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Teaching social accountability by making the links: Qualitative evaluation of student experiences in a service-learning project

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Abstract

Background: Many medical students come into medicine with altruistic motives, few carry this altruism into their practice. As a result rural, remote and international areas are underserved by the medical community. Teaching social accountability may help students remain altruistic and encourage work in underserved areas. Making the links (MTL) is a project designed to teach medical students the social aspects of medicine via service learning.

Aims: The purpose of the study was to explore student reflections on their experiences during the MTL program.

Methods: Qualitative data analysis was conducted using structured open-ended written questionnaires. Fourteen students, representing three student cohorts, participated in the study. Data was collected between 2005 and 2007.

Results: Six themes emerged from qualitative data analysis. (1) relationships, (2) social determinants of health in real life, (3) community development (4) interdisciplinarity, (5) linking health and communities, and (6) personal learning. Themes reflected the opportunities and challenges experienced by the students during the MTL project. Students reported that MTL was an essential component of their medical training.

Conclusions: MTL is a promising model for using service learning to teach social accountability in medical training.

Introduction

A large percentage of medical students come into the profession with altruistic motives; including working with underserved populations at home and abroad (Eckenfels 1997; Coulehan & Williams 2001). With exposure to models of practice that may not support altruistic motives, the accumulation of debt and the establishment of relationships in the city of study, the medical school experience tends to reduce the number of students who carry ideals into practice (Hafferty & Franks 1994; Hunnert et al. 1996; Coulehan & Williams 2001). Thus the areas in most need of health care: rural, underserved urban and international populations in developing nations receive the least (Commission on the Social Determinants of Health 2008). Encouraging practice in underserved populations by creating socially accountable doctors could have an important effect on encouraging altruistic medicine (Faulkner & McCurdy 2000).

The World Health Organization (WHO) defines social accountably in medical schools as "the obligation to direct their education, research and service activities towards addressing the priority health concerns of the community, region and/or nation that they have a mandate to serve" (World Health Organization 1995). The College of Medicine at the University of Saskatchewan outlined, in its 2007 Integrated Plan, a "commitment to incorporating social accountability into its education, research and service activities towards addressing priority health concerns at the local, regional, national and international communities it serves, and has recognized the importance of community based service-learning for its faculty and students in fulfilling that commitment" (College of Medicine University of Saskatchewan 2003). Two aspects of that commitment are to provide service learning experiences for students and give students interdisciplinary training opportunities to learn the skills required to work with underserved populations. In 1974 the Lalonde report, "New perspective on the health of Canadians," recognized inequality in health care services in Canada, "medical services are not yet equally accessible to all segments of the population because health man power tends to

Practice points

- It is difficult for medical students to carry altruism into their practice.
- Rural, remote and international areas are underserved by the medical community.
- MTL teaches medical students socially accountable medicine via service learning.
- Community service-learning teaches social accountability and may help students to remain altruistic and encourage work in underserved areas.

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concentrate in cities and is not attracted to rural or isolated locations (Lalonde 1974)." The inequity in health services still exists today (Marmot 2007; World Health Organization 2007). Educational strategies giving medical students clinical and service learning experience in rural/remote, urban underserved and internationally may be an effective way to increase social awareness and practice in these settings (Burrows et al. 1999; Easterbrook et al. 1999; Laven & Wilkinson 2003; Courran & Rourke 2004). However, exposure to mainly urban environments during medical training encourages physicians to establish urban practices (Easterbrook et al. 1999).

The worldwide commitment of medical professionals to social accountability (World Health Organization 1995; Health Canada 2001) the importance of reducing inequities in healthcare access (Marmot 2007, World Health Organization 2007) and the positive results of rural training experiences for medical students (Laven & Wilkinson 2003; Courran & Rourke 2004) were the founding ideas behind the making the links (MTL) program. MTL provides medical students with a longitudinal service-learning experience built on long-term relationships with underserved communities, fostering social accountability and community involvement to encourage medical students to practice altruistic medicine in underserved areas.

