The Peer Education Approach in Adolescents- Narrative Review Article

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Abstract
Adolescence is an important stage of human life span, which crucial developmental processes occur. Since peers play a critical role in the psychosocial development of most adolescents, peer education is currently considered as a health promotion strategy in adolescents. Peer education is defined as a system of delivering knowledge that improves social learning and provides psychosocial support. As identifying the outcomes of different educational approaches will be beneficial in choosing the most effective programs for training adolescents, the present article reviewed the impact of the peer education approach on adolescents. In this review, databases such as PubMed, EMBASE, ISI, and Iranian databases, from 1999 to 2013, were searched using a number of keywords. Peer education is an effective tool for promoting healthy behaviors among adolescents. The development of this social process depends on the settings, context, and the values and expectations of the participants. Therefore, designing such programs requires proper preparation, training, supervision, and evaluation.

Keywords: Adolescent, Peers, Peer education

Introduction
Adolescence, an important stage of human life (1), involves crucial developmental processes (2) through which a person goes over to adulthood from childhood (3). These changes may potentially pose pressure on adolescents (4) and cause multidimensional problems necessitating a holistic approach. The majority of adolescents experience some level of emotional, behavioral, and social difficulties (2, 5). On the other hand, adolescents naturally tend to resist any dominant source of authority such as parents and prefer to socialize more with their peers than with their families (4, 6). Research suggests that adolescents are more likely to modify their behaviors and attitudes if they receive health messages from peers who face similar concerns and pressures (7). A peer is a person whose has equal standing with another as in age, background, social status, and interests. Peers play a critical role in the psychosocial development of most adolescents. They, in fact, provide opportunities for personal relationships, social behaviors, and a sense of belonging. Therefore, peer education is considered as a health promotion strategy in adolescents (8, 9).

Adolescents comprise 20% of the world population and live mostly (85%) in developing communities (10). Moreover, about a quarter (25.1%) of Iran’s population belongs to the age group of 11-14 years old. Unfortunately, more than half of this huge population does not develop healthy life skills. Since peers can effect on each other's feelings of health, habits, and behaviors (11, 12), vari-
ous studies have indicated peer education to be more effective than traditional methods (e.g. training provision by teachers) when sensitive subjects like sexual relationships and substance abuse are concerned (12). Studies have also evaluated peer education as a mechanism to promote behavior and attitude modification (13). Peer education has been shown beneficial in improving knowledge and the intention to change behavior in human immunodeficiency virus infection/ acquired immunodeficiency syndrome (HIV/AIDS) prevention programs among high school students (14). It is, hence, a system of delivering knowledge that promotes social skills (15).

As the important role of peers in quality of life of adolescents warrants further research on peer education, the present study reviewed the peer education approach in adolescents. Knowing the outcomes of different educational approaches will help choose the most effective programs in training adolescents.

**Searching Method**

In this narrative literature review, databases of PubMed, EMBASE, ISI, and Iranian databases including IranMedex and SID were searched to review the relevant literature. A comprehensive search was performed through PubMed and Google scholar using the combinations of the following keywords: adolescent, peer, peer group, peer education, peer intervention, peer educator. All published data from 1999 to 2013 were then included in this review.

**Results and Discussion**

**Peer education (PE)**

Peer education is known as sharing of information and experiences among individuals with something in common (16, 17). It aims to assist young people in developing the knowledge, attitudes, and skills that are necessary for positive behavior modification through the establishment of accessible and inexpensive preventive and psychosocial support. Peer education programs mainly focus on harm reduction information, prevention, and early intervention. The youth have accepted peer education as a preferred strategy to reach unreachable populations such as sex workers and to approach and discuss topics that are insufficiently addressed or considered taboo within other contexts (17-19). Sexual health peer education has been found to significantly increase the use of modern contraceptives and methods to prevent sexually transmitted infections (STIs) (20). A systematic review of interventions to prevent the spread of STIs among young people indicated that peer-led interventions were more accepted, and thus more successful in improving sexual knowledge, than teacher-led interventions (21).

Different methods of peer education have been proposed. The audience can be reached through a variety of interactive strategies such as small group presentations, role plays, or games (15). Formal delivery of peer education in highly structured settings such as class teaching in schools is also possible. Other methods may include informal tutoring in unstructured settings during the course of everyday interactions or individual discussions and counseling. Various methods are adopted based on the intended outcomes of the project (e.g. communicating information, behavior modification, or development of skills) (22).

**Peer educator**

A peer educator is a member of a peer group that receives special training and information and tries to sustain positive behavior change among the group members (18, 23). The levels of trust and comfort between the peer educator and his/her peer group will facilitate more open discussions on sensitive topics (24). Peer educators can in fact act as role models of attitude and behavior for their peers (25).

Peer educators should receive adequate training enabling them to understand the purpose of the program, be good listeners, provide encouragement, motivation, and support healthy decisions and behaviors. They should also know other sources of information and counseling so as to refer other peers to appropriate help (5).
More attention to the specific personal characteristics, for instance leadership skills of peer educators is important (26). Identification and selection of peer educators with sufficient confidence, technical competency, compassion, and communication skills who are accepted by other peers are crucial aspects of program success (27). Borgia et al. stated that peer educator selection is a crucial and delicate point in the efficacy of peer education interventions (28).

Peer educators should allow that emotions, feelings, attitudes, and beliefs to be expressed and discussed openly (29). They should also be aware of the usefulness of jokes and humor in establishing relationships with the target group (23). Moreover, initiation of trainings at early ages of adolescence will maintain and consolidate a healthy function. Nevertheless, educational outcomes will widely depend on the relationship with peers (29). Sharing socioeconomic conditions with program participants, peer educators are able to make educational material accessible and credible to participants and hence increase the efficacy of a peer education program (15). A variety of financial, intellectual, and emotional reasons leads to the attractiveness of youth peer education. In addition, the participation of unpaid volunteers makes peer education inexpensive (30).

