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A peer-led approach to promoting health education in schools: The views of peers

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Peer-led health promotion strategies in schools have been found to be effective in promoting healthy behaviours amongst youth. This study aimed to evaluate the views of the peer educators in implementing a health education programme using a qualitative approach. Informal discussions and eight in-depth interviews were used to explore the views of the 10 peer educators. Information from the interviews was transcribed verbatim, analysed, and coded thematically. The themes that emerged from the analysis of the informal discussion and in-depth interviews were grouped into categories, which included peer educators' experience of implementing the intervention, personal growth and experience with interacting with young people, and personal reflection on the presentation of the intervention. The role of peer educators was shown to be crucial to the success of peer-led programmes, but it is clear that equipping and supporting them through the process of implementation is essential.

Key words: constructivism; experience; health education; interventions; life orientation; mixed methods design; peer educators; peers; schools; youth

Introduction

Peer-led health education strategies have been recognised as a popular and effective method of providing health education in schools. Mellanby, Rees and Tripp (2000) concluded that there is strong evidence for the effectiveness of peer-led health education strategies. Peer-led education has been widely used in schools to address issues such as Human Immunodeficiency Virus (HIV) prevention (Van der Maas & Otte, 2009; Visser, 2007), sexual health promotion and education (Kim & Free, 2008; Mason-Jones, Flisher & Mathews, 2011; Tolli, 2012) and smoking prevention (Bosi, Gorini, Tamelli, Monti, Storani, Carreras, Martini, Allara, Angelini & Faggiano, 2013). Limited evidence exists of peer education programmes being used in schools to address chronic diseases such as asthma (Al-sheyab, Gallagher, Crisp & Shah, 2012), or risk factors for non-communicable diseases such as physical inactivity (Lambert, 2012).

The possible need for peer-led intervention focusing on risk factors for chronic diseases amongst young people needs to be determined. Literature indicates that there is an increase in obesity and several risk factors for non-communicable diseases in Africa, and more specifically South Africa (Frantz, 2006; Mayosi, Flisher, Lalloo, Sitas, Tollman & Bradshaw, 2009; Vorster, Venter, Wissing & Margetts, 2005). Research has shown that addressing the risk factors for non-communicable diseases such as physical activity participation and diet, can lead to a decreased risk of coronary heart disease, hypertension, type 2 diabetes mellitus, and cancer at several sites (Grundy, Blackburn, Higgins, Lauer, Perri & Ryan, 1999). Thus, the need to use peer-led intervention in schools to address or influence people who are at risk for chronic disease needs to be assessed.

Evidence exists that peers may have an influence on those who are at risk for chronic disease, such as diet and physical activity participation (Finnerty, Reeves, Dabinett, Jeanes & Vögele, 2010). A young person's peer group has a great influence on the way he or she behaves. This is true of both risky and safe behaviour. Peer education thus makes use of peer influence – in a positive way. As peer-led interventions are based on the assumption that behaviour is socially influenced and that behavioural norms are developed through interaction (Campbell & MacPhail, 2002), this form of intervention can be advocated to promote more positive health behaviour amongst youth. The credibility of peer educators in the eyes of their target group is indeed an important base upon which peer education can be built.

The process of peer education is perceived as receiving advice from a friend 'in the know', who has similar concerns and can identify with an understanding of what it is like to be a young person. In addition, peer education is also a way to empower young people; it offers them the opportunity to participate in activities that affect them and to access the information and services that they need to protect their health.

The increased prevalence of risk factors for chronic diseases of lifestyle amongst young people, if allowed to become a public health concern, will have a definite impact on the economy of the country (Frantz, 2006). Increasing risk factors such as tobacco smoking, harmful use of alcohol, physical inactivity, and unhealthy eating patterns will contribute to mortality. This increased prevalence associated with low awareness and knowledge of the risk factors as well as poor socio-economic conditions can lead to various challenges, when attempting to implement health education interventions. Geneau and Hallen (2012) indicate that there is a need for concerted efforts to combine efforts in addressing HIV/AIDS (acquired immune deficiency syndrome) and non-communicable diseases. Therefore if peer education interventions in schools have been proved to function in creating awareness regarding HIV/AIDS and sexual health, then using this method of health promotion to address risk factors for chronic disease should be considered.

