

# Comparison of Self-Concept in Type 2 Diabetes Mellitus Patients between Men and Women at Diabetes Dharma Clinic Perumnas Helvetia Medan in 2019

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ABSTRACT

**Keywords:**

Self-concept, Diabetes mellitus type 2, Men and Women.

Self-concept is a person's view of himself. Diabetes mellitus is a chronic disease that can interfere with a person's self-concept because diabetes mellitus sufferers often complain of boredom having to take medication every day, it is difficult to follow the recommended diet, patients have difficulty sleeping because they are always reminded of their illness. Self-concept in men and women who suffer from diabetes mellitus shows a real difference. In living their lives, women are less healthy than men. This study aims to determine the differences in self-concept in people with type 2 diabetes mellitus between men and women. This study uses a comparative description design. The research sample was 38 patients with type 2 diabetes mellitus at the Diabetes Clinic Dharma Perumnas Helvetia Medan in 2019 consisting of 19 men and 19 women. The sampling technique is using purposive sampling technique. Data analysis was performed using the Mann Whitney U test. Based on the results of data analysis, a significance value of 0.001 ( $p < 0.05$ ) was obtained so that the research hypothesis was accepted. This shows that there are differences in self-concept in people with type 2 diabetes mellitus between men and women. The conclusion of this study is that there are differences in self-concept in people with Type 2 Diabetes Mellitus between men and women at the Diabetes Clinic Dharma Perumnas Helvetia Medan. Clinic employees are expected to be able to make nursing plans that can improve self-concept according to the gender of the diabetes mellitus patient.

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## 1. Introduction

Diabetes mellitus is a chronic disease characterized by blood glucose levels exceeding normal and disruption of carbohydrate, fat and protein metabolism caused by relative or absolute deficiency of the hormone insulin [1]. Diabetes mellitus is a chronic disease that is increasing in number in today's society, diabetes mellitus [2]. This can be seen from the number of people with diabetes mellitus from year to year which continues to increase. Based on data from the International Diabetes Federation (IDF), there are 415 million people living with diabetes mellitus in the world in 2015. In 2040 this number is expected to increase to 642 million people. It is estimated that out of 415 million people, 175 million of them have not been diagnosed, so they are threatened with progressive development into complications without being aware of it and without prevention (ATLAS Diabetes IDF, 2015).

Patients with diabetes mellitus in North Sumatra have increased every year. Based on data obtained from the North Sumatra Health Office, it is stated that from January 2015 to April 2016, the number of people with type 1 diabetes mellitus was 18,358 and type 2 was 54,843 people (North Sumatra Health Office with diabetes, 2016). Based on research conducted (Jelantik and Haryati, 2014), it shows that diabetes mellitus can mostly be found in women compared to men. Of the 50 respondents, most of them were female, 32 people (64%) and 18 men (36%). This can be caused because in women having LDL (Low Density Lipoprotein) or bad cholesterol triglyceride levels are higher than men, and there are also differences in carrying out all activities and daily lifestyles which greatly affect the incidence of a disease, and this is one of the risk factors for diabetes mellitus. The amount of fat in adult men on average ranges from 15-20% of total body weight, and in women about 20-25%. So the increase in lipid levels (blood fats) in women is higher than in men, so that the risk factors for diabetes mellitus in women are 3-7 times higher than in men, namely 2-3 times [3], [4].

When people with type 2 diabetes mellitus experience high blood sugar levels (hyperglycemia), the patient will feel very thirsty, urinate frequently, have headaches, tire easily and feel irritable [5], [6]. If the patient experiences a very low blood sugar level (hypoglycemia),

then the patient will sweat easily, get hungry, have impaired vision, feel anxious, experience motor coordination problems, and mental confusion (Kusumadewi, 2011).

Individuals diagnosed with diabetes mellitus, both type 1 and type 2, must live a certain lifestyle that is different from the previous one. They must adopt new habits recommended by health workers to maintain their quality of life so that blood sugar levels do not rise above the normal threshold [7], [8]. This lifestyle includes taking medication regularly, controlling blood sugar levels regularly, maintaining the food consumed (strict diet) and exercising regularly. This is thought to cause the patient's self-concept to experience changes. Self-concept problems are also likely to be suffered by adult type 2 diabetes mellitus sufferers, especially those of productive age. Patients who have experienced complications, such as blindness, kidney disease, gangrene and amputation, heart disease and stroke, may feel that they are no longer useful and they will depend on a companion who helps the healing process of their disease (Budi Sarasati, 2016).

