Development and Evaluation of an Interprofessional Educational Programme on Rehabilitation of Clients with HIV/AIDS for Students in the Health Sciences Professions

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Patty Solomon PhD, PT
Associate Professor
School of Rehabilitation Science
McMaster University

Penny Salvatori MHSc, OT
Associate Professor
School of Rehabilitation Science
McMaster University

Dale Guenter, MD, MPH
Assistant Professor
Department of Family Medicine
McMaster University

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Executive Summary
This report describes an innovative educational program for health professional students entitled ARehabilitation Issues in HIV≅. The program was unique in that it was interprofessional, problem-based and used a co-facilitator model in which a faculty tutor was paired with a resource tutor who was a person with HIV (PWHA, resource tutor). Two tutorial groups of five students participated in a two hour weekly tutorial for eight weeks. Five professional groups were represented including senior level occupational therapy, physiotherapy, nursing, medicine and social work students.

As a component of the evaluation of the project students were required to keep a weekly journal reflecting on their learning experience. All students, tutors and resource tutors participated in a semi-structured interview at the completion of the project. Students also rated their personal learning on a 7 point Likert scale with 1 indicating Athere was no new learning related to the objective≅ and 7 indicating Athere was extensive learning related to this objective≅.

Nine of ten students completed all components of the project. The students= mean scores of their perceptions of their learning were high ranging from a low of 5.87 out of 7 for understanding how models of rehabilitation could be applied to the management of HIV to a high of 7 out of 7 for developing an appreciation of the psychological, social, political and ethical issues that influence a PWHA.

The qualitative analysis revealed that students highly valued the role and input of the PWHA or the resource tutor. The resource tutor was able to challenge, and bring life and reality to the scenarios the students were studying and encourage reflection to a degree that would not likely occur in a more traditional course or in a problem-based course that did not use a resource tutor. The presence of the resource tutor also challenged the students to address their own assumptions and values. One challenge of including a resource tutor in the educational process was related to the students= worries about offending the resource tutor with their comments or inappropriate use of terminology.

Analysis of the interview and transcripts found that students perceived they gained knowledge in several areas as a result of their participation in the project. These included facts related to HIV/AIDS such as natural history of the disease, pathology and signs and symptoms. In addition students felt they gained insight into the many complex social and ethical issues surrounding HIV/AIDS, and the importance of rehabilitation.

Students also perceived that the inter-professional format of the course was positive. They felt that they were able to learn and achieve more by working together. Another perceived benefit to the course was a sense of confidence that developed related to their specific role in caring for PWHAs. Overall, although the course was above the ususal course requirements, students valued and enjoyed their learning experience.

Education related to rehabilitation and HIV appears to be ideally suited to interprofessional, problem-based learning models. The participation of a PWHA in the tutorial process is a highly

valued and successful component of the model, but requires confidence and skill development on the part of the resource tutor in order to be effective. Logistical challenges of organizing interdisciplinary tutorials can be substantial. Due to the impact on student learning, there is need for further evaluation of the most effective ways to train and utilize PWHAs to be involved in educating health professionals.

Introduction/Rationale

The face of the HIV epidemic has changed dramatically in the past five years, and with it, the issues for people living with HIV (PWHAs) have also changed. Due primarily to the introduction of combination antiretroviral medication around 1996, significant reductions in morbidity and mortality are being achieved for the first time since the epidemic began (Hetch et al, 1999; Sexton et al, 1998; Reyes et al, 1999). The demand for palliative services has diminished, while routine disease monitoring, rehabilitation and back-to-work issues have become more important. New demands have been placed on the health care system, social services and income supplementation programs while people living with HIV have sought ways to maintain quality of life and participate in meaningful and productive activities.