Service learning: A framework for teaching social accountability

It is notoriously difficult to teach the social aspects of medicine in traditional didactic classroom or hospital settings (Faulkner & McCurdy 2000; Stephenson et al. 2001; Lempp & Seale 2004; Cole & Carlin 2009). Traditional settings are not ideal for teaching the so-called "soft stuff" (Stephenson et al. 2001; Cole & Carlin 2009). The difficulty of teaching the social aspects of medicine is illustrated in the three of the four principles of family medicine developed by the (College of Family Physicians of Canada, n.d.; CFPC). How do you teach a student to be community-based within the walls of the university? How do they learn to be a resource for a defined population they've never met? How do you teach them to be patient-centered clinicians without showing them this attitude in practice? The nebulous nature of these principles, these social aspects of medicine, when contrasted with the hard facts of specialist-taught training, contributes to the paucity of students choosing family medicine (Coulehan & Williams 2001). Service-learning experiences moves the issue of teaching social accountability beyond well meaning rhetoric to measurable achievement. It offers a means for the students to see the practical application of their altruistic ideals (Woollard 2006).

At the core of MTL is the concept of service-learning. Service-learning is defined as "a structured learning experience that combines community service with explicit learning objectives, preparation, and reflection" (Pew Health Professions Commission 1993). Service-learning is an engaging and effective way to teach students the social aspects of medicine (Thompson et al. 2003). Four elements are critical to service learning: (1) student learning, (2) community service and partnership, (3) inter-professional collaboration, and (4) reflection (Seifer 1998). Service-learning "is a balanced partnership between communities and health professions schools and a balance between serving the community and meeting defined learning objectives" (Seifer 1998). MTL exposes students to service-learning experience in rural/remote, urban low-income and international communities. Students, community members and community-based organizations become active agents in community development and student training. Patients, clients, partners and community members assure that all initiatives address community-identified needs. This teaching and learning method encourages the formation of positive relationships with people of different socio-cultural backgrounds, leading to the development of communication skills and cross-cultural understanding. Community-based settings also introduce students to concepts of health systems and interdisciplinarity. Finally, students take the time to reflect on their experience. The reflection and evaluation period of MTL originates from the work of Schon (1983, 1987) who suggests that reflective practice involves thoughtfully considering one's own experiences which can help practitioners development of autonomy and self-direction.

Making the links

MTL outlines six learning objectives for students; (1) gain educational experience in multiple contexts, (2) gain exposure to concepts of international, rural and urban health, and community development, (3) experience service learning, (4) gain language skills and multi-cultural understanding, (5) improve communication skills, and (6) gain exposure to health systems and health teams. The purpose of the study is to explore student reflections on their experiences during the MTL program. We consider student reflection relative to the objectives, the unidentified gains and the potential negative consequences of the program.

Phases of MTL

MTL consists of five phases: (1) an orientation to health issues of the underserved, (2) a northern community experience, (3) a volunteer experience at a student-run clinic in an underserved urban area (4) an international experience in Mozambique, and (5) a reflection and evaluation period (See Figure 1 for the program timeline). The program takes place during the pre-clinical years and is completed in addition to the regular medical school curriculum.

The orientation portion of the project has three components. A 20 h Aboriginal seminar, a 3 credit global health course and language training. The Aboriginal seminar is a student-led reading and discussion group exploring topics, such as indigenous health and healing, treaties, residential schools and Métis history (see Appendix 1 for readings list). The global health course is taught at the University of Saskatchewan and examines international health and community development (see Appendix 2 for course description). Portuguese language training is done in preparation for Mozambique.

