



The Influence of Diabetic Experience against the Behavior of DM Controlling

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Abstract

The behavior control of diabetes mellitus can improve the life quality of patient through planning specific behaviors. The behavior can be reflected by the experience that diabetes itself or observed in surrounding. Therefore, this study was conducted to investigate the effect on behavior of diabetics experience against diabetes control. This type of study is explanatory research using cross sectional design. The collecting data was using diabetics experience related diabetes disease. The consecutive sampling technique was used to obtain 134 samples. Data were analyzed with chi square test. The results showed that the average 62.2% of diabetics to control diabetes well have a pleasant and unpleasant experience. Chi-square test results showed that diabetics experience have influence against the behavior diabetes control ($p = 0.043$). Findings influence on diabetics experience against the behavior control diabetes have implications for providing information and support positive consistently in order to become a source of knowledge and experience in improving the behavior good control of DM.

Keywords: diabetics experience; behavior of DM controlling.

1. Introduction

Diabetes mellitus is a group of metabolic disorders characterized by increased blood glucose levels (hyperglycemia) due to damage in insulin secretion, insulin action, or both of them [1].

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The cause of diabetes disease depends on the type of diabetes. There are two types of common diabetes and affects a lot of people, it were type diabetes 1 and type diabetes 2. In Diabetes 1, there are organ function problems occur so that the pancreas cannot produce insulin, while type 2 diabetes occurs because less the amount of insulin because the pancreas does not function well [2].

Diabetes can cause a variety of chronic complications, such as serebro-vascular disease, coronary heart disease, limb vascular disease, complications in the eyes, kidneys and nerves, if not controlled properly. If a person has been confirmed to have the disease, then it should control blood sugar levels in order to avoid various complications further. It required good understanding from diabetics related diabetes mellitus, and management, to follow the preventive measures recommended [3].

Until current, the population of diabetics is increasing from year to year. The International Diabetes Federation (IDF) reported in 2015, as many as 415 million people worldwide become patient of diabetes mellitus who are in the age range between 20 and 79 years, 80% of them live in the country which have the low and middle income. Predicted in the year 2040, the number of diabetics will increase to reach 642 million people, or one in 10 adults will suffer from diabetes. This equates to approximately three new cases every 10 seconds, or nearly 10 million per year. The largest increase will be more dominant in developing countries. This phenomenon puts Indonesia ranks seventh in 2015 with the number of diabetics as many as 10 million people or 6.7% of the total adult population in Indonesia and it is estimated by 2040 diabetes will increase to 16.2 million people [4].

The above figures will certainly rise as a modern lifestyle that is completely relaxed, almost instantaneous and sophisticated. The difficult thing are less than half the number of people with diabetes who want to try to control the disease and they are not aware of the importance of maintaining diet, exercise, take medication as well as control of blood sugar levels on a regular basis which is a parameter of diabetes cure [5]. Many diabetics who began trying to diabetes control efforts enthusiastically and maintain diet and undergo therapy carefully. But in subsequent years the enthusiasm becomes faded and they may not realize that their control is not as good as before [6]. It worsens the condition of diabetics.

The various efforts to control diabetes mellitus has been recommended by the health care team. The diabetics are encouraged to run the health lifestyle. The pattern of instant life such as the consumption of junk food, soft drinks, and smoking habits were more likely to aggravate the condition of diabetics should be exchanged with a healthy lifestyle, such as the consumption of vegetables and fruits which rich in fiber as well as fond of exercise .At the end a healthy lifestyle is very useful for the control metabolic status of diabetics in lowering the risk of diabetes complications. The monitoring of metabolic status of diabetics is important, and as part of the DM control behavior. The results of this monitoring as a handle adjustment diet, physical exercise, and medications to achieve glucose levels as normal as possible, so avoid the complications of diabetes [7]. Many factors that influence behavior of diabetics in controlling diabetes, lack of knowledge, lack of resources / health literature and incomprehension related to the disease [8, 9] socioeconomic [10]; and lack of access to health services [11]. The diabetics experience is also thought to play a role in controlling the behavior of DM, good experience that comes from observations of diabetics themselves or to others. So the focus of this study to determine the effect of experience in behavior of diabetics in controlling diabetes.

2. Materials and Methods

This type of study is explanatory research using cross sectional design conducted at 8 locations, Consist 3 hospitals and 5 health centers in the city of Makassar. The unit of observation is diabetes mellitus patients who had treatment to localized study a total of 143 patients were obtained using consecutive sampling technique, distribution of the samples in 8 locations customized research with the proportion of patients with diabetes mellitus visits per month. Collecting data was using a questionnaire that assesses instrument experience based on three aspects of themselves, their family and others. Data were analyzed using chi square test.

