KNOWLEDGE AND PERCEPTION OF PAIN ABOUT DIABETES MELLITUS WITH SELF CARE BAHAVIOR IN DIABETES MELLITUS PATIENTS

Kholis Khoirul Huda[1], Tomy Suganda[2], Romy Suwahyu[3], Nurul Septiani[4]
Universitas Islam Negeri Raden Intan Lampung

Corresponding author: Kholis Khoirul Huda
Email: kokohuda08@gmail.com

ABSTRACT

Diabetes Mellitus is a chronic disease that requires long-term self-care so that patients can carry out self-care independently to prevent complications from Diabetes Mellitus. Self Care Behavior aims to examine and classify the extent to which people with Diabetes Mellitus carry out self-care in order to improve their well-being and quality of life. This study aims to determine the relationship between knowledge and pain perceptions about Diabetes Mellitus and Self Care Behavior of Diabetes Mellitus sufferers. This research is a literature study that summarizes some of the relevant literature collected using Google Scholar which was published in 2015-2022. The results of the search found 56 identified journals and 7 journals that met the inclusion criteria. The results showed that there was a significant relationship between knowledge about Diabetes Mellitus and Self Care for Diabetes Mellitus patients and there was a significant relationship between perceptions of pain about Diabetes Mellitus and self care behavior for Diabetes Mellitus sufferers.

Keywords: knowledge, pain perception, Self Care, Diabetes Mellitus

INTRODUCTION

American Diabetes Association(ADA) (2019), said that Diabetes is a complex chronic disease that requires ongoing medical care to reduce the risk of being out of glycemic control. According to the World Health Organization (WHO) (2019), the basic characteristic of Diabetes Mellitus is the dysfunction of the destruction of β cells in the pancreas.

According to the World Health Organization (WHO, 2019), the number of people with Diabetes continues to increase with an estimated 455 million adults worldwide in

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2014. The International Diabetes Federation (IDF) Atlas (2019) states that the prevalence of Diabetes Mellitus is aged 20-79 years increased from 4.8% in 2010 to 6.3% in 2019; IDF estimates the prevalence of Diabetes Mellitus in 2013 to be 6.9% and 7.1% in 2045. Based on the results (Riskesdas, 2018), the prevalence of DM according to the 2015 Perkeni consensus in residents aged ≥ 15 years by 6.9% in 2013 increased by 10, 9% in year 2018 (Ministry of Health, 2018). Based on the data above, it can be seen that there has been a continuous increase in the incidence of Diabetes Mellitus, so efforts need to be made to minimize the incidence of Diabetes Mellitus. Before taking preventive measures, it is necessary to know the causes of Diabetes Mellitus. One of the causes of the high incidence of Diabetes Mellitus according to knowledge (Silalahi, 2019).

Knowledge is the process of remembering objects that have been studied through the five senses (Lestari, 2015). Good knowledge of a disease is important for achieving a better quality of life (Mutoharoh, 2017). Good knowledge can affect the perception of the disease of Diabetes Mellitus sufferers. The concept of disease perception itself refers to patients' beliefs about their disease based on personal experience regarding signs and symptoms, prior knowledge, cultural and social factors. In general, negative disease perceptions will be related to negative disease behavior and management, the impact of which is that patients with negative disease perceptions may refuse to take treatment and find it difficult to adopt healthy living habits (Eka & Tjomiadi, 2019). One theory that discusses self-care behavior is Orem's theory; Orem's theory of self-care behavior aims to help people with Diabetes Mellitus carry out self-care independently (Purwoastuti and Walyani, 2015). There are several indicators that must be known in self-care, namely diet, physical activity, use of pharmacology, checking blood glucose levels and foot care (Fahra et al., 2017). Based on research conducted by

Trisnadewi et al (2018) regarding Knowledge Description of Diabetes Mellitus (DM) Patients and Families regarding the Management of Type 2 DM, it shows that the knowledge of DM sufferers and their families in the Tabanan II health center area is not optimal because there are still characteristics of knowledge in the category bad; it is necessary to develop education to increase the knowledge of people with Diabetes Mellitus and their families. Another research on knowledge conducted by Harahap (2017) regarding the Description of Knowledge of Patients with DM on Diabetic Foot Exercise at RSU IPI Medan in 2015 shows that most DM sufferers are knowledgeable enough, it is necessary to develop to continue to increase the knowledge of people with Diabetes Mellitus.

Research conducted by Saragih et al (2016) on Perceptions of the Benefits and Barriers to Exercise in Patients with Diabetes Mellitus Based on Nolla J. Pender's Theory at the Internal Medicine Clinic in 2014 showed that as much as 54% of the benefits of exercise were in the category of negative perceptions and exercise barriers. as much as 54% in the positive perception category; it is necessary to increase the perception of diabetes patients Mellitus. Research conducted by Eka & Tjomiadi (2019) on the Perception of Disease in Patients with Diabetic Foot Ulcers in Banjarmasin, South Kalimantan showed no in-depth explanation regarding each domain of disease perception in the Brief Illness Perceptions Questionnaire (BIPQ). Research on self-care conducted by Sari (2016) on the Description of Self-Care in Patients with Diabetes Mellitus at H. Adam Malik General Hospital in Medan shows that self-care for Diabetes Mellitus patients is in the moderate and good categories. This needs to be improved and maintained so that self-care for Diabetes Mellitus patients remains good.