Teachers have a strong influence on how learners actually learn, and the theories of learning they believe in may influence the type of teaching methods they use. Various theories can be identified that can be linked to peer education. For more than a decade, constructivist perspectives on learning have become popular, and have caused awareness among teachers of knowledge-generation and the theory of learning. Constructivism is a theory about *knowledge and learning*. It describes knowledge not as truths to be transmitted or discovered, but as emergent, developmental, non-objective, viable constructed explanations from people engaged in meaning-making in cultural and social communities of discourse (Duffy & Cunningham, 1996). Learning from this perspective is viewed as a self-regulatory process of struggling with the conflict between existing personal models of the world and new insights, constructing new representations and models of reality as a human meaning-making venture.

Jonassen (1991) highlights that meaningful learning or 'purposeful knowledge' may be promoted via a learning environment that has three main features, which include the use of authentic problems; secondly, the learning environment should represent the natural complexity of the real world and avoid over-simplification of the task and instruction. A constructivist-learning environment should support collaborative knowledge construction through social negotiation. Social negotiation of knowledge has been identified as a key aspect of knowledge construction in that it allows individuals to test their constructions against one another and to gain new understandings from one another. According to Applefield, Huber and Moallem (2001:37), "a constructivist framework leads teachers to incorporate strategies that encourage knowledge-construction through primary social learning processes in which students develop their own understanding through interaction with peers and the teacher". 'Involving' the participants in an experiential training workshop in an active way that incorporates their own experience, is essential. Such experiential learning provides the trainees with an opportunity to begin developing their skills with immediate feedback. It also gives them the opportunity to participate first-hand in many of the training exercises and techniques, before they engage other peer-educator trainees in such exercises. One area of the South African curriculum that allows for students to strongly contribute to the learning environment from their own experiences is the module of Life Orientation.

Life Orientation is a subject implemented by the Department of Education in the school curriculum, aimed at providing learners with the necessary knowledge and skills to move from adolescence into adulthood (Department of Education Republic of South Africa, 2003).

According to Prinsloo (2007), Life Orientation is an important aspect of the school curriculum, and the challenges faced by schools in implementing the Life Orientation curriculum should be addressed sooner rather than later. With the implementation of Life Orientation in the schools, various barriers, which included that teachers "struggle to understand the worldview of learners from different cultures in one classroom, were experienced. They felt that they did not succeed in realising the aim of the outcome, personal well-being, because they could not empathise with or understand the frame of reference of many learners in the class" (Prinsloo, 2007:116). The argument for examining peer education within the context of constructivism is appropriate in assisting addressing these barriers. In addition, peer-led education programmes may be able to assist with the challenges identified by Prinsloo (2007), as the peer educators are able to promote acceptance and ownership of the programme. As mentioned earlier, the programme can be used to empower the peer educators with skills and knowledge that can be used in other areas in communities, thus providing an economical or more cost-effective resource that can be used more broadly. The aim of this paper is to explore peer educators' experience in implementing a health education programme in a school.

Materials and Methods

This study formed part of a larger study which aimed to improve the knowledge of high school learners, as it relates to risk factors for chronic diseases of lifestyle. Other aspects of the programme have previously been published in Frantz (2009) and Frantz (2011). The aim of this aspect of the programme was to empower a group of young people in various ways which included the ability to provide health-related information to their peers. In addition, they would demonstrate communication skills, and facilitate discussions on risk factors related to chronic diseases of lifestyle, in this way assisting their peers to make informed decisions about their health. The programme focused on an authentic problem, namely risk factors for chronic diseases of lifestyle, and highlighted the complexity of the problem in terms of the current situation and the impact if this is allowed to continue. Knowledge-construction was assisted by the method of presentation and involvement of participants in the programme. The programme was designed to fit in with the criteria of the Life Orientation Programme for Grade 8 learners according to the 2005 curriculum (Prinsloo, 2007).

