

Physiotherapy students' experiences in implementing a health education programme

ABSTRACT: *The skills required to educate and train the public with the proper skills needed to care for themselves through the use of lifestyle modifications are now becoming an important issue in health professions education. Integration of health promotion in physiotherapy practice has been recommended and implemented. A qualitative design using open ended questions was used to determine the experiences of third year physiotherapy students at a local university in the Western Cape in implementing a health education programme relating to chronic diseases of lifestyle in schools. The evaluation was conducted at the end of the 5 week intervention programme. The intervention programme focused on providing high school learners with knowledge regarding risk factors for chronic diseases of lifestyle. The information for each question was recorded from each student's response independently and coded according to similarities which finally translated into themes. The study highlighted that students needed more practical exposure to health education initiatives within the clinical programme. It also created the awareness of the personal skills that students develop when implementing health education programmes. The implementation of health education programmes by physiotherapists is a reality and the need to provide students with the relevant experience in various settings is essential.*

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INTRODUCTION

Lifestyle modifications have become a focal point in the management of chronic diseases of lifestyle by health professionals. The ability to educate and train the public on how to successfully apply lifestyle modifications is becoming an important issue in the curricular of health professions. Clinical practice in physiotherapy education allows students to experience "health" in the broader sense of the word. Within the description of health is the statement that patient-centered care must "... continuously advocate disease prevention, wellness and the promotion of healthy lifestyles, including a focus on population growth." (WHO, 1986)

Health promotion and health education has been identified as one of the key aspects of physiotherapy (CSP, 2000). If physiotherapists are to play a key role in

health education and health promotion, then individual therapists and other health professionals need to gain a thorough understanding of the terms health promotion. The World Health Organization (WHO) identifies health promotion as "all organized measures (whether public or private) to prevent disease, promote health, and prolong life among the population as a whole" (WHO, 1986). According to the Ottawa Charter for Health Promotion, health promotion activities should aim at building health policy, strengthening community action, creating supportive environments, re-orientating health services and developing personal skills (WHO, 1986).

Weiner (2003) stated that health professionals, including physiotherapists, are being encouraged to adopt person-centred and person-empowered approaches to healthcare. These approaches can be viewed as responses to the increasing demand of having the individuals participate in the health-related decisions that concern them and empowering them to make informed decisions (Glenton, 2002). A greater integration of health promotion in physiotherapy education has been recommended (Gahimer and Domholt,

1996), but are we equipping physiotherapists to incorporate it in their practice and are we providing physiotherapy students with sufficient opportunities? Like other health professionals (Herbert, 1995), physiotherapists may not be adequately trained to practice health promotion (Gahimer and Morris, 1999). Physiotherapists would thus benefit from gaining a larger knowledge base in the practice of health promotion, as well as incorporating its underlying principles. When providing learning opportunities for student it should include 4 main themes viz.

- Cognitive and conceptual learning
- Clinical and technical learning
- Social and personal
- Generic and enabling skills

According to Spencer (2003), learning in the clinical environment is beneficial as it is focused on real problems in the context of professional practice.

Physiotherapy departments at universities are attempting to offer students opportunities to specifically do health promotion and health education as part of their clinical training in order to enhance the above mentioned skills. Various settings are used to carry out health education and health promotion programmes such as schools, commu-

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nity health centres and community halls. During the clinical rotations that students undergo as part of their training, they are given the opportunity to interact with groups of various sizes and to assist in the sharing of knowledge relating to topics such as prevention and education about low back pain or stroke. However, limited opportunity is provided for the students to express their experience with implementing health education programmes in different settings. Thus the aim of this study was to determine the experiences of the students who implemented a health education programme within a school setting.

METHODOLOGY

Research Design

The main study employed a mixed method strategy to evaluate the effects of a health education programme on both the presenters and the participants. A pretest-posttest quantitative design to evaluate the knowledge gained by the participants following the health education programme and open-ended questions were used to qualitatively explore the experiences of the presenters and participants following the implementation of the health education programme.

Participants

The study was conducted among third year physiotherapy students at a university in the Western Cape. The total population of third year students were 40 but the study sample only included those students who had done their clinical rotation at three local schools in the Western Cape and implemented a health education programme over a period of 5 weeks. Students involved in implementing the health education programme were 3 groups of 4 students who rotated through this clinical rotation during the 2008 academic year. All students were expected to complete an evaluation form with open ended questions at the end of the clinical block.

Research Setting

The schools who participated in the study volunteered to be part of the study following a presentation by the author at a Life Orientation Conference in 2007. The schools were situated in areas iden-

tified by the Western Cape Burden of Disease study as having a high prevalence of risk factors for chronic diseases (Steyn, Fourie and Temple, 2006). The findings of the Burden of Disease study was supported by other studies (Rhoda and Hendry, 2003) who highlighted that hypertension, smoking and diabetes were the most prevalent risk factors for stroke in the Western Cape.

