SELFCARE MANAGEMENT IN DIABETIC

by Ardhiles Wahyu Kurniawan

Submission date: 18-Sep-2024 11:20AM (UTC+0700)
Submission ID: 2457624798
File name: ICISTECH_46_-_Ardhiles_WK-_INC-_Template_1.pdf (358.88K)
Word count: 4035
Character count: 21881

SELFCARE MANAGEMENT IN DIABETIC

Ardhiles Wahyu Kurniawan*, Heny Nurmayunita , Risa Putri Rahmadani

Department of Nursing, Faculty of Health Science, Institute Technology of Science and Health Dr Soepraoen Hospital Malang, Indonesia
*Corresponding Author: ardhiles.wahyu@itsk-soepraoen.ac.id

Abstract Diabetes Mellitus (DM) is a disease characterized by increased blood glucose levels and is a disease that needs attention. Diabetes mellitus cannot be cured, but it can be controlled by controlling blood sugar levels to prevent complications from occurring. These complications can be minimized with *self-care management* . This research aims to find out description *self - care management* on patient diabetes mellitus in the Kendalsari Community Health Center area, Malang City. This type of research is descriptive with an approach. The research was conducted in the Kendalsari Public Health Center area, Malang City on March 2023 with a sample size of 44 people. How to take samples is non-probability sampling that is purposive sampling. Tool measure that used is questionnaire *Summary of Diabetes Self-Care Activities* (SDSCA). Data collection is presented in the form of a frequency distribution table.

Based on results *self-care* research patient *management* almost half of diabetes is in the good category amount 17 people (38.63%), the majority on enough category amount 27 people (61.37). DM patients are expected to improve *self-care management behavior* to improve health status and prevent further complications.

Keywords : Self-care, management, diabetes

1.Introduction

Diabetes Mellitus is now a serious threat to global health. Diabetes mellitus is one of the main causes of cardiovascular disease (CVD), blindness, kidney failure, amputation (due to injury), and even death (IDF, 2017). Diabetes mellitus not only causes premature death throughout the world, this disease is also the main cause of blindness, heart disease and kidney failure (Ministry of Health of the Republic of Indonesia, 2020). Reducing the risk of complications in Diabetes Mellitus sufferers can be done through self-management. Self-care Management in Diabetes Mellitus is an action taken by individuals to manage DM disease, in the form of treatment and prevention of complications. Several problems that can arise in DM patients can be controlled if the patient can apply self-management behavior to their disease. However, not all DM sufferers choose maximum self-care management in view of the addition of patients in several areas. The self-care management of DM, the better the blood sugar levels will be controlled and ultimately complications can be prevented, thereby improving the quality of life for DM sufferers (Wahyunah et al., 2020).

Currently, an estimated 463 million adults aged 20-79 years suffer from diabetes. This represents 9.3% of the world's population in this age group. It is estimated that in 2030 and 2045 this number will increase to 578 million (10.2%) and 700 million (10.9%) (IDF, 2019). The International Diabetic Federation (2019), stated that Indonesia ranks seventh in the world after China, India, the United States, Pakistan, Brazil and Mexico. Basic Health Research (2018) reported that diabetes mellitus sufferers in East Java province were the fifth highest in Indonesia. The Health Service of Malang City recorded 21,013 people suffering from diabetes mellitus in 2021 and in 2022 it will increase to 23,363 patients. According to Noviyanti et al (2021), research data obtained from self-care management results in diabetes mellitus patients with 20 participants showed that the majority of patients were women with an age range of 55 - 64 years. The majority of type 2 DM sufferers minimal self-care before being given an intervention approach. The use of DSME/S can increase the ability and understanding of patients and families for independent care at home.

Based on the results of a preliminary study conducted by researchers on January 13rd 2023 at the Public Health Center of Kendalsari, it was found that the number of diabetes mellitus patients in 2021 was 492 patient (146 men/30% and 346 women/70%), and in 2022 as 677 patient (441 men/65% and 236 women/35%). Based on the results of interviews conducted by researchers with 15 respondents regarding the implementation of self-care management in diabetes mellitus patients, it was found that the number of patients carrying out eating patterns (diet) was 4 patients (27%), physical activity (exercise) was 5 patients (33%), monitored blood sugar was 4 patients (27%), diabetes medication regularly was 2 patients (13%).

This disease has increased from year to year and is

mostly caused by poor lifestyle factors such as smoking, unhealthy eating patterns, lack of physical activity, obesity, high blood pressure, high blood sugar and high cholesterol. Uncontrolled DM over a long period of time can cause complications, both microvascular and macrovascular. Efforts that have been made to control this disease are by implementing clean and healthy living behavior such as regular health monitoring, diligent physical activity, a healthy balanced diet and adequate rest (Ministry of Health, 2020). So that diabetes mellitus sufferers can survive longer and be healthier, they need professional health support and good self-care management.