Research Design

This study formed part of a mixed methods study which employed an explanatory sequential research design. The broader study was implemented in high schools in the Western Cape between 2008 and

2012, and was conducted in different phases. Phase 1 focused on the implementation of the health education programme into schools in the Western Cape and on evaluating the improvement of knowledge amongst learners as it relates to risk factors for chronic diseases of lifestyle. The quantitative aspect reported that the knowledge of the learners improved after the health education programme (Frantz, 2008, 2011). Phase 2 aimed to evaluate the implementation process of the study, where it initially had been implemented by health professional students as part of their health education and promotion interventions (Frantz, 2009), and from 2011, the study changed its strategy, aiming to equip peer educators to implement this study. Thus, this study reports on the qualitative aspect, where the views of the peer educators are explored.

Participants

Peer educators from purposively selected schools in the Western Cape were identified to participate in this study. Schools were identified based on geographical areas in the Western Cape where there was an increase in risk behaviour among adolescents. Post-matriculation learners from the 10 specified schools were identified and approached to participate in the study. The learners were selected based on their availability and willingness to volunteer, and one of the major motivating factors was that the learners had not continued with post matric studies. The researcher paid the peer educators a travelling and food allowance. They were informed about the study and the commitment that would be needed from them and those who were interested, and told that they were expected to attend a briefing meeting and training session. The peer educators were purposively selected by the researcher and they in turn were asked to identify interested peers (snowball sampling), who were then approached to participate in the study.

Training

The peer educators participated in a one-day training workshop, where they were exposed to the resource material and the content of the intervention programme. The specific outcomes of the intervention programme were to allow the participants to develop knowledge relating to the concept of chronic diseases of lifestyle and their risk factors, to interact personally with someone who had knowledge, either personal or otherwise, of a case related to chronic diseases of lifestyle, and to allow the participants to identify personal risk factors present in their own lives (Frantz, 2011).

In addition, the training aimed to familiarise the peer educators with the aims of the project as well as their role in the process, and to provide skills to deal with small groups as well as large classes. During the training process, peer educators

were allowed to add their own experiences in their communities to the training material in the programme. The researcher provided the training, and allowed participants to roleplay, as well as ask questions during the training process in order to familiarise them with the content. In each school, the peer educators were paired in order to promote their confidence.

Programme Implementation

The programme was implemented in 10 schools in the Western Cape, South Africa. It ran for a period of five weeks, and was implemented among the Grade 8 learners. Peer educators (n=10) ran the programme for five weeks with a total of 28 Grade eight classes, which reached approximately 350 learners. During the programme pre- and post-test, knowledge questionnaires were obtained from 320 learners. Peer educators in each school were allowed to work out their schedules according to the Life Orientation curriculum of the schools and the number of classes targeted. The responsible teacher or principal in each school assisted the peer educators in planning the weekly activities, and helped them to share their initiatives with other teachers involved.

Data Collection and Analysis

Informal discussions with the participants took place on a weekly basis (n=five) as the programme progressed to address challenges and understand its strengths and weaknesses. All information was tape-recorded and notes were taken during discussions. The informal discussions lasted from 30 to 45 minutes, depending on the issues that arose. In-depth interviews (n=eight) were conducted with the peer educators to obtain information related to the process of implementation, as well as their own personal growth and experiences in interacting with the learners and other young people at the end of the intervention. Information from the interviews was transcribed verbatim, analysed, and coded thematically. The researcher read each transcript, and notes made in the margins to highlight interesting concepts that emerged. The different concepts were listed and categorised. This was repeated for each transcript, and then the common categories were grouped into themes (Pope, Ziebland & Mays, 2000). Themes identified were discussed by the author and an independent reviewer, and consensus was reached on the final themes. All themes were presented with quotes to ensure the trustworthiness of the information provided. Ethical clearance was obtained from the University of the Western Cape (Project number 08/04/10). Permission was obtained from the Western Cape Department of Education, the principals of the selected schools, and parents of the learners, as well as the learners themselves, for the implementation of the programme. In addition, in-

formed consent and permission to record the interviews and informal discussions was obtained from the peer educators.