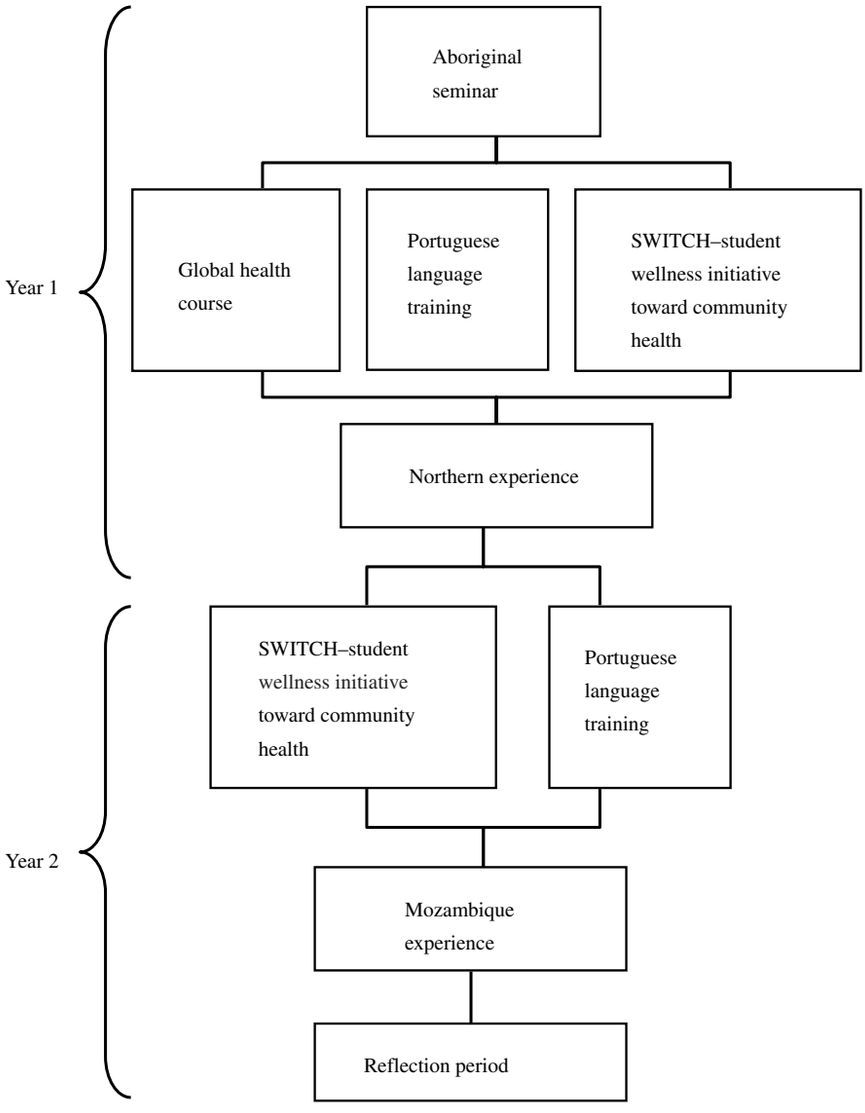

Figure 1. Timeline for the Marking the Links program.

During their northern experience students spend 6 weeks in one of two rural remote communities: Buffalo River Dene Nation or Ile a-la-Crosse. Students participate in clinical training and community service. They learn about the health issues faced by northern residents, and contribute to community health development activities. Activities include sweat lodge ceremonies, planning a youth conference, attending clinical training, and accompanying home care workers.

During the urban underserved experience students volunteer for two shifts per month at the student wellness initiative toward community health (SWITCH) clinic. SWITCH is an interdisciplinary student lead clinic that provides health services and community outreach to underserved neighborhoods. SWITCH involves students and professionals from a variety of health disciplines, including, medicine, dentistry, pharmacy, and nursing. Students engage in clinical training, participate in health promotion programming, and food preparation.

During their international experience students spend 6 weeks in Massinga, Mozambique. Students live and work at the Massinga Rural Hospital and the Centre for Continuing Education in Health. Students engage in hospital clinical activities, assist with mobile vaccine brigades, and participate in community development and participatory action research (Dickson 2000; Dickson & Green 2001).

During their reflection and evaluation period students complete a report pertaining to their experience.

Methods

The study used a qualitative approach to examine student experiences during the MTL program. The purpose was to explore student reflections on their experiences during the MTL program (Creswell 2007). Ethical approval for the study was obtained through the University of Saskatchewan Research Ethics Board. The authors acknowledge connections existed between researchers and participants in the field, (Creswell 2007) and steps were undertaken to reduce the potential bias caused by this connection.