Patients with type 2 diabetes mellitus also may not be able to survive in a painful condition so that the sufferer is not enthusiastic about life and is not even able to look for the positive side of the situation they are experiencing [9], [10]. This of course will affect the management of diabetes mellitus that he suffers. Diabetes mellitus cannot be cured only can be controlled. Therefore, sufferers must have a good self-concept to help manage psychological stress due to chronic diseases such as type 2 diabetes mellitus (Kusumadewi, 2011).

Self-concept is the organization of self-perceptions, namely the way a person sees and feels himself, thus the self-concept is something unique including individual perceptions, ideas, and attitudes about himself. Patients with diabetes mellitus often complain that they feel bored with having to take medication every day, it is difficult to have a diet as recommended and patients always ask about the cure of their disease during treatment, so that patients have trouble sleeping because they are always reminded of their disease, patients feel weak, like daydreaming, fear and bored with his life, which is always limited, patients feel sad, anxious, hopeless because they cannot do their usual activities, and patients feel that they add to the burden on their families (Winasis, 2010)

The pattern of health and disease in men and women shows a real difference. Women tend to have a longer life expectancy than men, which is generally considered a biological factor. However, in their lives women experience more pain and pressure than men. which has different backgrounds in various social groups, this illustrates that in living their lives women are less healthy than men (Depkes, 2011).

Many women feel depressed. There are also women who feel normal. Women like this usually have a good self-concept [11], [12]. Women who experience diabetes mellitus feel physical and psychological shifts and changes that result in a crisis and manifest themselves in psychological symptoms, including depression, gloom, irritability and irritability, suspicion, anxiety, insomnia due to very confused and restless. Other changes often occur, which are caused by disorders of the body's metabolism (Tika Larasati, 2010).

According to (Nofitri, 2010), self-concept in men tends to be better than women's self-concept. Men are more likely to hide stress problems, this could be a result of environmental influences as well which often condition that men must always look strong and should not look weak.

Sex differences among people with diabetes mellitus affect one's mindset or stereotype in interpreting the situation experienced. Explaining that men have a higher estimate (overestimate) of how well they are able to do a new task, while women have a much lower estimate (underestimate) regarding its performance. Men and women when suffering from type 2 diabetes mellitus certainly must have a good self-concept in order to be able to survive their illness and be able to find skills that help them get back up so they can carry out their functions and roles properly (Baron & Byrne, 2007).

The initial survey conducted by researchers on March 1, 2019, of 6 patients with type 2 diabetes mellitus at the Diabetes Clinic Dharma Perumnas Helvetia Medany who had suffered from diabetes mellitus for <2 years consisted of 3 women and 3 men, and the results of the initial survey 3 women said she was very sad When diagnosed with diabetes mellitus, they feel helpless, feel that they will not live long, are bored with the rules of taking medication and others. Meanwhile, 2 out of 3 men who were survey researchers said that the diabetes mellitus they suffered was tormenting themselves but they felt that the pain had to be faced, lived, always thought positive, and always happy.

## 2. Method

The research design used in this study is a comparative description. The approach used is cross sectional, which is a type of research that emphasizes the time to measure the data observation of the independent and dependent variables only once at a time. (Nursalam, 2014).

The research location was conducted at the Diabetes Clinic Dharma Perumnas Helvetia Medan. Taking into account the problems to be studied, there has never been a similar study before. The research time was on 14-27 August 2019 and the period of research and data collection was carried out for 2 weeks. The population in this study were male and female type 2 diabetes mellitus patients. The total population of the study was 261 patients, consisting of 116 men and 145 women, data obtained from the medical records of the Diabetes Dharma Clinic Perumnas Helvetia Medan in 2019. The sampling technique was carried out using purposive sampling technique, the criteria set by the researcher for the respondents the samples were Men and women aged 40-60 years and suffering from diabetes mellitus <2 years. The number of samples obtained in this study were 38 respondents consisting of 19 men and 19 women.

Data collection was carried out by giving questionnaires to respondents where previously the respondents had to sign a letter of consent to become respondents. Analysis of data using the Mann Whitney U test, namely the test used to determine the difference between the two independent groups.