Results

A total of 10 peer educators participated in the study, two of whom were male and eight of whom were female. The mean age of the peer educators was 19.3 years and they had matriculated one to four years prior to the intervention.

The themes that emerged from the analysis of the informal discussion and in-depth interviews were grouped into categories, which included peer educators' experience of implementing the intervention, personal growth and experience with interacting with young people, and personal reflection on the presentation of the intervention.

Process of Implementation

The interviews demonstrated that peer educators had mixed feelings about implementing the programme. These mixed feelings and the context of the feelings were important as they could have impacted on the successful implementation of the programme. The initial experience was at times discouraging and frustrating, but eventually became one of excitement and a sense of achievement. The constraints identified focused on the logistics of implementing the programme and the commitment from the schools.

The school system is not adequately equipped to deal with such a programme [be]cause it seems like the life orientation teachers change on a weekly basis [...] very frustrating! [sic] (P1);

The schools don't have laptops to do the presentation [...] they only have data projectors [...] this meant I had to start a week later [be]cause I needed overheads (P2);

Teachers forgot about us and did not make the necessary arrangements as was planned and discussed – this impacted on the successful implementation of the programme [...] (P6).

Amidst the initial challenges, the peer educators still highlighted the fact that they they tended to enjoy the process and the final outcome. They appreciated the interaction with their peers and the support from the teachers, as the teachers came to understand the role the peer educators were to play and the value-add that their presence made. They also valued the amount of dedication their peers put into performing the tasks, thus indicating the value they placed on the course.

The questions the learners ask are interesting and I can answer them [be]cause the supporting documents help (P4);

The interaction of the learners was great and the posters were very well done – they really worked hard and I was surprised [be]cause I thought they would not listen to me (P5);

Some teachers commented on how well the groups were working and the excitement for the class – that was good to hear (P1);

I think the principal and other teachers started appreciating our presence when we could fill in when there were teachers off sick (P3).

Personal Growth and Experience

There was evidence of a reciprocal appreciation during the process, as the peer educators were excited about the impact they could have on the learners, as well as the influence the learners had on them. They reported that they did not realise the extent of the influence they could have by sharing experiences and identifying solutions to specific challenges. This influence on their peers was linked to the information that they could provide from their own experiences and knowledge. The peer educators also realised that their role required personal reflection, which was not part of the preparation process. The experience of being a peer educator and acting as a role model also contributed to their feeling good about their own accomplishments.

Do you know that they [the learners] were actually interested in what I had to say and they listened? (P6);

I had several after-class discussions with learners wanting to know more, and asking why this was important to me and I had to think about my response [be]cause they were really looking to me for answers – that was a big responsibility (P5);

Someone asked how can they also do this [be a peer educator] when they are done with school – cause they think it is cool (P9);

After-class discussions caused me to reflect on own behaviour and realise that I needed to make some decisions about my behaviour, and I wasn't sure if I was ready (P2).

The learners also had an impact on the peer educators. The information provided by the learners on their health behaviours made the peer educators realise the risk to which the learners were exposed. The unintended output from the interactions with the learners led to the peer educators wanting opportunities to provide the learners with more information. Peer educators also reported on how being challenged by the learners affected their confidence.

They are involved in lots of things that they should not be – it's scary. I have younger family at that school and it made me wonder [...] (P8);

They are still young and have the problems (health problems) – how will they get old? The learners are very irresponsible at times – we need to tell them more and provide them with more information (P4);

I did not like the way they challenged me – it made me feel small [...] I did not like speaking in front of people before but took the challenge but I must say it wasn't always nice (P3).

Personal Reflection on the Presentation of the Course

The peer educators indicated that by implementing the intervention they familiarised themselves with

the content and it helped them to improve their own communication and presentation skills. Their knowledge of the topics improved and it assisted in developing their ability to critically review the work of others and give constructive feedback.