Another consequence has been the proliferation of a variety of impairments and disabilities which are amenable to rehabilitation efforts (Nixon & Cott, 2000). This relatively recent shift in the natural history of HIV /AIDS has resulted in a lack of appreciation of the role of rehabilitation in the management of HIV related disability. Education on theoretical and practical approaches to rehabilitation for persons with HIV/AIDS in professional education programmes is lacking (Cross et al, 2000). While many educational programmes on HIV/AIDS have been described in the literature these have focussed primarily on evaluation of the change of knowledge and attitudes pre and post educational intervention (e.g. Johnson & Sim, 1998). Little attention has been paid to the development of interprofessional educational programmes related to rehabilitation of persons living with HIV. This is in spite of the fact that it is generally recognized that coordinated team approaches are most effective in the management of chronic disability (Byrnes, 1991).

The call for increased emphasis on interprofessional education has been widespread. In 1988, the World Health Organization (WHO) discussed the importance of interprofessional education and collaborative practice within new health care environments to provide promotive, preventative, curative, rehabilitative and other health related services. Gilbert et al. (2000) have argued that Aincreasing emphasis on the delivery of integrated, interdisciplinary, client-centred health care services in Canada demands that health professionals have a sound knowledge of the services provided by their colleagues as well as the knowledge and skills to work effectively with them in teams≅ (p.3). There is some evidence indicating that patient health outcomes are superior when delivered by health care teams, though this is minimal (Richardson et al, 1999). Evidence regarding interprofessional education focusing on HIV/AIDs is also lacking and what is available does not appear to promote understanding of other health professional roles (e.g. Strauss et al, 1992). Other educational initiatives with greater emphasis on educating rehabilitation professionals about HIV disease limit the number of professional groups participating in the educational initiative (Bagolun et al, 1998).

Most health profession programmes have historically trained students in isolation of one another and provide little or no opportunity for students to become familiar with the values, roles and expertise of other health professionals. The educational philosophy of small group, problem-based learning (PBL) is ideally suited to interprofessional education. The sharing of information and the discussion and debate that occurs through the small group tutorials promotes

understanding of the roles of others.

A central tenet of rehabilitation is the understanding of the impact of an illness from the patient=s or client=s perspective (Law, Baptiste and Mills, 1995). While this is an important underpinning of all chronic illness, the social complexities associated with HIV/AIDS makes the understanding of the illness beyond the biological and physical manifestations paramount. Educators have recognized the importance of understanding the PWHA=s perspective and have included their participation through invited lectures or participation in panel discussions in large groups of students. Including a PWHA in the small group tutorial setting would allow students to have interactions and discussion that would not occur in larger, more formal sessions, and could provide students with an enhanced understanding of living with HIV.

In summary, there is a need for development of curricula that not only increase the awareness of the role of rehabilitation in the continuum of HIV related illness but also promotes client-centered, interprofessional approaches to management. Development of effective educational programmes for health professional students is a critical first step in preparing adequately trained clinicians who are able to understand and implement effective rehabilitation strategies. The purpose of this project was to develop and evaluate an innovative educational model that used PBL, interprofessional groups and involvement of persons with HIV in the process.

Methodology

Recruitment of Students

Senior level students from the occupational therapy (OT), physiotherapy (PT), MD, nursing and social work (SW) programmes were approached to participate in this study. Two students from each of the programmes were recruited to form two tutorial groups. Those interested were invited to submit a brief letter outlining why they were interested in the project and their commitment to attend. In the event that there were more volunteers than required the study team met to select the most appropriate participants.

Recruitment of Tutors

Two experienced tutors from the Faculty of Health Sciences were recruited to participate. One of the tutors was a physician, the other was an occupational therapist. Two persons living with HIV/AIDS were recruited as resource tutors. The role of the resource tutor was to provide insights from the clients= perspective and prompt and question students to consider varying aspects of the problem. The resource tutors were both experienced educators; one had been involved in the problem-based learning format at McMaster University while the other was an educational officer for the local AIDS network. We had anticipated that training about the educational process at McMaster and some basic facilitation skills would be required however, this was minimal due to the prior skill level of the resource tutors. The resource tutors and the faculty tutors were paid an honorarium for their participation in the project.
Learning Objectives

The learning objectives for the course are outlined in Table 1.

