SELF MANAGEMENT FOR IMPROVEMENT OF LIVING HEALTHY BEHAVIORIN PATIENTS WITH DIABETES MELLITUS

Hartanti & Jatie K, Pudjibudojo

Faculty of Psychology, Surabaya University, Indonesia

ABSTRACT:

The information provided about diabetes mellitus was not enough to improve healthy behavior. Self-management skills training such as controlling the cognitive, emotions and behavior of healthy living are expected to help improve the health behavior of people with diabetes mellitus. Cognitive dimensions of healthy behavior are measured through the Problem Areas in Diabetes Questionnaire (PAID) to determine the issues affecting the diabetes area. Emotional dimensions were measured with Cohen Perceived Stress questionnaire, while the dimensions of behavior were revealed by the Diabetes Self-Management Questionnaire (DSMQ) to determine the behavior of blood sugar control, diet, physical activity and medical treatment. Data collection was performed in the total population in Optima Clinical Surabaya and obtained 27 patients. People research subjects treated form of self-management skills with reference to the modules that have been developed by researchers. Manufacture of self-management module refers to the opinion of Kanfer (1984) and Lathan and Frayne (1990), by the management of cognitive, emotional, and behavioral. In consideration of these problems, the researchers sought to determine the influence of self-management for promoting healthy behavior in patients with DM. Self-management interventions used three kinds of techniques which are: cognitive management through reality and visualization counseling, emotional management grateful therapy and management behavior through visual imagery. Intervention method uses the principle of brief solution therapy for 3 weeks, consisting of one week for each type of intervention (cognitive, emotional and health behavior). The results showed that self-management is more effective to improve cognitive and emotions aspects, but cannot change the behavior of a healthy life. This indicated a significant decrease from the PAID score ($t = 2.170$ and $p < 0.05$) and Cohen Perceived Stress ($t = 7.867$ and $p < 0.01$). Healthy behavior did not change with $p > 0.05$ in glucose management, control diet, physical activity and medical treatment. The results showed that in order to be able to change health behavior, it still takes time although cognitive and emotional dimension has improved.

Keywords: *self-management, health behavior, people with diabetes mellitus.*

Diabetes Mellitus (DM) is one of the health issues that can have impact on human resources productivity. This disease does not only affect the individual, but more broadly affect the health system of a country. Although there is no national survey, with the change of lifestyle including diet, Indonesian society estimated DM patients are increasing, especially in the adult age and above in the entire socio-economic status. Currently DM disease prevention efforts have not reach the main priorities in health care, therefore the known negative large impacts caused among other complications of chronic heart disease, hypertension, brain, nervous system, liver, eyes, and kidneys. DM or diabetes is a disease caused by an increase in blood sugar levels (hyperglycemia) due to lack of the hormone insulin both in absolute and relative.

Diabetes mellitus (DM) is still a serious threat to society. It is evident that more and more people are diagnosed with the disease with blood sugar level more than normal. In some hospitals there is a pattern in the number of diabetics; for example in Haji Hospital Surabaya, in 2010,

recorded 2.828 patients with DM and in 2011 the number jumped to 10.070 patients. In Soewandhie Hospital, in 2011 there were 13.079 patients with DM. In both hospitals, about 50% of patients who came in experienced complications. Factors causing the incident are not certain. Early detection is minimal and blood sugar control is not routinely done; where the major cause of complications from conditions that accompany DM patients. DM diseases are also prevalent at younger ages ranging from 30 years. This disease does not just happen; it starts with lifestyle and non-balanced diet. A person diagnosed with diabetes at the age of 45 means that the diabetes occurred several years earlier, therefore, if the disease could have been detected earlier on, and then the likelihood of complications will be smaller.

According to Ogden (2007) the formation of a person's perception of the disease can vary, as well as in view of Diabetes Mellitus. Perception or negative thoughts can affect a person's blood sugar levels (Frayne, 1991). This stress can be caused by several things, among which is always thinking negatively related to the outcome of this disease. Overall, patients with diabetes need to look at three components of cognitive, affective, and behavioral. According to Glasgow, et al (2001), a diabetic patient would be living a good quality of life when all three components are already quite good, so it can adjust to the changes that occur as a result of diabetes. Bandura (2004) suggested the principle of self-regulation to be developed into self-management techniques. Gie (1996) is the self-management of all activities and measures set up and manage themselves as well as possible, so as to lead to the achievement of life goals. The first and main strategy in self-management is trying to find on your own all the advantages and disadvantages. By identifying them yourself, you can find out what is really needed in life. Glasgow, et al (2001) suggested that in order to be able to control yourself directly, then you can create or change a cue how objects, goods, things that exist around you to influence your behavior. Basis created for ourselves is the information that we have about ourselves by observing one's own behavior and the reasons that lie behind them, thus the individuals will get the information they need to organize themselves effectively.

METHODS

The design of experiments in this study is the one group pretest-posttest design (pretest-posttest single group). Subjects in this study are patients with diabetes, with the following inclusion criteria:

1. Willing to be a subject of research, by signing the informed consent.
2. Type II diabetes patients aged between 40 years to 65 years. Selection of Type II is based on the fact that Type II diabetes is more common than Type I (Taylor, 2006).
3. Being a member of the group in the diabetes clinic Optima Surabaya.
4. Staying with friends or nucleus family.