Intervention

The health education programme presented by physiotherapy students to high school learners was done as part of their clinical rotation and related to risk factors for chronic diseases of lifestyle. The health education programme was a standardized programme designed for the students to implement in the schools. The outline of the programme is presented in Table 1 below.

The programme had specific objective for the participants as well as the student presenters. For the presenters the programme aimed at encouraging the students to do public speaking, impart information at the level of the listener and facilitate learning through group interaction rather than didactically. The experiences of the learners were also

evaluated but are not reflected as part of this article.

Data collection

Permission was obtained from the University's Ethical Clearance Committee, the Department of Physiotherapy, the students, as well as the participating schools and learners. Two weeks after the programme was completed, the students who presented the health education programme were asked to reflect and write down their experiences with specific emphasis on how they felt about sharing information; ensuring information shared was understood, lessons learnt during the presentation of the health education programme and possible suggestions for improvement of the programme or preparation to implement a health education programme. An open ended questionnaire with basic questions was distributed to all students involved in presenting the programme and they filled in the necessary information and returned the forms anonymously (Table 2).

Data Analysis

The information for each question was recorded from each student's response

Table 1: Outline of the health education programme.

Week	Objective	Content
1	Overview of chronic diseases of lifestyle	Knowledge of risk factors and health risk behaviour as it relates to chronic diseases of lifestyle. <ul style="list-style-type: none"> · What? · Why? · How?
2	Identifying risk factors as it relates to CDL	Give a case and learners must identify the risk factors present and go and research why? <ul style="list-style-type: none"> · Diabetes · Hypertension · Stroke
3	Research information relating to CDL identified	Bring research material and pictures to make a poster that will highlight the risk factors for chronic diseases of lifestyle
4	Poster design and presentation	Sharing of information gathered
5	Recap and evaluate knowledge	Evaluation of knowledge

independently in an excel program and they were then coded according to similarities. These codes were compared across the responses to identify relations within the data and categorise key concepts. Responses identified were discussed by the author and an independent reviewer and consensus was reached on the final groupings of the responses. All the groups are presented with quotes to ensure the trustworthiness of the information provided.

RESULTS

A total of 12 forms were returned which were all the students who participated in the running of the health education programme. The participants included four male and eight female physiotherapy students. The results of the questionnaire are presented according to the similar responses under each question and a summary in Table 2 below.

Expectations of the programme

The expectations of students linked to the programme were mainly linked to imparting knowledge (8) with the main focus being on the task at hand. Only 2 therapists reflected on an expectation being that the knowledge given to the participants would empower them to make informed decisions about their health.

“As young people I hoped that the information we were going to give them

would help them make some behavior changes”

Presenting the programme

The students reported that they enjoyed presenting the programme (12) as they knew the topics. The parts they found challenging was the process of facilitating learning (8) and ensuring participation (6).

“It was easier when we presented the information and participants asked questions and we answered. However, when we had to facilitate the section where they had to find information for themselves and teach others. This was challenging. It’s easier to just teach but to ensure that they (participants) are learning is not easy”

What did I like most about the programme?

Most of the students (9) reported that the outcome where the participants presented their work was the most rewarding. The interaction of the participants and their enjoyment was also satisfying to the students. This emphasized the building of relationships as part of conducting good health education programmes. The students also highlighted that the relevance of health education and health promotion became evident during this programme (6). They liked the fact that

they could provide information that was relevant to the young people.

“Wow I realized how effective health education could be and that I can assist people in making informed decisions about their health.”

Earlier training

The students had mixed feeling about the contribution of their earlier training in preparing them for conducting health education classes. Students felt that they had received the theory (7) but the exposure was limited and that the practical experience was valuable.

“We did get the principles of health education and health promotion but I never clearly understood how I would apply it until I had to do it. I developed my own personal skills and assisted in the development of the skills of the learners (participants)”.

Improvements recommended

Students indicated that more time was needed (7). This was the implementation of a structured programme however more time was needed to allow for interaction with the participants as they only gained the trust of the group towards the end. More emphasis needed to be placed on building relations with the participants. Students also recommended that the students should not come with preconceived ideas of the knowledge of the participants as they can also contribute.

“This programme allowed me longer time with the group than I had in previous experience but this also meant that the learners (participants) had more confidence to ask questions and interact with us. I think we needed more time.”

Lesson learnt

The students identified that they had developed their own personal skills such as presentation and communication skills as well as adopting a different attitude towards the health education aspect of physiotherapy (5). They also realized that the information they were providing to the participants was relevant to their own lives and that they needed to be role models (4).