Tutorial Sessions

The two hour tutorial sessions were held weekly over an eight week period. During this time students studied four case problems that had been developed by the investigators. Supplementary reading materials, consisting of articles related to rehabilitation issues and some government publications, were provided to the participants. As participation in the tutorials was above and beyond ususal programme requirements, students were paid a small stipend for their involvement in the project.

Evaluation

As a requirement of participation students kept a journal describing and reflecting upon their experiences in the tutorial. Students were asked to reflect on their personal objectives, any challenges and successes they encountered in the tutorial setting, personal learning that occurred as a result of participating in the project and any other general perceptions about their experiences. Students were expected to write in their journal at least once a week. At the completion of the project all students, tutors and resource tutors participated in a semi-structured interview.

To begin the analysis, the audiotapes of the interviews were transcribed verbatim and entered into the Ethnograph computer program. The students= journals were entered directly into the Ethnograph program. The analysis of the audiotapes and interviews used an open-coding technique as described by Strauss and Corbin (1990). The analysis began with a line-by-line review of each journal and interview transcript to identify and code specific phenomena related to interactions with the resource tutors and any reflections that the students, tutors or resource tutors had about the interactions. Following the initial coding a constant comparison technique was used to identify patterns in the data by analyzing and comparing the information in each coding category. The final step consisted of the development of themes from the coding categories that reflected common experiences and perceptions.

Students were also asked to rate their perceptions of the amount of personal learning that occurred as a result of their participation in the project. Students indicated their rating on a 7 point Likert scale with 1 indicating Athere was no new learning related to the objective≅ and 7 indicating Athere was extensive learning related to this objective≅.

Results

Nine out of 10 students completed the course and the evaluation requirements. One MD student was unable to get permission to leave her clerkship site early to continue with the tutorials and hence only attended four sessions.

Students Rating of Educational Objectives

The educational objectives and the mean of the students= perceptions of the extent to which the objectives were met are shown in table 1. Students ratings were consistently high ranging from a low of 5.87 out of 7 for understanding how models of rehabilitation could be applied to the management of HIV to a high of 7 out of 7 for developing an appreciation of the psychological, social, political and ethical issues the influence a PWHA.

TABLE 1

Students= Perceptions of the Amount of Learning that occurred for each Educational Objective *

Course Objectives Students will:	x rating of amount of new learning (S.D.)
Understand the basic principles of the biology of HIV disease, its progression and its transmission from person to person.	6.75 (.46)
Become familiar with the types of medical and non-medical interventions that are commonly used to maintain the health of people with HIV, and the effect of these interventions on their quality of life	6.12 (.64)
Understand the management of HIV as a chronic as opposed to a terminal illness.	6.37 (.51)
Understand how models of rehabilitation may be applied to the management of clients with HIV.	5.87 (.83)
Develop an appreciation of the psychological, social, political and ethical issues that have an influence on the experiences of a person living with HIV, and on their rehabilitation.	7.00 (.00)
Understand the various roles and contributions of health care and social service professionals in the rehabilitation of clients at different stages of HIV disease.	6.75 (.46)
Develop skills in communicating, planning and decision-making with an interdisciplinary group of professionals.	6.50 (.53)

* students rated their perception of the amount of personal learning that occurred as a result of participation in the course on a 7 point Likert scale where 1 = no new learning and 7 = extensive learning

Qualitative Analyses

The results will be presented under four areas: I) evaluation of the resource tutor; II) evaluation of the knowledge, content and perceived learning; III) evaluation of the interprofessional model; IV) enjoyment; and V) developing confidence.

I) Evaluation of the Resource Tutor

1. Benefits of involvement of the Resource Tutor

A theme related to the benefits of involvement of the resource tutor emerged from the data. There were three subthemes: a) perspective on lived experience b) context for learning c) knowledge resource and d) challenges assumptions and values.

a) Perspective on Lived Experience

Students and tutors indicated that the perspective of the resource tutors provided a view of the realities of living with HIV/AIDS. The resource tutors often used stories and personal anecdotes to highlight their views and recognized that they were able to provide a perspective that was not available in written resource materials. The students appreciated that the resource tutors provided a view as to what it was like to encounter challenges related to HIV/AIDS on a daily basis.