Ability somebody in Perceiving and treating oneself about illness is relatively different between individuals, because the concept of illness can vary based on age,

gender, length of illness, and social interaction. Meanwhile, lack of knowledge and self-care is a factor that can increase the incidence of Diabetes Mellitus.

A person's behavior in self-care usually depends on knowledge about the disease being experienced. Knowledge is obtained from several factors such as experience and learning intensity; Experience is obtained from events that have been experienced by both the sufferer himself and those closest to him. As for learning intensity, such as reading books, journals, newspapers, electronic media or explanations from health workers. To minimize unwanted things, in this case self-care which is constrained due to lack of knowledge about the disease, it is the duty of health workers to transform knowledge or matters related to self-care of Diabetes Mellitus patients;

RESEARCH METHODS

This research is a literature study that summarizes some relevant literature by searching the results of scientific publications using Google Scholar with the keywords used namely "knowledge and self-care behavior of people with Diabetes Mellitus" or "perception of pain and self-care behavior of people with Diabetes Mellitus" or "knowledge of Diabetes Mellitus sufferers" or "health belief and self-care behavior of Diabetes Mellitus" or "perception of illness of Diabetes Mellitus sufferers" or "care Diabetes Mellitus" OR "factors influencing Diabetes Mellitus self-care" so that 46 journals were identified. From the search results, a literature selection was carried out with criteria using the PICOT standard, so that the inclusion criteria in this literature study were that the population used was Diabetes Mellitus patients with expressions analyzing knowledge, pain perception and self-care behavior, with

research results discussing the relationship between knowledge, perception illness and self-care behavior in Diabetes Mellitus patients using the design and type of publication of experimental and non-experimental studies, systematic reviews and qualitative and quantitative research with the year of publication ≥ 2015, and using the Indonesian language 7 journals. The results are then analyzed and concluded

RESULTS

Based on the results of a literature search from several articles obtained, there were 7 articles that met the inclusion criteria. These studies identified knowledge and perceptions of pain about Diabetes Mellitus with self-care behavior of Diabetes Mellitus patients.

According to research conducted by Tri et al (2020) said that the majority of respondents with diabetes had poor knowledge (61.7%); the same thing happened to self care management showing most of them were in the unfavorable category (56.7%). So it can be concluded that there is a relationship between diabetes knowledge and self care management in patients with Type 2 Diabetes Mellitus (p-value = 0.015). Another study discussing knowledge was conducted by Hills (2017) stating that the knowledge of type 2 Diabetes Mellitus sufferers regarding the use of insulin was in the sufficient category (72.09%); things that happen to the behavior of people with Diabetes Mellitus type 2 towards the use of insulin are in the sufficient category (72.10%).

Opposite results were found in research conducted by Bertalina & Purnama (2016) indicating that the respondents' knowledge was in the good category (66.7%); but most of the respondents with disobedient dietary adherence (60%). So it can be concluded that there is a significant relationship between knowledge and dietary adherence in Diabetes Mellitus patients (p-value 0.002).

Research conducted by Delima et al

(2020) discussing knowledge and perceptions of self-care shows that the majority of respondents adhere to a diet; then there is a relationship between knowledge and dietary adherence in Diabetes Mellitus patients (p-value 0.000). The same thing happened to the perception of dietary adherence, showing that most of the respondents were obedient in complying; it can be concluded that there is a relationship between perception and adherence to the Diabetes Mellitus diet (p-value 0.002). Similar research on knowledge and perceptions was conducted by Purnamasari (2015), discussing the knowledge and perceptions of prolanis participants in undergoing treatment at the Puskesmas; showed that there was a significant relationship between knowledge and medication adherence in type 2 diabetes mellitus (p-value = 0.002). Follow the recommended treatment. The same thing happened to the perception of compliance with prolanis participants in undergoing treatment with p-value = 0.008; then there is a relationship between perception and adherence of prolanis participants in following treatment. Respondents' knowledge was in the bad category (57.43%), compliance was in the non-compliant category (51.5%), and perception was in the bad category (53.5%). Perception and knowledge are interconnected because one's knowledge can influence perception. then there is a relationship between perception and adherence of prolanis participants in following treatment. Respondents' knowledge was in the bad category (57.43%), compliance was in the non-compliant category (51.5%), and perception was in the bad category (53.5%). Perception and knowledge are interconnected because one's knowledge can influence perception. then there is a relationship between perception and adherence of prolanis participants in following treatment. Respondents' knowledge was in the bad category (57.43%), compliance was in the non-compliant category (51.5%), and

perception was in the bad category (53.5%). Perception and knowledge are interconnected because one's knowledge can influence perception.