3. Result and Discussion

3.1 Result

The distribution frequency characteristics of the respondents indicated that most respondents were in the age group 46-55 years (35.7%), male sex (52.4%), high school educated (45.5%), has been suffering from diabetes for > 5 years (48.3%) , uncomplicated DM (55.9%), the majority of respondents were more likely to have an unpleasant experience related to controlling diabetes mellitus (83.9%) and other respondents had a pleasant experience related to controlling diabetes mellitus (16.1%).

Distribution of respondents' experience shows that there are 56.5% of respondents who have pleasant experience did not apply the behavior DM controlling well, while 65.8% of respondents who had an unpleasant experience always apply the DM control behavior well.

Table 1: Distribution of respondents' characteristics

Characteristic respondents	Amount (n)	Percentage (%)
Age Group		
26-35 years	1	0.7
36-45 years	24	16.8
46-55 years	51	35.7
56-65 years	43	30.1
>65 years	24	16.8
Gender		
Male	75	52.4
Female	68	47.6
Last Education Level		

Uneducated	7	4.9
Elementary School	22	15.4
Junior High School	22	15.4
Senior High School	65	45.5
Post Graduate	26	18.2
	1	0.7
Period suffering DM		
<1 year	17	11.9
1-5 years	57	39.9
>5 years	69	48.3
Complications		
No	80	55.9
Yes	63	44.1
Diabetics experience		
Pleasant experience	23	16.1
Unpleasant experience	120	83.9
Behaviour of DM controlling		
Yes	89	62.2
no	54	37.8

Table 2: The influence of diabetics experience againsts Behaviour of DM controlling

Experience	Behaviour of DM controlling				Total		p
	Yes		No		n	%	
	n	%	n	%			
Pleasant	10	43.5	13	56.5	23	100	0.043
Unpleasant	79	65.8	41	34.2	120	100	
Total	89	62.2	54	37.8	143	100	

CChi-square test results showed that diabetics experience diabetes affect the behavior of DM controlling (p = 0.043).

3.2 Discussion

Experience is defined as events that experienced by diabetics associated DM include personal events, family events and events of other people in their circumstances. Such coverage disaggregated by experience pleasant and unpleasant for the diabetics. The majority of the diabetics (84%) experienced an unpleasant event related to DM. Such unpleasant events include loss of body image as a result of drastic weight loss, decreased sensory sensitivity, diabetic injuries and other complications that accompany and death in the family / relatives as a result of the DM. But there is also the diabetics (16%) who have pleasant experienced in controlling the disease. They do not make controlling diabetes as a barrier in their daily activities, but enthusiastic with the treatment like maintaining a diet, doing exercise, managing stress, monitoring blood sugar levels and medication.

Experience of diabetics to control the disease were very heavy and tedious, because the disease is a chronic disease that can be suffered for decades and can cause severe stressor that affects the productivity of diabetics lives [12]. Control of Type 1 diabetes where blood sugar control becomes easier, this is because the insulin-dependent type 1, whereas in type 2 diabetes was more difficult to control blood sugar because it does not rely on insulin and more often because of the instant lifestyle.

The results of this study show that diabetics make effective control DM to prevent reoccurrence of unpleasant experience. The finding was proven by analysis result that showing that diabetics experience affects the behavior control of diabetes ($p = 0.043$). The finding was also supported by the frequency distribution of diabetics experience, both diabetics who have pleasant or unpleasant experience showed the average 62.2% in controlling diabetes, it means that the events experienced earlier would enable the awareness of patient of the importance in maintaining behavior control of diabetes mellitus.

Laurence Green in Notoatmodjo explains that a person's behavior were determined predisposing factors include beliefs, values, perceptions concerning one's motivation to act; supporting factors that include the availability of facilities and health facilities; and the driving factors that include attitudes and behavior of health care workers, family, or other officers that constituted a reference group of people's behavior [13].

DM control behavioral changes occur because of the perception and belief that by controlling the DM diabetes, it will improve their health condition and complications can be prevented. Perception and the belief that a thing can improve the state of health allows a person to get to know and choose the object with respect to the action to be taken. In accordance with the opinion of Notoatmodjo (2007) which states that the perception is the first stage in the act [13].

The perceptions of diabetics was started from their experience both pleasant and unpleasant. Diabetics who have longer suffering from diabetes has had a lot of experience about controlling Diabetes Mellitus, included in the arrangement of dining and physical activity. Having many experience was directly proportional to the increase in diabetes knowledge to inform and influence behavior.

