



## A Systematic review on the impact of peer education on self-care behaviors of patients

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### ABSTRACT

**Introduction:** One-of-a-kind education methods that are effective in facilitating and improving health and creating an appropriate learning environment are peer education. The peer is a person belonging to the same social group that people believe in terms of their ability to resemble themselves and can have powerful impacts on learning. Use their experiences to provide an educational program to other peers who are in trouble and yet they do not have the necessary skills in the care and control of symptoms associated with the disease. Can be helpful in controlling disease and controlling disease. This systematic review study was conducted to determine the effect of peer education on self-care behaviors in patients. **Materials and Methods:** In this systematic review Using articles published in the last 25 years on the impact of peer education on patient self-care behaviors. It was conducted in English and Persian by searching articles in search engines, authoritative scientific sites and databases SID, Google Scholar, Embase, Scencedirect, PubMed, Springer. In the first stage, 39 articles were found. Of these, 10 articles related to the topic published in the last 25 years were reviewed. **Results:** In this study, aimed at the effect of peer education on self-care behaviors of patients, ten articles were reviewed, the results of one of them, sponsored by peers in the self-care of patients with diabetes, showed that peer education led to increased self-care, proper use of medications and reducing the need for insulin in the peer group is more than controlled. **Conclusion:** The study showed that peer education seems to be an effective method for reducing anxiety in patients undergoing coronary artery bypass graft surgery. Therefore, it is recommended to use this educational approach in cardiac surgery to educate patients. Also, the effect of peer education on self-care behaviors in diabetic patients is significant. In addition to the impact of this type of training on the diseases studied in this study, this type of education can be effective in many other diseases as an effective way. Therefore, it is recommended to use this method in further research to reduce anxiety, improve self-care behaviors, and so on in patients.

**Key words:** Peer Education, Self-care Behaviors, Diabetic Patients, Multiple Sclerosis Patients.

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#### Introduction

Patients' compliance with these behaviors has a direct correlation with the reduction of morbidity and mortality, so compliance with self-care programs reduces the incidence of complications by more than 58% [1]. Self-care improves the quality of life, optimal metabolic control of the disease, reducing the number of hospital admissions and the cost of the treatment reduces the risk of cardiovascular complications that account for 70-80% of death in these patients. Any shortcoming in self-care behaviors leads to increased complications of disease in patients [2,3]. Self-care behaviors play

a vital role in many diseases, for example, failure to perform these behaviors in diabetic patients should be considered as the most important cause of mortality [3].

Diabetes mellitus is one of the most prevalent diseases caused by metabolic disorders. A chronic illness is a result of a disruption in the production and function of insulin in the body [4-13]. About 2 percent of the general population in Iran is estimated to have diabetes. Compliance with a program and diet in diabetic patients is one of the pillars of individual diabetes management. Lifestyle behaviors, including nutritional behaviors, play an important role in preventing and managing diabetes [14-23].

One-of-a-kind education methods that are effective in facilitating and improving health and creating an appropriate learning environment are peer education. The peer is a person belonging to the same social group that people believe in terms of their ability to resemble themselves and can have powerful impacts on learning. Use their experiences to provide an educational program to other peers who are in trouble and yet they do not have the necessary skills in the care and control of symptoms associated with the disease. Can be helpful in controlling disease and controlling disease [3, 24].

In Iran, peer education studies have been conducted on self-care behaviors in diabetic patients that have been effective [3], and it seems that this training is effective on some other diseases. One of the diseases can be thalassemia. Thalassemia is a hereditary anemia and patients with this disease are prone to stress and depression. Depression is one of the most common and debilitating problems in youth and adolescence. Depression may also cause some disorder in the mental and physical health of individuals [25-33]. For this reason, this kind of training can be useful.

This systematic review study was conducted to determine the effect of peer education on self-care behaviors in patients.

### Materials and Methods

This is a systematic review in order to achieve the study goal and to enhance the accuracy of reading and comprehension of it, based on the Broome method. Broome's method in the form of three phases of the search of texts, data evaluation and data analysis are done. So, in the search phase, the texts of post-retrospective studies are divided into four stages in terms of inclusion criteria, they are examined after obtaining the conditions for entry into the study, the content of the study is evaluated and at the end of the data were analyzed.

The criteria for entry of articles include studies published in Persian and in English, Access to their full text was possible, over the last 25 years, intervention studies have been conducted on the impact of peer education on patient self-care behaviors. Exit criteria included case studies, descriptive and qualitative studies. Also, unnamed and non-scientific studies as well as articles that lack the full text of the article, were deleted.

In this study using articles published in the last 25 years on the impact of peer education on patient self-care behaviors. It was conducted in English and Persian by searching articles in search engines, authoritative scientific sites and databases SID, Google Scholar, Embase, Sciencedirect, PubMed, Springer. In the first stage, 39 articles were found. Of these, 10 articles related to the topic published in the last 25 years were reviewed.