A*And as we went (the resource tutor) would share the odd personal story that I think really crystalized the meaning of what we were learning about. And it was very moving at times, those contributions. Challenging at other times. He was really superb*≅. (interview - tutor)

A*sometimes we would miss or we wouldn=t even, not even necessarily we=d miss but we wouldn=t acknowledge as being important and (the resource tutor) would say AI think you=re missing the big picture now. Yeah he=s got diarrhea today but what=s really important right now - he=s worried about what=s his biggest stress - it=s his money. So like you can do all those wonderful things but he needs drug benefits and that=s his biggest concern.*≅ (interview - SW)

A *So yeah, okay, I understand AIDS related dementia and what that is. But until the resource tutor described to us what it=s like when you know they couldn=t read a clock face anymore.....those personal experiences just make it all that more concrete and real.*≅ (interview - MD)

b) Context for learning

In addition to providing a perspective on living with HIV/AIDS the tutors and students indicated that the presence and participation of the resource tutors provided an important context for the learning. By providing a Ahuman face≅ to the problems being discussed, the presence of the resource tutor provided an immediate Areality check≅ for the students and enhanced the relevancy of their learning.

A*At the end of tutorial as I walked home I began to feel more comfortable with the idea of interacting with an HIV/AIDS person. I cannot say what helped exactly. The one thing that I can see being different from when we learned about it in class was the presence of (the resource tutor) in our group. It was my first time speaking with someone with HIV. As he shares his personal experiences, I gain more understanding around the topic, beyond what the literature tells us.*≅ (journal - OT)

A *(having a resource tutor was) crucial. Absolutely crucial. It made me think more about what I was researching, what I was reading, and I could put a context to it right away*≅. (interview - PT)

c) Knowledge Resource

Students found that the resource tutors were a resource on knowledge related to the disease process and the health care and social systems. While typically the role of the tutor in problem-based learning is to facilitate learning rather than provide knowledge, the resource tutors were able to steer the students to appropriate resources and to prompt the students in applying their knowledge without compromising the tutorial process.

A*Once again (the resource tutor) was a great resource and informed the group about the AIDS Networks (or lack thereof) in Northern Ontario*.≅ (journal - Nursing)

A(*The resource tutor) brought is some great resources from the HIV support group center. Some pamphlets on funding issues, the Canada Pension Plan, the Ontario government funding, welfare, etc. There was also some good packages that the center routinely gives out, one on womens= issues and one on men=s issues*.≅ (journal - PT)

d) Challenges Assumptions and Values]

Students felt that the presence of the resource tutors challenged them to examine their own assumptions and values surrounding HIV/AIDS. The close interaction and presence of the resource tutors meant that the students could not avoid addressing some difficult questions.

A*When (the resource tutor) shared her story with how she got (HIV) - it could have been anybody. So it really personalized it for all of us in the room. Like whoa.....like no one is immune from it.*≅ (interview - SW)

A*(The resource tutor) actually made a very effective point once we had defined all our learning issues (HIV risk for street kids, IV drug use and disease education for people of low socioeconomic status), by asking us to turn our paper problems face down and tell him how Jordy contracted HIV. There was a pregnant pause after which a couple of us said, AWe don=t know.≅. Upon reading the problem for the first time we all knew intellectually that Jordy=s lifestyle and history exposed him to a number of risk factors, none of which we could prove were the cause of his disease. But it took (the resource tutor) posing the question to make us (or at least me) realize we couldn=t point the finger at any of these exposures, nor could we assume it*

was his exposure to one of these obvious risk factors that resulted in HIV infection. The point was/is it doesn=t matter.≅ (journal -PT)

2) Challenges of Involvement of Resource Tutor

Students= worries

The presence of the resource tutor also posed some additional challenges for the students. Students worried that the terminology and language that they used were correct, about exposing their attitudes and values and whether they might offend the resource tutors.