## 3. Results & Analysis

### 3.1 Results

The results of research that has been conducted regarding the comparison of male self-concepts and comparisons of self-concepts in type 2 diabetes mellitus sufferers between men and women at the Diabetes Dharma Clinic Perumnas Helvetia Medan in 2019 obtained the characteristics of research respondents which can be seen in the demographic data of respondents as follows:

**Table1.**

Demographic Data of Respondents at the Diabetes Clinic Dharma Perumnas Helvetia Medan in 2019			
No	Data Demografi	Frekuensi	Persentase (%)
1	<b>Umur</b>		
	<b>Pria</b>		
	40 – 50 Tahun	5	26,3
	51 – 60 Tahun	14	73,7
	<b>Jumlah</b>	19	100%
	<b>Wanita</b>		
	40 – 50 Tahun	6	31,6
51 – 60 Tahun	13	68,4	
	<b>Jumlah</b>	19	100%
2	<b>Pendidikan</b>		
	<b>Pria</b>		
	SMA	8	42,1
	SMK	2	10,5
	Sarjana	7	36,8
	Magister	2	10,5
	<b>Jumlah</b>	19	100%
	<b>Wanita</b>		
	SMA	10	52,6
	SMK	1	5,3
	Sarjana	7	36,8
	Magister	1	5,3
	<b>Jumlah</b>	19	100%

Based on the demographic data above, 38 respondents showed that the majority of people with type 2 diabetes mellitus aged 51 - 60 years consisted of 14 men (73.7%) and 13 women (68.4%). Respondents who have high school education with male gender are as many as 8 people (42.1%) and female as many as 10 people (52.6%).

**Table 2.**

Frequency Distribution of Self-Concept in People with Type 2 Diabetes Mellitus in Men at Diabetes Clinic Dharma Perumnas Helvetia Medan in 2019

Konsep Diri Pria	Positif	Negatif	Jumlah	Persentase (%)	Mean
Gambaran Diri	18	1	19	94,7	16,21
Ideal Diri	19	-	9	100	18,68
Harga Diri	19	-	9	100	18,16
Peran Diri	18	1	9	94,7	17,21
Identitas Diri	19	-	9	100	16,10

Based on the table above, it can be observed that the majority of men have self-ideals, self-esteem and positive self-identity, seen from the number of frequencies of self-ideals, self-esteem and self-identity which are not negative. Men who have self-ideals, self-esteem and positive self-identity are 19 people (100%). Meanwhile, there were 18 men who had a positive self-image and self-role with a percentage (94.7%). For men who have ideal self-esteem, self-esteem and positive self-identity, men feel that they want to always look attractive in front of the people they love, still feel confident and enthusiastic in living life even though their health is not what it used to be and always try to make their family happy (Budi Sarasati, 2016).

Self-concept is a person's attitude, perception, view of himself which includes self-image, self-identity, self-ideal, self-esteem, self-role (Gufon, 2010). The self-concept in the form of self-acceptance is not a big pride about himself, can understand and accepting a number of various facts about himself, his evaluation of himself becomes positive and can accept the existence of others (Manik, 2010).

Self-concept in men tends to be better than women's self-concept. Men are more likely to hide stress problems. This could be a result of environmental influences which often condition that men must always look strong and not look weak (Nofitri, 2010).

According to the assumption of researchers, men with diabetes mellitus have ideal self-esteem, self-esteem, self-roles, and good self-identities. A man suffering from diabetes mellitus still feels fine, feels enthusiastic about running his life, still feels useful for his family and is still able to do the work he did before he got sick. This happens because men always feel that they are stronger than women, men don't want to look weak in front of people. Men have more positive thoughts that can arouse enthusiasm in him even though he is in a bad state and do not think about things that do not necessarily happen to him.

**Table 3.**

Frequency Distribution of Self-Concept in Patients with Type 2 Diabetes Mellitus in Women at Diabetes Clinic Dharma Perumnas Helvetia Medan in 2019

Konsep Diri Wanita	Positif	Negatif	Jumlah	Persentase (%)	Mean
Gambaran Diri	18	1	19	94,7	13,21
Ideal Diri	19	-	19	100	17,00
Harga Diri	18	1	19	94,7	14,10
Peran Diri	17	2	19	89,5	14,63
Identitas Diri	19	-	19	100	15,68

Based on the table above, it can be observed that the majority of women have positive self-ideals and self-identities. Meanwhile, some women have a negative self-role. There are 19 women who have ideal self and positive self-identity (100%). Meanwhile, there were 17 women who had a positive self role (89.5%).

In the ideal of herself, a woman wants to always look attractive in front of others, always wants to be a complete woman and always wants to have a happy relationship with her family. Meanwhile, in her self-identity, women try to make their husbands and children happy even with their current situation, and still be able to get along with other people. For women who have negative self-roles, women feel that they cannot do the work that is their responsibility and are unable to properly care for their families (Ghufron, 2010).