Participants

Participants for the MTL program were selected based on a written application and interview. First year medical students apply by answering a series of questions relating to international and northern/Aboriginal experience, language skills, and other relevant experience. Members of the MTL working group evaluate applications based on the quality of reflection and writing. Students are then short-listed for an interview. Members of the MTL working group and previous MTL participants interview candidates. Students are selected based on an assessment of their readiness for the experience and previous commitment to working with underserved populations. Consideration is given to students able to navigate the delicate nature of the relationships with the underserved communities and act as participants and ambassadors of the College of Medicine. Some consideration is given to language ability. In order to mitigate potential economic barriers to participation, students selected to the program are given a stipend to cover living expenses and travel.

Fourteen students, representing three first year cohorts (60 students per cohort), participated in the study. Data was gathered between 2005 and 2007. The selection of participants was not done explicitly for the purpose of the research. MTL is not the only service-learning opportunity for students in this medical program. While MTL is the most in-depth service learning experience, it is only one part of a larger social accountability strategy at the College of Medicine (Meili & Zaleschuk 2010).

Questionnaire

Data were obtained from structured open-ended written response questionnaires. Students completed the questionnaires twice during MTL, following the northern and international experiences (see Appendix 3 for questionnaires). Questionnaires contained nine open-ended questions developed for the purpose of the project. The MTL working group and first cohort of participants developed the questionnaire. Questionnaires were modified yearly by students in order to ensure the relevance of the questions.

Analysis

A research assistant compiled the reports based on location of experience (rural/remote, international) and removed all identifying information. Study authors independently reviewed student reports and engaged in theme generation. Theme generation involved four steps (Creswell 2007). First, a general reading with the purpose of gaining an understanding of the texts. Second, coding of information into preliminary themes. Third, authors independently generated themes. Fourth, peer debriefing was conducted. Using a consensus based approach authors collectively identify the final themes (Creswell & Miller 2000). The themes represent the meaning understood by the researchers and form the basis for understanding student experiences. Member checking was conducted by allowing students to review their compiled questionnaires. Participants verified that the themes were consistent with their experience, and withdraw or modify information contained in the article if they so chose (Creswell & Miller 2000).

Results

Our understanding of the student experiences revealed 6 themes. Themes are expressed with a short description from our perspective and a selected quote from a student.

Relationships

Through the MTL service learning experience students became keenly aware of the importance of relationships. They reflected on their relationship with patients and communities. This reflection acknowledged the reciprocal nature of relationships and their impact on the student.

> Had you asked me before this experience what community health is I would have given you a definition. If you ask me now, I'll give you names, stories, laughs, somberness and actions.

Through relationships with individuals in the communities students were forced to reflect on their own stereotypes, particularly with respect to Aboriginal populations. These populations are highly stigmatized in Canada, particularly in Saskatchewan.

> I learned the importance of not judging someone who may be down and out and struggling with their addictions. First of all often you don't know what they have done in the past (good or bad) and what they may have lived through in their life. Also you don't know what they may become in the future (many the respected Elders earlier in their lives struggled with addictions), and even if they don't win their battle with addiction they still shouldn't be judged.

Social determinants of health in real life

Much of the student's reflection was focused on their experience with social determinants of health in a broad sense and related to specific experiences.

> Another observation is the amount that people in Dillon must travel for appropriate health care. Daily, people travel to Ile-a-la-Crosse, North Battleford, Saskatoon, or Prince Albert for health-related reasons. The fact that almost everyone will travel up to twelve hours round-trip at least once (but probably several times), just for an appointment is noteworthy. It makes visiting a doctor an entirely different experience, and I still don't know if I understand what that would be like.

Community development

Students recognized, through experience, the potential of a community development approach. They saw the limits

of disease-centered medicine without considering community context. As well, students recognized, and at times were frustrated by, the long-term process of community development.