A*I guess I=m trying really hard not to be medicalized and I FEEL like I=m not but then when I talk about something I=ve learned or read I STILL wince or cringe internally when I say something like Apeople with the illness can get oral ulcers in the early symptomatic stage or even in the acute retroviral illness stage before seroconversion≅.....and what sounds wrong is the Apeople with the illness≅ because it=s a ATHEY≅ type classification.....it doesn=t include US, THIS GROUP right here and now.*≅(journal - MD student)

A*It was intimidating at first, not that (the resource tutor) is intimidating but I did not want to offend her in any way. This forced me to think critically before I spoke, it made me more aware of my language and assumptions*.≅ (journal - SW)

A*In the beginning, political correctness was creeping into the forefront of my thoughts every time I opened my mouth. I found myself measuring my words so carefully (to avoid sounding offensive or ignorant) that I was stumbling through conversations at a snail=s pace, probably sounding pretty inarticulate. This surprised me. I have open discussions all the time about delicate topics. I have gay friends. I=ve treated IV drug users and patients with all kinds of personally sensitive conditions on my clinical placements. I guess I just haven=t had open discussions with anyone who=s been a direct stakeholder in what I=m talking about*.≅ (journal - PT)

II) Evaluation of Knowledge, Content and Attitudes

The students identified specific factual knowledge they had discussed during their tutorial experiences. They also gained an awareness of a shift in their attitudes as they progressed through the course. The knowledge, content and attitudes emerged in five broad thematic areas related to a) HIV/AIDS b) social and ethical issues c) roles of other health disciplines d) rehabilitation insight and e) changing attitudes and values.

a) Specific HIV/AIDS Knowledge

Students referred to knowledge and facts that were specifically related to the natural history, the pathology and related signs and symptoms of HIV.

A*We discussed lipodystrophy and the way that it alters a person=s appearance. There is also wasting and lesions that appear on the face and body*.≅ (journal - nursing)

A*I=m starting to appreciate the extensive number of symptoms someone with HIV may go through. After discussing only three clients so far in tutorial, I feel as though I have a better understanding of how many symptoms from the disease, and side effects from certain medications, actually exist.*≅ (journal - OT)

A*Well it=s not a life threatening end of disease anymore. I=ve learned that. I mean it=s...the implications of having it is stressful to your body but now there=s ways of managing it and I didn=t really understand that until I started the group. So I guess there=s new hope and if you have that you can pass it on to people that you=re working with. It doesn=t have to be the end of your life but we can manage it for years.*≅ (interview - SW)

b) *Knowledge of other health disciplines*

Virtually all students stated that they gained increased knowledge and understanding of the roles of the other disciplines. Students identified that they came to the table with preconceived ideas and stereotypes of other professions. They appeared to gain a greater respect and appreciation of the contributions of others.

A.....*the whole process of working with a team, especially with the students that are really eager - they kind of feel like they can take everything on so you get a real sense of what their profession can do*.....≅ (Interview -OT)

A *I have also begun to understand what each profession brings to the care of the patient. It has been extremely beneficial because each one has certain knowledge and approaches to situations. I have appreciated the variety of assessment tools and resource information that they bring to class*≅. (Journal - OT)

A *Before this class I had strong opinions, which were based on prior experience with Dr.=s. When I met the med student, she changed that for me. It is important to study and work together so we are not separate silos operating under different parts of a system*. (Journal - SW).

c) Social and Ethical Issues

It was apparent that many social and ethical issues arose as a result of the tutorial discussions.

