

Analysis Of Factors Related To The Cause Of Drug Withdrawal In Patients With Type Ii Diabetes Mellitus At Tk Ii Putri Hijau Kesdam 1/Bb Medan Hospital In 2020

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Abstract.

Diabetes Mellitus is a disease that cannot be cured and can only be controlled by taking medication regularly. Diabetes must be treated quickly and appropriately to get a cure. Taking drugs continuously can cause a person to start to feel bored to take drugs, causing a person to stop taking drugs. The purpose of this study was to provide information on the causes of drug withdrawal of patients with type II diabetes mellitus in the outpatient installation of Putri Hijau Medan Hospital. This research is descriptive using qualitative methods. The research was conducted at TK II PUTRI HIJAU Hospital KESDAM 1 / BB Medan for three months from March to May 2021. This study took samples in a presumptive way, namely by using the Non Random Sampling Technique with the accidental sampling technique method by collecting data through observation and interviews then the data was processed in thematic form. The results of the interview research obtained were 3 out of 5 respondents experienced drug withdrawal which was predominantly male (40%), the age of the late elderly (56-65 years) as much as (40%). The majority of occupations are self-employed (60%). And have suffered from diabetes from 6-10 years (60%). The fact of drug discontinuation is due to advanced age, occupation, and compliance with taking medication. The gender factor is very influential in the occurrence of diseases, especially DM, the female sex is more susceptible to Diabetes Mellitus because women have premenstrual syndrome after menopause, but the results of the research obtained are predominantly male. Meanwhile, 2 female-dominant respondents did not drop out of medication but were less compliant in taking medication.

Keywords: *Diabetes mellitus, Descriptive, Qualitative and Respondent drug withdrawal.*

I. INTRODUCTION

Diabetes Mellitus (DM) is a chronic disease or disorder of carbohydrate, protein, and fat metabolism due to insufficient insulin secretion that occurs in tissues. Diabetes Mellitus is a metabolic disease with metabolic characteristics of hyperglycemia, due to insulin secretion, insulin action or both. Hyperglycemia is a condition where blood glucose levels increase past the normal threshold. Diabetes Mellitus is not a disease that can be transmitted to others (1). The World Health Organization WHO reported in the Global Status Report on NCDs that people around the world who suffered from Diabetes Mellitus in 2008 were around 347 million and 80% of them came from poor and developing countries. In 2008 as many as 1.3 million people died from Diabetes Mellitus. WHO estimates that by 2030 DM will be the seventh leading cause of death in the world (2). According to research conducted by Pasaribu (3), the prevalence of DM at the age of ≥ 15 years in North Sumatra which was diagnosed was 1.8%.

The highest prevalence was in Deli Serdang Regency (2.9%), followed by Medan City (2.7%), Pematang Siantar City (2.2%), Asahan Regency (2.1%), and Gunung Sitoli City (2.1%). The lowest prevalence was in Mandailing Natal district (0.3%). In this study, the researcher was interested in conducting research on analyzing factors associated with diabetes mellitus and drug withdrawal factors. Drug withdrawal or non-compliance with taking medication is one of the patient's undisciplined attitudes in carrying out treatment therapy to obtain recovery. Factors associated with treatment non-compliance in accordance with Green's theory are influenced by several factors including (predisposing factors) which include patient factors, patient condition factors against other diseases and therapeutic factors. External factors (enabling factors and reinforcing factors) which include health service system factors and socio-economic factors (4). The provision of interventions for non-adherence is unique because it is more psychological in nature so it needs to be studied more in depth with qualitative research methods. In this study, interviews were conducted with patients who experienced type II diabetes mellitus.

II. METHODS

This research applies qualitative methods and is descriptive in nature. Conducted at TK II PUTRI HIJAU Hospital KESDAM 1/BB Medan for three months, starting from March to May 2021. The sampling approach uses presumptions, by applying Non Random Sampling Technique and accidental sampling method. Data were collected through observation and interviews, then analyzed thematically.

III. RESULT AND DISCUSSION

Descriptive characteristics of respondents

Description	Frequency	Percentage
Gender		
Male	2	40%
Female	3	60%
Total	5	100%
Age		
36-45 Years (Late Adult)	1	20%
46-55 Years (Early Old Age)	1	20%
56-65 Years (Late Old Age)	2	40%
65-up (Elderly)	1	20%
Total	5	100%
Job		
Self-employed	3	60%
Housewife	1	20%
Teacher	1	20%
Long Suffering		
1-5 Years	1	20%
6-10 Years	3	60%
>10 Years	1	20%
Total	5	100%

The results of the above recapitulation of the 5 research respondents who were respondents in this study more than half of the respondents were women, 3 respondents (60%) and 2 respondents (40%) were men. This happens because women have premenstrual syndrome after menopause which makes body fat distribution easily accumulated due to hormonal processes in women so that women are at higher risk of diabetes. Where hormonal changes after menopause can increase the risk of degenerative disease (5).