> I used to detest my academic courses in community development. While I never had trouble understanding the concepts, I was always annoyed because they seemed to talk about things that are common sense but they use buzz words like 'empowerment' and 'facilitation.' However, to see what is going on in Tevele and Basso is really special, because it puts all the academic work into real life.

> There is a danger to not take adequate time to develop this relationship and understanding of the community and to make assumptions as to the problems faced by the community. This leads to people at arms length fabricating wonderful solutions for the problems they fabricated. If the community isn't involved in every step of the process, why would they buy into a plan for development?

Interdisciplinarity

Students reflected on the blurring of the hierarchy of medicine in underserved areas. They recognized variations in power relationships both between health professionals and in the doctor-patient relationship. Students understood that interdisciplinarity was important in the context of limited resources. However, they also acknowledged that the availability of resources should not necessarily result in the adoption of a hierarchical health care structure.

> Since the clinic's number of workers is so small and expertise is greatly limited, everyone must interact with and depend on each other constantly on a wide range of health issues. As a result, there is less of a clear line between "I am the doctor, you are the nurse, and you are the student.

Linking health and communities

Students reflected critically on the similarities and differences between underserved communities. They clearly understood the links between communities and saw community development as an approach to meet the needs in culturally appropriate ways.

> I think there is a false belief that Mozambique and Africa face far different health issues than Canada, but in reality Canada also faces issues of poverty, HIV and malnutrition. It is difficult for us to tell the third world how to deal with these issues when we haven't overcome them ourselves.

Personal learning

Students reflections on their learning was broad. One common element that addresses one of the objectives of MTL was reflection on future practice. Students discussed how MTL changed or encouraged existing career choices.

> I never thought that I would consider family medicine as a career and I certainly didn't think that I would ever want to do rural family medicine and Northern rural family medicine was completely out of the question. After spending time in a Northern community I can honestly say that rural family medicine in the North is one of my top choices in medicine.

> Before my northern Saskatchewan experience I had really thought about becoming a family physician and working in rural Saskatchewan. My experiences this summer further solidified that decision and have made me very excited about what role I can play as a physician in a rural community in Saskatchewan.

Discussion

Through MTL, students are exposed to a living experience of social accountability. Not every aspect of the program is comfortable, given the stress of training and teamwork in an unfamiliar context. The variety of student experiences reflects the successes and challenges of the MTL program.

Students felt MTL was important for gaining real world experience in their medical training. The achievement of the primary objectives of the MTL program are easily identified in the student responses. It is evident that they have gained educational experience in multiple contexts, gained exposure to concepts of international, rural and urban health, and community development, participated in service learning, gained language skills and multi-cultural understanding, improved communication skills, and gained exposure to health systems and concepts of health teams. However, responses indicate much deeper reflection. Students discussed the importance of culturally sensitive, compassionate medical practice and realized the limits of a disease-centered approach. Students were conscious of the impact of MTL on their future career decisions. Most express an interest in rural or international practice, even among those who had not considered such practice prior to the program. Although it is difficult to report trends on actual practice due to the small number of students, it is worth noting that 12 of the 16 graduates of MTL have chosen Family Medicine residencies, eight of those in programs with a rural focus.

Reflections on the challenges of the program should not be overlooked. The main challenge expressed by the students was that achieving the altruistic goals they brought into the program was difficult given their clinical experience and the short duration of rural and international experiences. Students are generally disappointed by their inability to help in clinical situations. Because the program takes place in the first 2 years of medical training their scope of practice is limited. The length of the rural and international experiences was also challenging for students. They wanted to engage in community development but found the short duration of the program limiting.

From a teaching perspective, exposing students to service-learning in rural/remote, urban low-income and international communities in the form of MTL is a promising model for teaching social accountability in medical training. Clinical educators should promote service-learning as a framework for teaching social accountability. The format of new service-learning initiatives should reflect the values of social accountability and community development in their context.