A*We had a couple of ethical discussions today also that I found insightful and useful. For example, the gentleman we were studying had decided to stop medications and was nearing the end of life. He, however, was in denial and stated that he was not going to die. We talked a little about spirituality and whether it would be right to initiate discussion about mortality and his beliefs. When he is so insistent on staying in the state of denial, is it therapeutic for the health care professional to push him towards acceptance or not? We had some interesting points come up but the one thing we all agreed on is the importance of client-centred care and treating each*

patient individually (that=s McMaster for you!).≅ (journal - nursing)
A*In today=s session, many ethical issues were discussed. We addressed the issues of needle exchange, anonymous testing for HIV, and partner notification when someone has tested positive for HIV. I think the group learned a lot about legal information in regards to informing previous and current partners of a person who has just tested positive. Furthermore, we discussed our thoughts on the pros and cons of where individuals can receive medical attention, in clinical or street settings. Great discussions!*≅ (journal - OT)

d) *Rehabilitation Insight*

While the course was titled ARehabilitation Issues in HIV≅ overt references to rehabilitation were not common in the students= reflections. However, students seemed to gain a broader understanding of rehabilitation and appreciated that different professions had slightly different interpretations of rehabilitation. Students also appeared to gain insight into the importance of a client-centered approach which is a fundamental component of rehabilitation practice.

A *I never knew that there were so many ways and means to energy conserve for example. And just with someone who=s very fatigued and may not have the energy reserves that they need to do their daily activities - I had no idea. Like that you could have special spoons and special carts that allow you to transport food and all these kind of things that we never discuss in my particular profession.*≅ (Interview - MD)

A *The discussion tended to move towards bringing Jordy (problem scenario) past his denial. We discussed ways we could bring him to this point, yet as we talked I began to realize that this was our goal and maybe not Jordy=s. In my PBL class, we talked about his acceptance and denial around death. We came to a realization in this class that there is no proper or set way of coping; each person has their own and it is not fair to expect them to match our expectations of what we consider normal*≅. (journal - OT).

A *It only adds to my beliefs that each person=s experience of a disease will be completely different from others and thus any type of rehabilitation and intervention will have to be personalized to their specific needs.*≅ (Journal - SW).

e) Changing Attitudes and Values

As students progressed through the tutorials many became aware of some of their attitudes and values around the issues discussed and reflected on a shift that was occurring. Many students indicated that they realized that how someone contracted the virus was not important.

AI had an interesting conversation with one member of the group after everyone had left: she said she had been expecting at some point to hear Athe story of the (resource tutor),≅ *by which I assume she meant not only the course of his own illness, but how he contracted HIV. I=d be*

lying if I said the thought hadn=t crossed my mind either. But the fact that he was gone, the tutorial was over and we would likely never know the fine details of his illness, served to drive home what was probably the most significant message I gleaned from this experience: it simply doesn=t matter.≅(journal - PT)

A *Before we began this tutorial I had my opinions about HIV and AIDS and about the people who seemed to have this condition. I thought that people must be very careless to end up with a condition like this, something that can be prevented. But since tutorial has begun, four weeks later my opinion is changing. I am realizing how many people can be affected. My thoughts about contracting the disease when it could have been prevented are still with me, however, now I=m starting to direct my thoughts more so on what can I do as an OT to assist these people with something than can be devastating*≅ (journal - OT)

III) Evaluation of the Interprofessional Model

In addition to the knowledge of other disciplines that the students gained through their interactions, other benefits resulted from the interprofessional nature of the educational experience.

1. Benefits of learning together

Students spoke and wrote of an increased awareness of how much more they achieved when they worked together and of how they were able to build on each others= knowledge to increase their learning.

AWe started out with a medical point of view (the natural history of the disease) and then moved on to Alex=s (the problem) issue of Aworking out≅ and muscle building. The PT student covered this topic. After that we tied those ideas in with ADLs and the effect muscle wasting would have. This topic was introduced by the OT. Next the social worker focused on finances, which was very useful and the nursing students focussed on self-concept and L=s theory. It really made me see how the problem would be handled differently by different health care professions and lent an idea of how we can work together≅. (journal - nursing)

AI think the biggest thing was that how much knowledge.....how much everyone in the team can learn from each other. I think it was demonstrated every single week. And we brought in stuff and realized that everyone is able to fill the gaps of everyone else - and if we could rely on each other more as a team than just as individual health care providers the amount of good you can do for someone just multiplies itself≅ (interview - nursing).