**Theories of Peer Education**

As a broadly accepted effective behavioral change strategy, peer education relies on several well-known behavioral theories:

**The social learning theory** asserts that some individuals function as role models of human behavior due to their aptitude for stimulating behavior changes in other individuals (31).

**The theory of reasoned action** states that a person’s perception of social norms or beliefs about what people, who are important to the individual, do or think about a particular behavior can affect behavior change (32). In other words, people’s attitudes toward changing a behavior is strongly influenced by their view of its positive or negative consequences and what their peer educators would think about it (7).

**The diffusion of innovation theory** considers an innovation as new information, an attitude, a belief, or a practice that is perceived as novel by an individual and that can be diffused to a particular group. This theory employs ‘opinion leaders’ to propagate information, influence group norms, and finally act as change agents within the population they belong to (27).

**The theory of participatory education** has also played a key role in the development of peer education. According to participatory or empowerment models of education, powerlessness at the community or group level along with socioeconomic conditions caused by the lack of power are major risk factors for poor health (7).

**The social inoculation theory** postulates that people may adopt unhealthy behaviors under social pressures (33).

Other available theories (the role theory, health belief model, and transtheoretical model) imply partnership, ownership, empowerment, and reinforcement as the critical principles of peer education.

**Peer education program**

Peer education programs have been used as public health strategies to promote various positive health behaviors such as smoking cessation and violence, substance abuse, and HIV/AIDS prevention. Since such programs seek to produce behavior change in a peer group (the unit of change) by the help of a peer educator or facilitator (the agent of change) (34), they may simultaneously empower the educator and the target group by creating a sense of collective action. In non-hierarchical structure, the management structure of peer education comprises two distinct parallel roles (15), i.e. peer educators and adult support workers. While the first group are the “bosses” and control the direction of the program, the second group (also known as program facilitators) guide and support the peer educators throughout the process (35, 36) (Fig. 1). Peer education programs require careful planning (37), identification and training of peer educators, and follow-up evaluations.
Peer educator training, as the most important component of a peer education program, involves:

1. An introductory meeting to familiarize the peer educators with the concept of peer education and the training needs;
2. Training the educators with communication, facilitation, research, and evaluation skills;
3. Providing opportunities for personal development;
4. Providing access to formal knowledge (13).

The period between the training and the delivery of knowledge to the target group should not be longer than a few weeks (23). After the initial training, peer educators will undoubtedly require continuous supervision and opportunities to give feedback about the program (38).

Peer education strategies engage all five senses and can also improve the participants’ power of thinking and innovation. In fact, the participants will take part in all stages of the program including planning, implementation, and evaluation (12). Studies with more rigorous designs reported peer education programs to increase knowledge and help-seeking about STIs and condom use to prevent HIV infection and to delay first sexual experience (39). Youth peer education programs, whose numbers are growing throughout the world, are extensively used to promote reproductive health. These programs require appropriate technical frameworks, particularly training and supervision, to satisfy the needs of the young and adolescent volunteers (30).

Fig. 1: Management model of peer education program

The general approach to peer observation was first described in Bell's model (Fig. 2) which involved pre-observation meeting, observation, post-observation feedback, and reflection (40).

Fig. 2: Peer observation process (Bell’s model)

Peer education intervention

Peer education interventions are commonly employed to prevent HIV and other STI (41). By selecting and training peer educators, peer education interventions try to increase the peer group’s knowledge and stimulate behavior change among them. More cost-effective than programs that incorporate highly trained professionals; have been applied in various target populations including the youth, commercial sex workers, and injection drug abusers in developing countries (42, 43). A study in 10 African, Asian, and Latin American countries indicated that peer education interventions can be effective strategies in prevention of risky behaviors and increasing self-esteem and psychosocial aspects (12). According to Merakou and Kourea-Kremastinou, peer education interventions can affect the youth’s behavior about self-protection from HIV infection (25). Similarly, a systematic review suggested peer learning as an efficient method in improving the standing of health science students in clinical placements (44).

Peer education interventions can be used in multiple domains including physical activity, mental health, nutrition, HIV/AIDS and STIs, tobacco and alcohol use, and drug abuse. Visser believed that peer education can postpone the onset of sexual activity and hence play a critical role in the prevention of
HIV/AIDS among adolescents (45). Besides, other researchers have identified school-based HIV education as the basis of youth-focused HIV prevention interventions (46). Studies have found the mean score of knowledge regarding breast self-examination to increase in students who receive peer education about breast cancer prevention through the learning of self-examination (29, 47). Rhee et al. showed that a peer-led asthma self-management program can be successfully implemented and absorbed by adolescent learners (48). In addition, the peer education program designed by Karayurt et al. could increase knowledge about breast cancer, enhance the performance of breast self-examination, and improve perceived health beliefs (49). Peer mentorship has also been broadly and successfully used to treat alcohol and substance abuse disorders (50). Finally, some researchers believe that although school-based behavioral interventions which teach sexual health skills can improve the youth’s levels of knowledge and self-efficacy, they may not have great impacts on sexual behavior (51, 52).

Conclusion

We briefly reviewed the impacts of the peer education approach on adolescents. Peer education, which is considered as an effective tool in promoting healthy behaviors among adolescents (53), is a social process affected by the settings, organizational context, key personnel, and the values and expectations of the participants. It requires proper preparation, training, supervision, and evaluation. We found various studies suggesting the success of different peer education programs. We hope that this paper will serve as a starting point in the application of this method in health promotion.

Ethical Considerations

Ethical issues including plagiarism, data falsification, double publication or submission have been completely observed by the authors.

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