TEACHING DISABILITY AND REHABILITATION TO UNDERGRADUATE MEDICAL STUDENTS IN TWO UNIVERSITIES IN SOUTH AFRICA

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ABSTRACT

A cross sectional survey was conducted to find out the extent to which undergraduate clinical medical students (N=235) in two universities in South Africa were exposed to structured teaching of disability and rehabilitation. There were multiple opportunities to learn about disability and rehabilitation (n=444), with medical doctors facilitating 40.8%, focusing greater emphasis on disease and impairment. In one of the universities, the survey was followed by a focus group discussion involving 11 students (including 5 persons with disabilities) in the postgraduate Disability Studies program. The focus group reviewed the outcome of the survey and made recommendations on strengthening available learning opportunities for medical students to acquire the knowledge, skills and attitudes required to provide effective service to persons with disability.

INTRODUCTION

The latest national census of the Republic of South Africa reported that over 2.25million people reported having serious visual, hearing, communication, physical, intellectual or emotional disabilities, about 5% of the total population, though this value was considered to be seriously under-reported (1). In the budget speech to the first post apartheid national assembly in 1994, the then national Minister of Health promised to focus special attention on the care for persons with disability while acknowledging the need for graduating doctors to have basic knowledge about disability and rehabilitation in addition to knowledge of diseases causing disabilities (2). Towards achieving this goal, the white paper on an Integrated National Disability Strategy (INDS) was later produced in an attempt to develop a society for all (3).

The INDS contained 15 policy guidelines relating to prevention, public education and awareness, health care, rehabilitation, barrier free access, transport, communications, data, information and research, education, employment, human resource development, social welfare and community development, social security, housing, and sport and recreation. The policy guideline on health care recommended that the training of medical doctors should be geared towards the development of an understanding of the delivery of health services within the social model of disability. The current study was therefore conducted to ascertain if the undergraduate curricula for medicine are now intended to fulfil the goals set by the Minister of Health in 1994.

There have been reports that healthcare practitioners sometimes exhibited negative attitudes toward persons with disability (4, 5, 6). These negative attitudes may be related to a lack of adequate knowledge about impairment and disability. If the reports about the negative attitudes held by healthcare practitioners are true, they would have detrimental implications for the care of people with disabilities. Unfortunately, a number of studies have confirmed the inadequacy of disability and rehabilitation training in the curricula of medical (7) and nursing students (8). As a response to this deficiency, there has been an attempt to raise the level of awareness about disability among undergraduate medical students in a local South African university by introducing an elective special study module titled "Images of Disability" (5). The students who registered for the module felt that the experiences they had would be useful in their future practice as medical doctors. The specific objectives for the present study therefore were to establish to what extent undergraduate medical students in two South African universities are exposed to structured teaching of disability and rehabilitation, and to evaluate the appropriateness of the learning opportunities in preparing these students to meet the needs of persons with disability.

METHOD

This study was conducted in two universities, namely the University of Cape Town (UCT) and the University of Limpopo (UL), after ethical approvals were obtained from the Research Ethics Committees of both institutions. Firstly, research assistants were recruited to conduct a survey among medical students in their clinical years of training (UCT: $3^{rd} - 6^{th}$ year; approximately 600 students; UL: $4^{th} - 6^{th}$ year; approximately 500 students). The survey at

UCT was conducted towards the end of the 2007 academic year, while the survey at UL was conducted towards the end of the 2008 academic year. A 9-item self-administered questionnaire was developed specifically for the study, to establish the learning opportunities offered on disability and rehabilitation.

At UCT, the survey was followed up with a focus group discussion involving 11 students registered in the MPhil programme in Disability Studies (3 males, 8 females) to evaluate the appropriateness of the curriculum offered, as well as make recommendations regarding how to raise awareness about disability and rehabilitation among undergraduate medical students. The focus group was facilitated by one of the authors (SLA). Five of the participants were persons with disability, one of whom was involved in facilitating learning in disability and rehabilitation among medical students at UCT. Two participants were parents of children with disability, and 4 worked for disability interest groups. The discussion was divided into 4 parts. In the first part, the outcome of the survey was presented to the group for discussion. Later, the 15 policy guidelines in the INDS were reviewed as to whether they were still relevant or not. The second part explored the experiences of persons with disability in their encounters with healthcare practitioners. In the third part, participants explored what they perceived a doctor should know about disability and rehabilitation. The fourth part focused on what was considered to be appropriate for the students to learn.