RESULTS AND DISCUSSION

The results showed that self-management is more effective to improve aspects of the cognitive and emotions, but cannot change the behavior of a healthy life. This indicated resources a significant Decrease from PAID score ($t = 2.170$, and $p < 0.05$) and Cohen Perceived Stress ($t = 7.867$ and $p < 0.01$). Healthy behavior did not change with $p > 0.05$ in glucose management,

control diet, physical activity, and medical treatment. Components of attitudes related to each other; Component cognitive, affective and tendency to act foster attitudes of individuals. From wherever we start the analysis of attitude, these three components remained in the bond system. The attitude of the individual is closely associated with their behavior. If the factors have influenced the attitude or the person grow, then there is consistent a between attitudes and behavior, such opinions Azjen (1988). The attitude of a person was supposed to be consistent with the behavior. Had an attitude inconsistent with the behavior, there may be factors outside human that makes attitudes and behavior inconsistent. These factors are external value system in society, including norms, politics, culture, and so on. Every behavior of human beings is affected by the development and growth.

In the development of human or other beings in general, it can be divided in three things: the maturation process, a learning process, and the process of disposition or talents. The results showed that in order to be able to change health behavior still takes time although cognitive and emotional dimension has improved. This study cannot change the behavior, but is only able to change your mind and emotions. This may explain that self-management is only able to change attitudes toward healthy living attitudes and healthy behavior has not changed. This is also supported several opinions among others Bandura (2004) suggested that self-management training will allow interactive guidance making it easier for a person to achieve the goals set. Taylor (1995) revealed that the involvement of others can be used as a means to change behavior. Lathan and Frayne (1990) suggested that self-management program to be effective if (1) Individuals have a desire to manage itself, (2) Individuals have a strong commitment to change, (3) Individuals is willing to do the recording or monitoring of his own behavior. If the individual does not have all three of the above, the self-management program will be difficult. Results of the study was the new DM patients wanted to be able to manage themselves, but have not yet committed and are willing to monitor their own behavior, so that the research was at the cognitive and emotional changes or a change of attitude and behavior change has not reached. Although the behavior of the diet is an important part in the management of diabetes mellitus, many people with diabetes fail to follow these suggested activities (Senecal et al, 2000). Lorig (2006), supports research showing that despite nutritional therapy is the main component of successful treatment of diabetes, but the seriousness of the patient in managing the nutrition and meal planning is one of the barriers to diabetes care. Based on the above it is necessary to arrange an intervention to improve the management of patients with diabetes mellitus eating behavior. Social cognition theory reveals that humans were able to control their own behavior. According to Bandura (Gibson, 2004), human behavior is largely self-regulated behavior (self-regulation behavior). Bandura (1994) suggested that the principle of self-regulation be developed into self-management techniques.

CONCLUSION

Self-management is only able to change the attitude of people with diabetes mellitus and has not been able to change health behavior. The results showed that the diabetic patient wishes to be able to manage themselves, but not yet committed and are not willing to monitor their own behavior. This study has recently come to the cognitive and emotional changes and has not change the behavior.

REFERENCES

Ajzen, I. (1988). *Attitudes, Personality, and Behavior.* Milton Keynes: Open University Press.

Bandura, A. 2004. Health promotion by social cognitive means. *Health Education & Behavior.* Vol.31 (2):143-164

Frayne, C.A. (1991). *Reducing Employee Absenteeism through Self-Management Training: A Research-Based Analysis and Guide.* New York : Quorum Books

Gibson, S.K. (2004). Social learning (cognitive) theory and implication for human resource development. *Advances in Developing Human Resources.* Vol.6 No. 2 : 193-210

Gie, T.L. (1996) *Strategi Hidup Sukses.* Yogyakarta:Penerbit Liberty

Glasgow, R.E., Toobert, D.J., & Gillette, D. (2001). Psychological barriers to diabetes self management and quality of life. *Diabetes Spectrum*, 14, 1,33-41. doi: 10.2337/diaspect.14.1.33

Kanfer, F.H. (1984). Self management methods, dalam *Helping People Change.*

Lathan, G.P & Frayne, C.A. (1990). Increasing job attendance through training in self management : A Review of two Field Experements. Dalam Kleinbeck, U dkk (editor). *Work Motivation.* Hillsdale : Lawrence Erlbaum Associates

Lorig, K. (2006). *Living a healthy life with chronic conditions: self management of heart disease, arthritis, diabetes, asthma, bronchitis, emphysema and others: third edition.* Boulder: Bull Publishing Company.

Ogden, J. (2007). Health Psychology: A Texbook 4th ed. New York: McGraw-Hill

Senecal, C., Nouwen, A., White, D. (2000). Motivation and diatary self care in adult with diabetes: are self efficacy and autonomous self regulation complementary or competing construct. *Health Psychology.* 19,5,452-457

Taylor, S.E. (1995). *Health Psychology.* New York : McGraw Hill Inc