Limitations and future directions

An important limitation of the present study is that it reflects only the student experiences of MTL. The focus on the students does not provide a complete understanding of the effect of the programs on the communities and university. Also the present study does not examine the effects of other service-learning opportunities nor does it examine the entire social accountability strategy at the university. Future research should address theses limitation and use a more comprehensive approach to evaluate the effects of service-learning initiatives in producing more socially accountable physicians.

Conclusion

Service-learning can encourage altruistic medicine and teach social accountability (Coulehan & Williams 2001). As one MTL participant reflected:

"There is not much we are equipped to do, but we stop and we try. And it is enough. Enough to remember that we are people who can care for each other. Caring is sometimes all we can do." This recognition of the importance of the "soft stuff" reflects back to William Osler's statement that the physician's role is to "... cure occasionally, relieve often, but comfort always." (Osler 1905) and reminds us of the need to keep social accountability at the forefront of the profession.

Acknowledgment

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Appendix 1

Aboriginal seminar readings list

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Fournier S, Crey E. 1998. Stolen from our embrace. Vancouver: Douglas & McIntyre.

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Appendix 2

University of Saskatchewan global health course

Course description. The course explores global issues affecting personal, community and international health and development both overseas and locally in Saskatchewan. The course uses approaches from human-centered development, health promotion, population health and primary health care (PHC) to help frame analyses. Students are introduced to patterns of disease, determinants of health, the global context of health, and strategies and actions for enhancing well-being. Related aspects of gender, ecology, education, indigenous beliefs and practices, economic and political systems, and foreign aid are explored.

Course aim. The aim is to provide an introduction to international health using approaches and frameworks from health promotion/population health, PHC, people-centered development and participatory learning, research and action. PHC provides a means for challenging inequities and dependencies on professionals and focusing on preventive health through community involvement. Health promotion and population health provide a framework for understanding the underlying determinants of health and for understanding empowerment strategies. Human or people-centered development and participatory approaches provide a foundation for learning the essentials of consciousness-raising and socio-political action. By combining critical analysis of theories with hands- on practice in the community, students will come to understand the links between issues that are common overseas and in Saskatchewan.

Appendix 3

Questionnaires

Northern questionnaire 2005–2007.

(1) Describe in brief your healthcare related experiences and activities in Northern Saskatchewan. Emphasize or elaborate upon one or two of the more significant experiences.
(2) What did you learn from these experiences?
    (a) about international health
    (b) about community development
    (c) about yourself
(3) What did you like about your time in Northern Saskatchewan? What did you dislike?
(4) What suggestions do you have for future student experiences?
    (a) For students
    (b) For Making the Links organizers
    (c) For the host communities and organizations
    (d) For the University
(5) Was the preparation you received useful? What improvements would you suggest?
(6) How has this experience affected your plans for the future?
(7) Reflect on similarities and differences between health issues in Saskatoon and Northern Saskatchewan. How will your experience in the North affect your approach to healthcare in Saskatoon?
(8) How was your time in Northern Saskatchewan an interdisciplinary experience? What opportunities existed for mutual learning? What are some pros and cons of interdisciplinary training? How has this experience affected your view of the other discipline(s)?
(9) Any other comments?

Mozambique questionnaire 2005–2007.

(1) Describe in brief your healthcare related experiences and activities in Mozambique. Emphasize or

elaborate on one or two of the more significant experiences.

(2) What did you learn from these experiences?

   (a) about international health
   (b) about community development
   (c) about yourself

(3) What did you like about your time in Mozambique? What did you dislike?

(4) What suggestions do you have for future student experiences?

   (a) For students
   (b) For making the links organizers
   (c) For the CFCS
   (d) For the University

(5) Was the preparation you received useful? What improvements would you suggest?

(6) How has this experience affected your plans for the future?

(7) Reflect on similarities and differences between health issues in Canada and Mozambique. How will you experiences in Mozambique affect your approach to healthcare in Canada?

(8) How was your Mozambique experience an interdisciplinary experience? What opportunities existed for mutual learning? What are some pros and cons of interdisciplinary training? How has this experience affected your view of the other discipline(s)?

(9) Any other comments?