RESULTS

A total of 235 medical students at UCT and UL took part in the survey (Table 1). At the times of the survey and depending on the year of study, the students had rotated through discrete blocks which related to specific clinical practice areas, e.g. paediatrics, obstetrics and gynaecology, medicine and surgery. Almost 90% of the students reported they had encountered patients having various forms of disabilities in these clinical areas (Table 2). Each participant reported multiple opportunities (n=444) to learn about disability and rehabilitation, mostly during ward rounds (28.6%), lectures (26.8%), seminars (17.8%), group discussions (17.6%), and workshops (9.2%). The learning opportunities were facilitated mostly by medical doctors (40.8%), non-medical personnel like physiotherapists and occupational therapists (26.8%), persons with disability (12.6%), and informal carers of persons with disability (8.3%). The topics covered included the pathologies and management of different

diseases resulting in different types of disabilities, as well as the rehabilitation of the patients with the resulting impairments.

Table 1. Participants in the survey (N=235)

	UCT (n=144)	UL (n=91)	
Participants			
• 3 rd year	14	0	
• 4 th year	32	12	
• 5 th year	32	26	
• 6 th year	66	53	
Gender			
• Male	52	39	
• Female	92	52	
Age (years)	19-30	20-40	

Table 2. Opportunities to learn about disability and rehabilitation

	3 rd year		4 th year		5 th year		6 th year	
	UCT	UL	UCT	UL	UCT	UL	UCT	UL
Encounter with PWD*								
• Yes	9	0	23	9	29	19	66	52
• No	4	0	5	2	3	4	0	1
Not sure	1	0	4	1	0	3	0	0
Opportunities (n=444)								
• Lectures	6	0	18	4	20	12	33	26
Ward rounds	3	0	6	10	18	14	37	39
• Seminars	0	0	6	2	19	9	21	22
Discussion groups	8	0	13	1	9	3	31	13
Workshops	0	0	10	1	4	3	18	5

Learning facilitators								
• Doctor	7	0	20	10	23	18	57	46
• PWD	5	0	17	0	9	0	21	4
Informal carers of PWD	2	0	7	0	10	2	8	8
Non medical personnel	3	0	9	3	19	3	54	28
• Others	0	0	0	5	9	18	0	19

^{*}PWD Persons with disability

Observing that all the participants in their 6th year of study at UCT had encountered persons with disability as patients, 10 of these (5 males, 5 females) were purposely selected and interviewed by one of the authors (SLA) to explore the perceived level of confidence of the students while interacting with persons with disability who were their patients. The question posed was "How do you feel treating persons with physical impairments?" (9). Overall, the participants expressed confidence in the management of patients with diseases leading to disabilities. They however expressed some discomfort while interacting with persons with disability as they felt unsure of how to "handle these people" when they come to their clinics.

The opinions of the participants who took part in the focus group discussion on the outcome of the survey can be summarised in the statement of one of the participants –

"This survey confirms that typical of medical students and universities, what students are fed is the medical part of disability. The knowledge that comes out strongly is the medical knowledge that students are expected to go there and dish out as it relates to disability. Are they competent enough to ensure that the concerns of disabled people and their parents are taken care of?"

A second participant posed another question –

"Have people with disability given any input into the curricula from the two universities?"

The focus group agreed that the 15 policy guidelines were still relevant in the development of a society that attempts to accommodate all its citizens, especially the guideline that recommended that the training programs for healthcare personnel should ensure an understanding of the Social Model of disability and its implications.

However, the experiences reported by the non-medical participants when they interacted with healthcare practitioners were generally unsatisfactory. A parent of a child with disability reported -

"There are definitely challenges. I am a parent of a child with a disability and I always get a feeling that I am being treated as if I dont know anything and they are the professionals and Im just the parent and I must do what they say. Its very often that [they] dont want to hear what the challenges are. I have to listen to what they are saying and there is no connection ... always getting the feeling or the sense that my input is not valuable and I dont know what I am doing or saying. This is probably why I got so involved with the disability sector"

Another parent of a child with disability described her experience –

"A nasty experience I had when my child was admitted on the medical ward involved a paediatrician during a ward round. I expected the doctor to have advanced knowledge of the condition of my child. He just came and said -'Well we dont expect a lot from this child! That statement gave me the impression that as long as my child was not fixable within medical prescriptions, then my childs problem is not fixable anywhere else. Rarely do we get doctors referring patients to social worker or whatever structure can help to improve the situation of the children with disability."

