training through the Speaker's Bureau program of the Toronto People With AIDS Foundation outside of this study. The total time commitments were 5.5 hours for Medical Students, 4.5 hours for Patient Instructors and 2.5-4.5 hours for Clinical Preceptors. No logistical challenges or feasibility concerns were identified in the pilot project of the SCE, however a larger scale intervention of several hundred medical students would require administrative support and significant faculty engagement.

DISCUSSION

Based on the findings of this pilot study, the SCE is an acceptable and well-received intervention to train medical students in HIV counseling and testing.

One limitation is the study population bias. This bias was acknowledged prior to the execution of the study, but was necessary to minimize vulnerability of the Patient Instructors in a pilot project. Medical Student participants were recruited based on an identified interest in HIV medicine. Their performance in HIV counseling and testing may be superior to medical students without a specific HIV interest and SCE acceptability may vary with a broader group of medical students.

A second limitation of the study was the inability to measure behavioural change or Medical Student performance in HIV counseling and testing. Future studies, with larger sample sizes, could look at long term effects on Medical Student practice and on the psychological impact on Patient Instructors [35].

Many Patient Instructors found that participation in the SCE led them to relive past experiences of when they were initially diagnosed with HIV. As this can be an upsetting experience for some participants, it is important to discuss this phenomenon in pre-SCE training so that participants are prepared for possible emotions that they will experience during the SCE. Post-SCE debriefing with other Patient Instructors is also important as they can provide support to each other. Availability of a study team member or counselor for one-on-one support, if needed, can also help to minimize vulnerability of participants.

One study strength was that it was guided by community-based research principles. PHAs and community organizations were engaged as stakeholders and share ownership of the project. As a student-run initiative, this study was able to supplement the formal medical education curriculum by directly responding to educational needs of medical students using learning strategies that are valued by medical students.

The SCE enabled PHAs to contribute to medical education by providing a unique perspective based on their lived experiences with HIV. With appropriate measures taken to minimize vulnerability, PHAs can be valuable medical educators and their role in SCEs warrants further exploration.

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