“Health education and promotion definitely has a place in physiotherapy”

Table 2: Guiding questions for evaluation.

	Comment
1	What were your expectations of the programme
2	Comment on the presentation of the information to the learners with emphasis on the reaction of the learners and your reaction
3	How did you experience conducting and facilitating the programme
4	How did you ensure that the learners were learning
5	How did you manage the classroom situation?
6	Were you prepared earlier in your training for this and how could it be facilitated?
7	What were the lessons learnt
8	How could the programme be improved
9	How did you feel when the learners presented the knowledge they had gained from your programme

Table 2:

Question	Item	Quote
Expectations of the program	Knowledge improvement Impart knowledge	<i>" I expected the learners to complete a project and through the project enrich their knowledge</i>
	Project implementation	<i>about chronic diseases of lifestyle and hopefully encourage them to reflect upon their own lives".</i>
Presenting the program	Facilitating interaction	<i>There was little interaction between us and the</i>
	Dealing with non-participation	<i>learners. They did all the work. Maybe I thought I had to teach them and only later realized I am there to facilitate learning.</i>
What did I like most Earlier training	Interaction among participants and presenters Output of the learners Enjoyment of learners Knowledge vs practice Facilitation vs teaching	<i>The learners presentations and observing what they had learnt from their research and seeing how they enjoyed presenting their work and being able to answer the questions. We don't get much training in conducting group classes. Well maybe we do but in most cases we have the knowledge and we go and teach. This was different – we had to facilitate" "We are taught about health promotion and health education but its like we must just know how to do it – actually doing it is different and sometimes difficult."</i>
Improvements	Time	<i>"More time is needed to complete the</i>
	Translation from classroom to community	<i>programme because it was very rushed due to the interaction from the learners." "I would like to add a more interactive element between the learners and those presenting the program as well as the broader community."</i>
Lesson learnt	Knowledge is need for health education Methods of teaching Public speaking skills Personal development	<i>It was a learning experience for me as well as I had to read over the conditions and revise my work. It also helped me to improve my public speaking skills and confidence whilst speaking to large groups</i>

DISCUSSION

Education is one of the key components used in health promotion activities by physiotherapists (Reynolds,1996). Integrating the principles of health promotion in the field of physiotherapy requires an acknowledgment of a wider perspective on health than the one that generally underlies physiotherapy based on the still-dominant biomedical model (Perreault, 2008). In the current study, students' expectation of this intervention was to educate the participants. The method of education envisioned by the physiotherapy students was not supported by the structure of the health education programme as it required facilitation rather than didactic teaching. From the views of the physiotherapy students the presentation or lecture was

the easiest method of transferring knowledge and using the case study approach and group work as indicated in this health education program, had both negative and positive effects. According to Bonner (1999), when the skills that are to be developed are complex, the teaching methods used should involve active participation of the learner. The physiotherapy students first had to master the skill of facilitation before the methods used could facilitate learning in the participants.

Ultimately the students' expectations were met, however, they still identified a gap between knowledge and skills acquired during university education and practical application. This is similar to the study by Hunt, Adamson and Harris (1998) that highlighted that

physiotherapists only felt "partially" prepared by university education for applying certain aspects in practice. The authors further emphasise that one of the challenges that university educators face is finding the balance between equipping students with knowledge and skills and providing them with opportunities that enable them to develop as health professionals.

The students also identified that they developed their own personal skills as well as the skills of the participants. This is in line with the principles of health promotion which highlights "development of personal skills" (WHO, 1986) as one of the pillars of health promotion. Boucaut (1998) also highlighted in her study that health education activities by physiotherapists can meet some of the

aims of health promotion as indicated by the Ottawa Charter. This is similar to the study by Rew, Rochlen and Murphey (2008) that highlighted the personal development of the health educators as a positive result of implementing the health education programme. It is thus evident from the findings that as a learning opportunity the implementation of a health education programme can assist students in achieving the 4 main themes of learning but there is a need to provide more opportunities.

The implementation of health education programmes by physiotherapists is thus a reality and the need to provide students with the relevant experience in various settings is essential. This was highlighted more than 10 years ago by Gahimer and Domholt (1996) which stated that the physiotherapy profession should include more opportunities for health education and health promotion. These changes recommended should be in line with the changes in health care models which have started placing more emphasis on disease prevention, promotion of healthy lifestyles and management of chronic diseases of lifestyle.

CONCLUSION

In the current study it is evident that although students may be trained in health promotion principles, there is still a need for training institutions to provide adequate practical exposure. In addition, the move towards primary health care in South Africa highlights the need to emphasise that health professionals need to realise that patients need to be taught to take responsibility for their own health and can also contribute to their own health.

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