



THE RELATIONSHIP OF KNOWLEDGE ON THE PREVENTION OF DIABETES MELLITUS MOTIVATION IN STUDENTS

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A B S T R A C T

Health students were identified as having bad habits in consuming and life style related to DM type II prevention, which should be a role model and provide examples of how to behave in a healthy life style to prevent illness. Health students, especially nursing, have the ability to keep many information as a memory known as retention. Retention is declared as any information kept in the brain as a memory and not being forgotten. The purpose of this study was to determine the relationship between knowledge and motivation to prevent diabetes Mellitus. This study used a cross sectional, 97 samples filled out a questionnaire about knowledge and motivation to prevent Diabetes Mellitus. The results of statistical tests using the Chi-Square test showed p value (p-value) = 0.760 > (\geq 0.05). This shows that there is no relationship between knowledge and motivation to prevent type II diabetes mellitus. Poor motivation may be caused by the influence of commercial advertising and lifestyle that is less able to support prevention of type II Diabetes Mellitus.

I. INTRODUCTION

The motivation to prevent type II DM is important in healthy living behavior. Healthy and consistent living behavior can prevent the occurrence of a disease, especially in prospective nursing students or the seeds of professional nurses who are role models and provide examples of how to behave in a healthy lifestyle to prevent illness. The ability to keep many words and information is known as retention. Retention is declared as any sentences and information kept in the brain as a memory and not being forgotten (1). Retention in education

process is mostly related to long-term, working and short-term memory. These are easily can be improved by providing information or material repeatedly, the material is uniquely packaged, attracts attention, and is associated with other information (2). These memory of information obtained or known as knowledge is closely related to motivation to prevent type II diabetes mellitus. The motivation of preventing diabetes mellitus type II depend on knowledge of related diseases. Low knowledge causes a lack of motivation to perform healthy lifestyle behaviors ((1). Low knowledge can affect perceptions of diabetes

mellitus (Sousa & Zauseniewski, 2005; Azis & Aminah, 2018). According to behavioral theory apart from knowledge, motivation is also closely related to one's behavior, because with knowledge, motivation will appear in a person to behave (3).

Diabetes mellitus is a chronic disease that happened when there is no enough insulin (a hormone that regulates blood sugar, glucose) or unqualified insulin in their body (4). This condition causes an increasing of blood glucose level called hyperglycemia or blood glucose levels are higher than normal.

According to the World Health Organization (WHO) 2016. Diabetes mellitus type II is a degenerative disease. Although diabetes mellitus is non-communicable diseases. It can cause blindness, heart attacks, strokes, kidney failure, and leg amputations. This is because this disease has various risk factors ranging from lifestyle, smoking behavior and individual eating patterns that are not good. The incidence of type II diabetes mellitus continues to increase. From 1980 to 2014. The increase in the prevalence of diabetes mellitus, which is mostly type II, is 3.8% (5).

Because of the importance of the role of knowledge in increasing motivation to carry out healthy lifestyle behaviors in preventing diabetes mellitus, the authors feel it is important to know the relationship between knowledge and motivation for diabetes mellitus prevention behavior

II. METHODS

This research is using cross sectional approach. The respondent of this study is nursing student program, health science faculty of Universitas dr. Soebandi in Jember Regency. The sample size of 97 respondents was recruited using simple random sampling technique with the criteria in this study were 6th semester nursing student of Universitas dr. Soebandi willing to joint this study.

To measure the knowledge and motivation the author using DM type II questionnaire dan Treatment Self-Regulation Questionnaire (TSRQ) via google form, and conducted for a month from Mei to June 2021 which was conducted on Universitas dr. Soebandi in Jember Regency.)

III. RESULT

The results of this research the relationship of knowledge on the prevention of diabetes mellitus motivation in students can be presented in the following table.

Table 1. Distribution of respondent characteristics based on knowledge level

Variable	(n)	Percentage (%)
Good knowledge	70	72%
Bad knowledge	27	28%
Total	97	100

The table above showing that most of the respondents are having good knowledge about DM

Table 2. Distribution of respondent characteristics based on motivation

Variable	(n)	Percentage (%)
Bad motivation	66	68%
Good motivation	31	32%
Total	97	100

From the table we can see that most of the respondents besides having good knowledge they also have good motivation.

The results of statistical tests using the Chi-Square test show p value (p-value) = 0.760 > (>=0.05). This shows that there is no relationship between knowledge and

motivation to prevent type II DM in Universitas dr. Soebandi

IV. DISCUSSION

Age is very influential on the pattern of individual knowledge, this is because increasing individual age will have an impact on the capture power and mindset of the individual in receiving and understanding information, so that it will affect the results of the knowledge that will be obtained by the individual. good (6).

The above statement is supported by the results of research conducted (7) that an older age will get much more information and experience that can affect the formation of knowledge in individuals, the older the individual, the more experience he will get, this is which will then lead to an increase in the ability and maturity of individuals in receiving and understanding information which tends to be better than younger ages. Individual knowledge tends to be better at an older age than at a younger age, this is because older people have a lot of experience that supports the formation of a good knowledge in the individual (8). This proves that the increasing age of the individual can affect the capture power and mindset of the individual himself in understanding and receiving information that will have a good impact on the individual's knowledge (9).

Unique, interesting and innovative media are more attractive to young people. Advertisements that are packaged in such a way that they are interesting and unique can increase the desire to consume food that does not support the prevention of type II DM, moreover the information can be repeated by respondents whenever and wherever they want (10). After the information is absorbed and received by short-term memory and working to be remembered,

then it is necessary to do a strategy that connects the information that has been obtained and learned into long-term memory. In addition, the lifestyle of young people who like to hang out in cafes with treats and dishes that do not support the prevention of type II DM.

V. CONCLUSION

The conclusion of this study based on the results of statistical tests using the Chi-Square test showed p value (p-value) = $0.760 > (> = 0.05)$. This shows that there is no relationship between knowledge and motivation to prevent type II DM in dr. Soebandi Jember. Poor motivation may be caused by the influence of advertising and lifestyle that is less able to support prevention of type II diabetes mellitus.

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