Another study discussing perceptions was conducted by Purwanti & Nurhayati (2017), discussing the factors that influence the adherence of type 2 DM patients in performing foot care; shows that most of them have good knowledge (58.4%) but the level of adherence in foot care is still low. In the theory of the Heath Belief Model (HBM), of the 4 domains studied, the average is in the good category, but the level of adherence in foot care is still low. This study shows that there is a significant relationship between knowledge and adherence of Diabetes Mellitus patients in performing foot care, indicated by a p-value of 0.013.

Research conducted by Hardiyanti et al (2018) discussed factors related to the behavior of controlling type II Diabetes Mellitus. One factor that associated with the behavior of controlling Diabetes Mellitus type II, namely perception; most of the respondents had a good perception (65.5%) and the behavior of controlling Diabetes Mellitus, most of the respondents were able to control Diabetes Mellitus (58.6%). So it can be concluded that there is a relationship between perception and behavior in controlling Diabetes Mellitus (p-value 0.000).

DISCUSSION

Self-care behavior can support sufferers Diabetes Mellitus For canoptimally maintain their ability to achieve better welfare and quality of life (Purwoastuti and Walyani, 2015). There are several factors that can influence self-care behavior in people with Diabetes Mellitus such as knowledge, self-efficacy, self-care agents, social support, socio-economic (financial) (Tri et al., 2020). In a study conducted by Tri et al (2020), one of the reasons for poor self-care management is caused by not enough regular And not

enough he obeyedrespondents in carrying out self-care, and the lack of good knowledge of diabetes is caused by the respondents' ignorance of the symptoms of Diabetes Mellitus and the importance of physical activity (exercise) in regulating blood glucose levels. On *diabetes knowledge,* the more

Good Knowledge of Diabetes Mellitus patients is also good behavior. So

expected withgood knowledge And behavior can increasing adherence of Diabetes Mellitus patients in self-care independently (Hills, 2017). The behavior of Diabetes Mellitus patients can be described

How patient DiabetesMellitus in the management of the disease being suffered either by controlling blood glucose levels, exercise or physical activity, the use of pharmacological therapy nor management

diet. Diet management is one of the things that must be considered; the lack of adherence of respondents in controlling the diet because they are less enthusiastic about participating in counseling about the Diabetes Mellitus diet, and the respondents ignore control recommendations diet Because Already stricken with complications Diabetes That Mellitusthemselves (Bertalina & Purnama, 2016). One of the factors related to dietary adherence is knowledge (Delima et al., 2020). Knowledge is one that needs to be maximized, such as the respondent's knowledge about dietary compliance, then taught and continuously reviewed dietary adherence behavior.

Knowledge is important when someone perceives something. Knowledge is the result of one's perception about something, where if the knowledge is lacking then the perception can have a negative impact and vice versa, if the knowledge is good then the perception can be good or positive too. Purnamasari (2015) stated that the better a person's knowledge, the better the compliance of people with Diabetes Mellitus. Compliance with Diabetes Mellitus sufferers can increase if knowledge and perceptions are in the good category.

Perception of pain according to Sunaryo (2015), is the final process of observing an object which begins with the process of sensing. Perception is one of the factors that influence good self-care for people with Diabetes Mellitus. Self-care in question is doing foot care, physical activity, undergoing medication, and diet, controlling blood glucose levels. Purwanti & Nurhayati (2017) stated that many factors caused respondents' lack of compliance in performing foot care; one of them is knowledge about foot care which is still low and lack of support from family; and according to Hardiyanti et al (2018) poor control of Diabetes Mellitus can cause unwanted things such as complications of Diabetes Mellitus.

Based on the results of research discussing knowledge about Diabetes Mellitus with self-care behavior of Diabetes Mellitus patients conducted by Tri et al (2020), Hills (2017), Bertalina & Purnama (2016), Delima et al (2020), Purnamasari (2015), Purwanti & Nurhayati (2017) showed that there is a relationship between knowledge of Diabetes Mellitus and self-care behavior. And research discussing the perception of pain about Diabetes Mellitus with self-care behavior of Diabetes Mellitus patients was conducted by Delima et al (2020), Purnamasari (2015), Purwanti &

Nurhayati (2017), Hardiyanti et al (2018) show that there is a relationship between the perception of pain and self-care behavior. Of the 7 journals discussed, there is still poor knowledge, poor perception patterns about illness, and there are still Diabetes Mellitus sufferers who are less compliant in carrying out self-care.

CONCLUSION

Self-care behavior has a close relationship with knowledge and perception of pain; but there are still many people with Diabetes Mellitus with poor self-care behavior or lack of compliance so that it affects knowledge and perception of pain and resulted in many Diabetes Mellitus

sufferers who are less able to carry out Diabetes Mellitus care independently.

Based on the results of the literature study that has been done, it can be concluded that knowledge about Diabetes Mellitus is related to self-care behavior and perceptions of pain about Diabetes Mellitus are related to self-care behavior.

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