One of the participants with disability commented –

"You come into the hospital and say: 'Look, I have got STI the first thing they ask is how you got this disease because you are a disabled person and you are not supposed to engage in such activities. They try to blame you for having acquired the disease instead of addressing the disease.

That attitude actually prevents disabled people from going to the clinics. I have received complaints from disabled people around this, as my duty is HIV/AIDS training. How do you go around to these clinics when you are actually chased away by the negative attitude that we are confronted with when we go to clinics. So I think this attitude is one of the issues that need to be addressed."

Another participant with a disability reported concerns over perceived inequalities –

"What I hate most is when I have to confront my doctor to confirm my disability! Do I confirm your non-disability?"

The participants decided to combine the third and fourth parts of the focus group discussion, and labelled it "What I want to teach my doctor". The participant involved in facilitating learning among medical students reported –

"I think that medical students do not have the competencies required for the social model. They stick to the medical model because that is what their professors are telling them! They need to differentiate between impairment and disability."

Another participant said –

"I think that disability is very broad, and to bring every issue to the table is not going to be an easy thing. How do you teach a person that is not disabled to know what the person with the disability is going through? I dont think that is something that you could teach to somebody. You may put students in wheelchairs or blindfold some. The physical side you could do, but the emotional side of it you could never do, because what that person has gone through, you could never put that into somebody else!"

A parent of a child with disability commented –

"I will teach my doctor to be human and compassionate! As much as we want to work on the curriculum, I think a lot of what we are talking about has to do with a change in attitude – the low expectation and the attitude they attached to people or the attitude they have towards people with disabilities. I believe the best way to go about it is to target medical students

from the onset of their training to interact with people with disabilities -I believe it will be a matter of changing their attitude!"

After discussing the need to avoid increasing the financial burden on students due to curriculum change, the focus group recommended that an academic module titled "Introduction to Disability" be integrated into the existing curriculum for first year undergraduate medical students. The broad outcomes of the module are for the students to have a basic understanding of disability as an equity issue, and being able to differentiate between disability and impairment, as well as the different models of disability. It was agreed that people with disabilities should be part of the process of the curriculum adaptation and be available to assist in facilitating students learning.

DISCUSSION

Doctors and medical students should have the necessary knowledge, skills and attitudes to interact with their patients in a sensitive and caring manner, while conveying a supportive and non-judgmental attitude, especially with regard to disability issues. Traditionally, undergraduate medical education has focused on curative approaches to illnesses and injuries, but issues about disability are receiving more prominence in the curriculum. In the two universities surveyed, there were multiple opportunities to learn about disability and rehabilitation, but with greater focus on the medical model of disability and little focus on the social model of disability. A major issue highlighted in the social model of disability relates to discrimination based on disability, which is still endemic in the society (5, 10) and reported in the experiences of the participants in the focus group discussion. It becomes necessary to find ways of eliminating possible discriminatory practice against people with disability within healthcare. Available opportunities to learn about disability and rehabilitation must therefore be strengthened by ensuring medical students acquire not only the specific knowledge and skills, but also the attitudes required to provide effective service to persons with disability. Collaboration between university academics, persons with disability, and disability interest groups may help in ensuring medical students are adequately sensitised to issues about disability.

Following the recommendations made by the focus group, a multidisciplinary module has been developed in the Faculty of Health Sciences, UCT titled "Disability in Primary Health Care" with the intention to integrate it into the curricula of all the undergraduate healthcare

professional programs at each level of training. The proposed module will lay greater emphasis on the social model of disability. At the first year level, the module has been integrated into another one semester multi-disciplinary module (Becoming a Health Professional) for students in audiology, medicine, occupational therapy, physiotherapy, and speech and language pathology. The module is being piloted in the 2nd semester of the 2009 academic year. This is a niche in the education of medical students in disability and rehabilitation in South Africa.

CONCLUSION

The curricula of the two universities surveyed showed that the multiple opportunities available to teach disability and rehabilitation focused more on impairment. The need to ensure that medical students acquire the specific knowledge, skills, and attitudes required to provide effective service to PWD was highlighted.

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