AWe, as a group are using each other as stepping stones to go that extra step further in understanding clients.≅ (journal - OT)

2. Breadth of learning

Students became aware of the increased breadth of learning that occurred from interacting with students from other disciplines. Students indicated that they had a more holistic view of their role and of others following the experience.

A I think - especially with the rehabilitation end of HIV - it was really beneficial to have interdisciplinary because I think nurses do have some sort of a role in it but there is a huge role for all the other professions too. And if I just take in this and tried to learn about HIV rehabilitation with nursing I would have missed a lot of the picture≅ (interview - nursing).

I especially appreciate the perspectives from social work, the PT and the OT.....the nurses too, but their roles are similar to mine, or at least their approaches seem to be.≅ (Journal - MD)

AI find that the different disciplines can fill the gaps that nursing has and can help to think of issues on a more holistic, global scale. For example, we had a neat moment when three different disciplines made hypotheses about his swallowing difficulties - illustrating how much we can really learn to think from each other≅. (journal - nursing).

IV)Enjoyment

In spite of the fact that this experience was in addition to their regular academic and clinical studies, students reflected on a sense of enjoyment. Many described an experience which provided a major insight for them and a change in their thinking (epiphany) as a result of the tutorial.

A *I really wanted to do as much reading as I could, find out as much as I could, probably because I was inspired by the people I was working with and by the resource tutor. And I loved going to tutorial every week. I leave placement saying Aokay gotta go, see you later≅ and I would love going even though it was till six at night≅.* (interview - PT)

A.≅. *I am learning so much from the members of my tutorials, their different professions and their roles with people living with HIV. I am very eager to begin the next case scenario next week* (journal - OT).

A*It was probably the best tutorial/PBL experience I have had in my four years of education here at McMaster* (journal - SW)

V) Developing confidence

As students progressed through the tutorials, they gained a sense of confidence in knowing what their role would be in dealing with someone with HIV/AIDS. They became aware that much of their previous background knowledge and experience was relevant and germane. In having to explain and advocate for their disciplinary role they learned more about what their specific profession could offer and of the applicability of their knowledge and skills.

A*Things I was saying in our session today, regarding working with people who had strokes, was very applicable to working with any one of the clients we have looked at in tutorial so far. What a great realization, to know that I would know how to treat someone who was inflicted with HIV or AIDS*!≅ (journal - OT)

A*Often every professional did not know that the skill base that they had was completely applicable to HIV and I think there was a strong feeling - if you were an OT or a PT or a social worker....nursing and medicine understood, they have a role, but in the other fields you know they were used to Awell I do this in stroke≅ and then a light bulb would go off - and Ait=s well I can do that same thing in HIV≅*. (interview - resource tutor)

A*And I also think that the knowledge that we all went into the HIV course and not a lot of us had a lot of experience with but you can rely on so many other things you=ve learned in your past and apply it to so many different situations and things that we hadn=t really thought about that we could do for someone with HIV that you are doing for other clients too.*≅ (Interview - nursing)

Evaluation

Our results suggest that the students perceived this as a valuable educational experience. The ratings of the perceptions of their learning were consistently high. Themes that emerged from the data and the representative quotes confirm that this was an enjoyable and rewarding learning experience.

The use of a resource tutor in a facilitator role was valued highly; the resource tutors were able to challenge, bring life and reality to the scenarios the students were studying and encourage reflection to a degree that is not likely to occur in a more traditional course. While generations of educators have taken advantage of clinical venues to enhance student learning, direct involvement of patients or clients in the academic setting is less commonly reported and evaluated. Kopacz et al (1999) called for teaching about AIDS to go beyond didactic communication and simple exposure to AIDS patients. The intimacy and opportunities for personal dialogue and interaction that is present in a small group tutorial is difficult to replicate in large groups of students.

The interprofessional element of the course was also valued by the students, tutors and resource tutors. One of the benefits of the interprofessional, group format is that it provides an opportunity for students to share perspectives on their role. Insight into the roles of other professions is not likely to occur in an educational setting in which students are trained by profession. The students perceived that there were other benefits related to increasing the breadth of their learning and being able to build on each others= knowledge when learning together.