Herawati (2010) states that body image changes in almost all diabetes mellitus sufferers and if these changes are not properly integrated, self-concept will decrease drastically and women who have diabetes mellitus feel that they are less than perfect women. Women tend to have a longer life expectancy than men, which is generally considered a biological factor. However, in life women experience more pain and pressure than men. This illustrates that in living the life of women are less healthy than men (Ministry of Health, 2011).

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According to the assumptions of researchers, women with diabetes mellitus have negative self-esteem and roles. Women who suffer from diabetes mellitus feel that they are no longer valuable, discouraged because they think that the disease they suffer is a lifelong and incurable disease. Women who suffer from diabetes mellitus think about negative things as a result of the disease they suffer. They feel that since suffering from diabetes mellitus they are no longer able to care for and take care of their families anymore. This happened because of the lack of support and acceptance from the family. Family support and acceptance is very meaningful for people with diabetes mellitus.

Based on the results of the calculation of the bivariate test using the Mann Whitney U test on the self-concept data of men and women with type 2 diabetes mellitus, the following data were obtained:

**Table 4.**  
Frequency Distribution Comparison of Self-Concept in Type 2 Diabetes Mellitus Patients between Men and Women at Diabetes Clinic Dharma Perumnas HelvetiaMedan, 2017

Konsep Diri	Jenis Kelamin	Positif	Negatif	Jumlah	Mean	Uji Statistik <i>Mann Whitney U</i>
Gambaran Diri	Pria	18	1	19	16,21	0,001
	Wanita	18	1	19	13,21	
Ideal Diri	Pria	19	-	19	18,68	
	Wanita	19	-	19	17,00	
Harga Diri	Pria	19	-	19	18,16	
	Wanita	18	1	19	14,10	
Peran Diri	Pria	18	1	19	17,21	
	Wanita	17	2	19	14,63	
Identitas Diri	Pria	19	-	19	16,10	
	Wanita	19	-	19	15,68	

Based on the table above, it can be observed that the self-concept of type 2 diabetes mellitus sufferers in men and women is mostly positive but, men have higher self-image values, self-ideals, self-esteem, role and self-identity than women. men and women have significant differences in self-concept with the results of data analysis, namely PV value = 0.001 with  $\alpha < 0.05$ .

The results of statistical tests showed that there are differences in self-concept in people with type 2 diabetes mellitus in men and women. Although overall men and women both have positive self-concepts, the components of self-esteem and the role of women are more likely to be negative than men. Men have a higher self-concept value, seen from the average value obtained, namely 26.32, while women only have an average self-concept score of 12.68.

Diabetes mellitus can mostly be found in women compared to men. Type 2 diabetes mellitus sufferers also may not be able to survive in a painful condition so that sufferers are not enthusiastic about life and are not even able to find the positive side of the situation they are experiencing (Budi Sarasati, 2016).

The results of this study were also reinforced by a study conducted (Umma Fadilah, 2014) entitled differences in resilience in people with type 2 diabetes mellitus based on gender, that the resilience of type 2 diabetes mellitus sufferers is higher than male gender. This shows that men are better able to face problems or difficulties in life, so that men can be more independent, able to regulate emotions, be able to have good relationships with others, have humor and have awareness of their future. Patients with female sex have various results so it can be said that the resilience value of women with type 2 diabetes mellitus is smaller than men, this shows that women are less able to face the difficulties that exist in their lives, so that women are less able to live. independent, lacking in hope for the future and having difficulty raising problem solving skills.

According to the researchers' assumptions, there are differences in self-concept in people with diabetes mellitus between men and women. This difference occurs because men are more able to accept a situation that is not good in themselves than women. A more positive male thinking that is able to make a man more accepting of the pain he is suffering from. Meanwhile, women are less able to regulate themselves emotionally. Women have high anxiety in dealing with difficulties that occur to them. Women have more sensitive feelings than men, which makes women need more support and attention from those around them.

## 4. Conclusions

From the results of research on "Comparison of Self-Concept in Type 2 Diabetes Mellitus Patients between Men and Women at the Diabetes Clinic Dharma Perumnas Helvetia Medan in 2019" it can be concluded as follows: Self-concept in men with type 2 diabetes mellitus obtained data that the self-concept in men tends to be positive. The self-concept of women with type 2 diabetes mellitus shows that the self-concept in women tends to be positive, but the components of self-esteem and the role of women tend to be negative. Comparison of self-concept in type 2 diabetes mellitus sufferers between men and women at the Diabetes Dharma Perumnas Clinic Helvetia Medan proved to be different from the results of data analysis, namely PValue = 0.001 with  $\alpha < 0.05$ .

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