To achieve relevant studies, a wide range of keywords including Peer Education, Self-care Behaviors, Diabetic Patients and Multiple Sclerosis Patients was used as a one-to-one search, combined with the method "And" and "OR".

### Results

In this study, aimed at the effect of peer education on self-care behaviors in patients, ten articles were reviewed. These are the ten articles of the results of educational interventions It shows the impact of this type of training on patient self-care behaviors.

The results of the study [34] showed that teaching in a grouped manner by peer (one peer educates a group) better impact than peer-to-peer education (A peer educates a person) on the student's self-examination of breast and the student's health beliefs.

Based on the results of the study [3], after 12 weeks of peer-to-peer education program, the mean scores of self-care behaviors were different before and after intervention. In all dimensions except for foot care and drug behaviors, there was a significant difference between the two groups, this suggests the effect of peer education on self-care behaviors in diabetic patients.

Other study results [35], also showed that peer education was effective on quality of life in patients with mastectomy and the average quality of life scores increased before intervention.

Other study results [36], also peer-to-peer education is an effective way to reduce patient anxiety. In this study, the mean of anxiety in both groups was not significantly different on the day of admission. The mean anxiety in the intervention group was significantly different in comparison with the control group in the preoperative period, five days and four weeks after the operation.

Another study [37], which was done to compare the individual teaching method (by a researcher for a few patients) and the other on quality of life in patients with heart failure, in line with the results of study [3], both educational methods lead to improved quality of life for patients. But peer-to-peer education (one peer trains a number of patients), it has a longer-lasting impact on individual ways.

The results of a study titled Supporting peers in self-care in diabetes patients also showed that peer education leads to self-care, proper use of medications and Reducing the need for insulin in the peer group is more than controlled [38].

The results of a study comparing the effect of education on the prevention of HIV infection by peers, physicians and distribution of pamphlets on the knowledge of high school female students, showed that peer education has not been effective in promoting awareness of intervention groups [39].

Also, the results of another study that was titled comparison of nutrition education by peers and health personnel on nutritional, indices suggest that peer education has not been effective in raising awareness [40].

The results of a study that examined the impact of the peer group on improving the physical health of patients with multiple sclerosis, showed that peer education is effective on the level of physical health of patients and the average level of physical health of the patients in the intervention group was higher than before the intervention [41].

The result of a study in peer education on the anxiety of patients with multiple sclerosis, suggesting that peer education is effective in reducing anxiety in patients [42].

### Discussion

One-of-a-kind education methods that are effective in facilitating and improving health and creating an appropriate learning environment are peer education. The peer is a person belonging to the same social group that people believe in terms of their ability to resemble themselves and can have powerful impacts on learning. Use their experiences to provide an educational program to other peers who are in trouble and yet they do not have the necessary skills in the care and control of symptoms associated with the disease. Can be helpful in controlling disease and controlling disease. This systematic review study was conducted to determine the effect of peer education on self-care behaviors in patients.

According to study [36], that showed that there was no significant difference in mean of anxiety in both groups on admission day. However, the mean anxiety in the intervention group was significantly different in comparison with the control group before surgery, five days and four weeks after the operation. It can be said that it seems, peer education for candidates for coronary artery bypass graft surgery, an effective way to reduce anxiety in patients. Therefore, it is recommended to use this educational approach in cardiac surgery to educate patients.

According to study [37], which showed that the mean score of life quality before intervention in both peer and individual groups was not significantly different and immediately after the intervention, the mean of total quality of life in both peer and individual groups was significant. And the results

one month after the intervention in both the peer group and the individual, which was also meaningful. It can be said, the results showed that both educational methods lead to improved quality of life but the impact of peer education is greater in the long run.

According to study [39], which showed that the mean of pre-test and post-test scores was significantly different in all three intervention groups and the mean before and after scores changes in the training group by the physician was higher than the average change in scores before and after peer education and the latter was more than pamphlet and the greater boon test of these differences was statistically significant, It can be said that according to the findings of this study, prevention of AIDS by physicians is more effective in increasing students' knowledge.

According to study [41], that Showed that the underlying cause of the disease could be a predictor of self-esteem and the physical health of patients with MS, the factor of self-esteem also had an estimated 0.43 effect on physical health and the new finding of this study was a direct link between the perception of the disease and the physical health condition, It can be concluded that the results of this research can be used in nursing education management and nursing management in order to improve the physical health of patients with MS.

### Conclusion

The study showed that peer education seems to be an effective method for reducing anxiety in patients undergoing coronary artery bypass graft surgery. Therefore, it is recommended to use this educational approach in cardiac surgery to educate patients. Also, the effect of peer education on self-care behaviors in diabetic patients is significant. In addition to the impact of this type of training on the diseases studied in this study, this type of education can be effective in many other diseases as an effective way. Therefore, it is recommended to use this method in further research to reduce anxiety, improve self-care behaviors, and so on in patients.

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