Risk factors for chronic disease was not something I knew [about], but understanding the topic now I can look at my own family and I can tell them that what they are doing could lead to various diseases (P7);

I had to learn that when giving feedback on the posters I had to be objective and could not let my own personal views influence my decisions too much. That is not always easy (P4);

In presenting this course I realised that I must prepare [...] ooh [sic][...] I learnt to think how teachers work [...] I also realised that you need to take time to explain things [...] the learners don't just get it [sic] the first time (P5).

Discussion

Peer education interventions in schools are an acceptable model of health education and health promotion that has been documented previously (Al-Iryan, Basaleem, Al-Sakkaf, Kok & Van den Borne, 2013; Warwick & Aggleton, 2004). There is a belief that theoretically based peer education interventions may help improve knowledge and ultimately assist in changing adolescent risk behaviour (Mahat, Scoloveno, Ruales & Scoloveno, 2006). The impact of school-based peer education interventions has been shown to have a positive effect on the recipients (Al-Iryan, Basaleem, Al-Sakkaf, Crutzen, Kok & Van den Borne, 2011) but the impact on the peer educators needed further investigation. According to Audrey, Holliday and Campbell (2006) peer educators can be effective in diffusing health promotion messages related to risky behaviours. However, it is important to understand the experiences and views of the peer educators in implementing health education programmes in order to make this health promotion model a more successful and sustainable one. The role of peer educators is important to the success of any education programme. According to Choudhury, Brophy, Fareedi, Zaman, Ahmed and Williams (2009:43), "peer educators are the most important part of the course and should be well known in the community, have the ability to learn and the ability to teach the course". This was similar to the criteria used in the current study where the peer educators were alumni of the identified school.

This study aimed to provide an understanding of the impact peer education interventions have on the group that implements the intervention, namely the peer educators. When designing interventions, it is important that we consider the practical implications, and this article identifies some of the possible challenges designers of peer intervention programmes in schools should consider. In addition to the external factors that should be considered,

there are also internal factors that play a role. In the current study, the peer educators reported that they were affected in two ways: by the interaction with the learners, as well as by the content of the programme that they presented. This is similar to a study by Ochieng (2003) who demonstrated that peer leadership can result in changes of attitude in the peer leaders themselves, besides affecting behavioural change in the recipients. This positive impact could have far-reaching effects if peer educators start making changes in their own behaviour, and the influence of peer pressure can be used to positively influence others.

One other aspect that emerged was that prior training of the peer educators in implementing the intervention, and providing them with knowledge and resources, was important. This assisted them in addressing the questions posed to them on the topic. This is supported by Ebreo, Feist-Price, Siewe and Zimmerman (2002:420), who indicated that it is important to ensure that peer educators are "knowledgeable about the content and properly trained on their involvement." This tends to highlight the important role that health professional educators can play in the schools, and the contribution they can make in the recruitment and training of peer leaders to assist in combating the public health concerns facing the youth. This allows for consideration of partnerships between universities training health professional students, schools and communities. The impact on youth of risk factors for chronic disease is a concern for many stakeholders, and if effective partnerships can be encouraged between these stakeholders then the implementation of prevention strategies for risk factors of chronic diseases becomes an attainable goal.

It can also be deduced from the findings that the process of this intervention led to the peer educators being empowered with knowledge and skills. This empowerment led to them being willing to continue the discussion beyond the classroom and thus providing positive evidence for sustainability of the intervention at a relatively low cost. In addition, using established networks (post-matriculants) within the school context as peer educators was an effective method to disseminate information and empower the youth to become advocates of change without great expense. This is therefore an intervention strategy that can be used in poor socio-economic areas.

Conclusion

The role of peer educators in peer-led school interventions can contribute to an effective prevention strategy. However, in planning these peer-led interventions, it is crucial to the success of the programmes that the peer educators are equipped and supported throughout the process. Thus, sustainable partnerships with key stakeholders such as univer-

sities can assist in effective training of peer educators. Peer intervention designers also need to take into consideration the key role of the peer educators, and ensure that there are strategies in place to evaluate the impact that implementing the interventions may have on the peers. It therefore becomes essential that we realise that when constructing purposeful learning environments for various stakeholders, the role of the stakeholder must be understood as a key aspect of providing an authentic learning environment.

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