The problem-based design of the course ensured that the students were able to interact directly with the resource tutor, in a way that would not occur in a classroom situation. The problem-based design also promotes teamwork and sharing of professional roles. We believe this component of the curriculum is, in part, responsible for the positive evaluations of the learning experience.

Limitations

This project encountered difficulty in recruiting students from a variety of disciplines. These difficulties were related to lack of integration of timetables, and difficulty finding a time period when all could be available and released from their other course requirements. In addition, although the resource tutors who participated in this project were well suited to the teaching style used, there were times when they felt some insecurity with the discussion and topics raised. Finally, in using only one resource tutor per group, the scope of HIV experience that the students were exposed to was limited to some degree.

Recommendations

The following are recommendations that arose out of evaluation of the project:

3) Education about HIV and rehabilitation is ideally suited to interprofessional, problem-based models of education and should be promoted in health professional programs and continuing education following graduation.
4) Interprofessional education initiatives should be targeted to senior level health professional students. We purposefully chose senior students for this initiative, based on previous literature that suggests that interprofessional initiatives are most successful if one chooses students who have already developed a sense of professional identity. We believe this was important in this study as students often had to advocate for their role in the rehabilitation of HIV/AIDS. This would be difficult for students who do not have a clear idea of their possible and potential roles. The sense of confidence that many students spoke of as they progressed through the educational experience may result partially from the need to justify and advocate for their role. If further inter-professional initiatives are to take place, they will require creative approaches to the substantial logistical hurdles, depending on the institution.
5) Use of PWHAs as resource tutors was highly valued by the students. Alternate models using PWAs in the training of health professionals should be implemented and evaluated. Training of the resource tutor may be required if the PWHA has not been active in an educational environment previously. We were fortunate to have resource tutors who were advocates in the HIV community and were comfortable with the role of facilitator in the tutorial group. Others interested in pursuing this model should consider whether there is a need to provide the resource tutors with an introduction to problem-based learning including training in small group facilitation skills and knowledge about the role of facilitator versus didactic instructor. The background of our resource tutors also meant

they had content expertise that may not be readily available in other PWHAs. Those considering implementing a similar model should also consider the balance of knowledge and skill level between the faculty tutor and the resource tutor.

6) Through the interviews with the resource tutors, several challenges to the role were identified which are of importance to those who are interested in developing a similar educational program. Although the resource tutors were active in the HIV/AIDS community, had participated in other educational initiatives and were comfortable with revealing and discussing their HIV status, occasionally the personal nature of the discussions was difficult. It is our view that PWHAs who are interested in participating in this type of educational initiative should be selected carefully. They need to be provided with examples of questions and discussions that can occur and practice role playing in these situations. The tutors and resource tutors need to have opportunities to debrief after the tutorial sessions and additional support should be provided to the resource tutors if necessary.

How the project meets CWGHR priorities

The data from this project is directly related to the CWGHR priority that relates to development of an educational process for health care professionals. This project meets CWGHR priorities by providing data on the effectiveness of 1) interprofessional educational initiatives related to rehabilitation of clients with HIV/AIDS; 2) the use of resource tutors to augment student learning; 3) a problem-based approach to learning about rehabilitation in clients with HIV/AIDS. The development and evaluation of this model will provide a foundation for others interested in similar initiatives.

How others will benefit from this project

We anticipate that recommendations from this study will assist others interested in similar educational initiatives. We plan on presenting and publishing our findings in a number of venues. Due to the interprofessional nature of the project we anticipate that the presentations could be given to a number of health professional groups (PT, family medicine, OT) and NGOs. One abstract has been accepted for presentation at a national physiotherapy conference this July. Two additional abstract have been submitted for presentation. Two manuscripts are currently in preparation.

Final products

A copy of the course objectives, the four problems developed for the course and their accompanying tutor guidelines is appended to the report.

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