Carolan and his colleagues [9] in their study entitled "Experience of independent diabetes management: study focus to Australian with diabetes type 2", revealed that diabetics find that it was so difficult and they worry in

managing diabetes self. Some diabetics complained about the lack of commitment to an eating schedule and the loss of enjoyment of food (spontaneous) [9]. It also supports the idea of diabetes researchers that the possibility that another diabetics who didn't apply good DM control behavior was due to events or conditions that happened.

Phenomenological study by [14], which focuses on the experience in compliance and undergo self-care in elderly individuals with Diabetes Mellitus who are undergoing therapy of treatment of hypoglycemic therapy and insulin concluded that waywardness during the running of hypoglycemic oral insulin therapy in elderly due to unwitting, while the experience of running a self-care affected by the aging process [14] Another study try to view the direct influence of experience on the locus of control. Even though there are contrary to the opinion of some experts who concluded that the experiences related to past events when unpleasant can increase external locus of control and if the unpleasant experiences in the past may increase the internal locus of control [15,16].

The exposure above contrast to these findings, that experience also influence the behavior of the DM control. Diabetics who have experiencing unpleasant events of the past was more likely to improve diabetes control behavior, because they do not want such events recurring and realized that could be addressed by improving the quality of life, their families and the people around him. Moreover, when diabetics have experiencing pleasant events that further enhance the control behavior of DM because diabetics will avoid excessive stress and impact on the balance of glycemic load.

Findings influence on experience of diabetics against behavior control diabetes have implications for the need for the provision of information and positive support consistently in order to becoming knowledge and experience in improving the behavior of DM good control.

4. Conclusion

The experience of diabetics influences the behavior of diabetes controlling. Diabetics who have pleasant and unpleasant experience together enthusiastically in improving behavior of diabetes controlling.

References

- [1] Smeltzer, S.C. 2014. Keperawatan Medikal-Bedah (Handbook For Brunner & Suddarth's Textbook of Medical-Surgical Nursing) Edisi 12, Terj. Devi Y. & Amelia K. Jakarta: EGC.
- [2] Russel, Dorothy M. 2011. Bebas dari 6 Penyakit Paling Mematikan. Yogyakarta: Media Pressindo.
- [3] Waspadji, Sarwono. 2013. Diabetes melitus, penyulit kronik dan pencegahannya. Penatalaksanaan Diabetes Melitus Terpadu. Jakarta: Badan Penerbit FKUI.
- [4] International Diabetes Federation Atlas. Seventh edition. online version of IDF Diabetes Atlas: www.idf.org/diabetesatlas. Sitasi, 28 Januari 2016.
- [5] Tandra, Hans. 2008. Segala sesuatu yang harus Anda Ketahui tentang Diabetes. Jakarta: PT Gramedia Pustaka Utama.
- [6] Tim Redaksi VitaHealth. 2006. Diabetes. Jakarta: PT Gramedia Pustaka Utama.
- [7] Soewondo, Pradana. 2013. Pemantauan kendali diabetes mellitus. Penatalaksanaan Diabetes Melitus Terpadu. Jakarta: Badan Penerbit FKUI.

- [8] Holmstrom IM & Rosenqvist U. 2005. Misunderstandings about illness and treatment among patients with type 2 diabetes. *Journal of AdvanceNursing* 49, 146-154.
- [9] Carolan-Olah MC, Cassar A, Quiazon R & Lynch S. 2013. Diabetes care and service access among elderly Vietnamese with type 2 diabetes. *Biomed Central Health Services Research* 13.
- [10] Abouzeid M, Philpot B, Janus ED, Coates MJ & Dunbar JA. 2013. Type 2 diabetes prevalence varies by socio-economic status within and between migrant groups: analysis and implications for Australia. *BioMed Central Public Health* 13, doi:10.1186/1471-2458/13/252
- [11] Kim C, Sinco B & Kieffer EA. 2007. Racial and ethnic variation in access to health care, provision of health care services, and ratings of health among women with histories of gestational diabetes mellitus. *Diabetes Care* 30, 1459–1465.
- [12] Soegondo, Sidartawan. 2013. Prinsip dan strategi edukasi diabetes. *Penatalaksanaan Diabetes Melitus Terpadu*. Jakarta: Badan Penerbit FKUI.
- [13] Notoatmodjo, Soekidjo. 2007. *Kesehatan masyarakat: ilmu dan seni*. Bandung: Rineka Cipta.
- [14] Lilyana, Maria TA. 2014. Experience in older people with diabetes mellitus of adherence and self care toward oral hypoglycemi and insulin therapy.
- [15] Schneider, SW. 1971. A comparison of canal preparations in straight and curved root canals. *Oral surgery, Oral medicine, Oral pathology*, 32 (2), 271-275.
- [16] Nowicki, S., & Strickland, BR. 1973. A locus of control scale for children. *Journal of consulting and clinical psychology*, 40 (1), 148.