Based on age group, there were 1 respondent (20%) in the age range of 36-45 years (late adulthood), 1 respondent (20%) in the age range of 46-55 years (early old age), 2 respondents (40%) in the age range of 56-65 years (late old age), and 1 respondent (20%) in the age range of 65 years and above (seniors). The age characteristics of the patients were grouped based on this distribution. The majority of Diabetes Mellitus patients are aged 40 years and above, because at that age the risk of developing diabetes is higher due to decreased insulin production by pancreatic beta cells, caused by the aging process. The pancreatic beta cells fail to produce enough insulin to overcome the increased insulin resistance. As we age, the number of pancreatic beta cells will decrease because the process of apoptosis exceeds the process of replication and neogenesis (6). Based on the level of employment, the majority of the respondents had variations in their occupations. A total of 3 respondents (60%) were self-employed, 1 respondent (20%) was a housewife, and 1 respondent (20%) was a teacher. According to Fitriani et al (7), a person's occupation has an impact on their level of physical activity, where groups who do not work tend to be less physically active, which can increase the risk of Diabetes Mellitus.

In the results of the study, there were several themes identified. The first theme is information obtained from patients, which includes knowledge about Diabetes Mellitus, how to control it, the types of drugs used, and the symptoms felt. The second theme was compliance in taking medication, which consisted of subtopics such as forgetting to take medication, lack of caution, and feeling cured. The third theme was medication non-adherence, which included problems checking blood sugar, interruptions in taking medication, discontinuing medication without consulting a doctor, and difficulty in remembering to take medication. The last theme was medication side effects, which included the types of side effects felt,

responses to side effects, and actions taken when experiencing side effects (8). From the results of interviews with respondents, it was revealed that the majority of them could not explain Diabetes Mellitus in general, with only one respondent having adequate knowledge. Knowledge is an important factor for the formation of a person's behavior in controlling blood glucose levels to remain stable within normal limits. For someone who has a good level of knowledge, of course, it will be easier to manage the diabetes mellitus he suffers, while someone who has less knowledge will find it difficult to control blood glucose levels (Sormin & Tenrilemba, 2019).

Factors affecting drug withdrawal

The results showed that the most common factor leading to drug withdrawal was a lack of motivation from respondents, who often felt lazy or bored to continue taking the drug because they felt their condition had improved. In addition, some respondents also experienced difficulties in maintaining consistency in taking medication due to frequent traveling or busy work.

Frequency of drug administration in patients

No	Name	Drug Name	Quantity of drug	Frequency of Delivery	Side Effects
R1	Remita br. Pasaribu	Metformin	1	After meals	None
R2	Sahabi yani lubis	Metformin	1	Once a day after meals	None
R3	Ratna Khirah	Metformin	1	Three times a day after meals	None
R4	Mhd. Jamil	Metformin	1	Once a day in the morning	None
R5	Mhd. Iqbal	Glibenklamide	1	Twice a day before meals	exist

Based on the data in the table above, it can be concluded that only respondent 5 used the drug glibenclamide, and all respondents only used one type of drug. Only respondent 5 reported any side effects from taking the medication, while almost all respondents took the medication after meals. In terms of family support, it can be seen that respondent 3 and respondent 5 did not receive support from their families in maintaining compliance in taking medication. Friedman (2014) (9) says that family support is a process that occurs throughout life, the nature and type of family support differs in the stages of the life cycle. Family support can be in the form of internal and external social support (10). Families need to provide positive support to involve families as supporters for people with DM to take medication obediently so that there is cooperation in monitoring treatment between families. This means that the better the family support means that the patient's compliance with taking medication will also increase. Thus, when the family supports and the patient complies with taking DM medication, the condition of blood sugar in the body will be controlled so as to minimize complications that occur due to DM disease (11).

Factors affecting patient non-adherence to medication

Patient Name	Factors Affecting Patients			
	Lazy	Forget	Family Support	Feel Better
Patient 1		(✓)		
Patient 2		(✓)	(✓)	
Patient 3		(✓)		(✓)
Patient 4	(✓)	(✓)	(✓)	
Patient 5	(✓)			(✓)

From this information, it appears that there are factors that may contribute to patient non-adherence, including reluctance, negligence, family support, and the view that the body has improved. Interviews with five patients showed that most of them experienced non-compliance in taking medication due to forgetfulness, especially due to being physically busy. One solution to improve patient compliance is through

motivation provided by the family. Support from loved ones is very effective in increasing happiness and helping patients maintain consistency in taking medication. In interviews, the main reason for non-adherence in taking medication was forgetting, and some patients also admitted that they were not consistent in taking medication because they felt that their condition had improved and felt that they no longer needed to take medication. Therefore, support from family is very important for patients to remain consistent in taking medication (8). Forms of medication non-adherence include taking less or more than the recommended dose, not adhering to the correct dosing interval, violating the correct medication timing, as well as taking additional medications without a doctor's prescription. According to Sarafino, non-adherence can also include failing to adhere to medication recommendations, not following appointments, stopping dietary and lifestyle rehabilitation recommended by a healthcare practitioner, ignoring multiple doses, using medication for inappropriate reasons, taking medication at an inappropriate dose or time, and not continuing medication until the prescribed time limit (12).

IV. CONCLUSION

The conclusion from the results all patients had knowledge about diabetes mellitus, both in general and in a more clinical context, including how to control blood sugar. Reasons for non-compliance in taking medication included forgetting due to busy work and other activities, as well as inattentiveness in carrying medication when traveling. In addition, there was a tendency to lack motivation, such as laziness in taking medication, and an attitude of indifference when feeling good. Patients often stop taking medication when they feel that their condition has improved, but return to taking medication when they feel sick again.

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