According to research from Sulistria (2018) in Handriana & Hijriani, (2020) that complications that occur in diabetes mellitus patients can be controlled or prevented with self-care management. Self-care management is very important for diabetes mellitus sufferers because it can improve the quality of their health and well-being. Research by Chaidir et al (2017), shows that the quality of life of diabetes sufferers is very dependent on the self-care management carried out. This means that the quality of life will be better if self-care management is carried out well and vice versa. There are several health promotions obtained through the socialization of the Chronic Disease Management Program (in Indonesia called with Prolanis) at the Public Health Center Kendalsari, Malang City, which are carried out once a month.

Self-care is an activity carried out by a person in initiating and carrying out an action based on his desires with the aim of maintaining life, health and well-being. Self-care activities that can be carried out include diet, physical activity/exercise, blood glucose control, taking medication regularly, foot care (Adimuntja, 2020).

2. Materials and Methods

The research study used descriptive study. The research design was used to analyze self-care management in diabetes. This study was conducted among self-care management in Diabetic Patients in Public Health Center of Kendalsari Malang in May 2023. The sampling technique in this research used non-probability sampling (purposive sampling) with criteria respondent patient DM in Chronic Disease Management Program.

The variable in this study was self-care management in Diabetes Mellitus. Retrieval of research data used questionnaire Summary of Diabetes Self-Care Activities (SDSCA) where the instrument has been tested for validity and reliability. Descriptive analysis for categorical data used the frequency distribution and for numerical data used the mean, standard deviation (SD), minimum (min) and maximun (max) values.

Ethical Considerations

Respondents were given informed consent by signing a consent letter as research subject for interviews and filling out SDSCA questionnaire, discussion and observations. Research delivered informed consent and explained the research objective, voluntarism and the ability to understand the information. This study was approved by the Health Research Ethics, Committee Institute Technology Science and Health RS Dr Soepraoen Malang no 2574 in 2023.

3. Results

The research was carried out in the Public Health Center Kendalsari, Malang City, East Java, Indonesia. Where general data includes age, gender, education, occupation, length of time suffering from DM, type of DM, living with family, care giver, complications. Meanwhile, special data includes self-care management DM patients at Public Health Center Kendalsari using the Summary of Diabetes Self-Care Activities (SDSCA) questionnaire. Public Health Center Kendalsari is one of the community health centers in Lowokwaru district area, Malang City. The working areas of the Public Health Center include: Jatimulyo, Lowokwaru, Tulusrejo.

Health workers include: 3 General Practitioners, 3 Dentists including the Head of the Community Health Center, 12 Midwifes and 1 auxillary health center (9 Civil Servants, 4 Interns), Nurses 10 person, Dental Nurses 1 person, Pharmacist 1 person, Assisstant of Pharmacist, Sanitarian 1 person, Administration 6 people and auxillary public health center 1 person, Medical Analyst 1 person, Health Analyst 1 person, Driver 1 person, health promotion 1 person, Medical Record 1 person, Accounting 1 person, Security Guard 2 person (2 Contract), Cleaning Service 2 person.

Type of services include: Emergency room, 24 hour inpatient and delivery, Metadhone Maintenance Therapy Program, General Medicine, Maternal and Child Health Dental and oral health checks according to working days, Laboratory, health nutrition, health environment, health promotion, VCT (Voluntary Counseling and Testing) Clinic and ARV Treatment.

Public Health Center of Kendalsari not only currative and rehabilitation include: Health Promotion, health environment, health nutrition, Maternal and Child Health include Family Planning, Efforts to Prevent and Infectious Diseases, Efforts to currative.

The Chronic Disease Management Program has become a routine activity once a month at the Kendalsari Health Center, Malang City, every 3rd week in Friday.

Table 1 Frequency Distribution of General Data on Respondent Characteristics

General Data	Frequency Distribution	
	f (person)	Percentage (%)
Age		
36- 45 years old	8	18.20
46- 55 years old	6	13.63
56- 65 years old	9	20.45
> 65 years	21	47.72
Gender		
Man	22	50
Woman	22	50
Marital status		
Not married yet	1	2.27
Marry	33	75
Single	10	22.73
Education		
Not yet	3	6.82
Elementary school	14	31.81
Junior high school	5	11.36
Senior high school	14	31.81
College	8	18.20
Work		
Doesn't work	23	52.28
Laborer	12	27.27
Entrepreneur	5	11.36
Private employees	1	2.27
Civil servants	3	6.82
Long of DM diagnosis		
1-5 years	11	25
6- 10 years	2	4.54
10 years	31	70.46
DM Type		
DM Type 1	2	4.54
DM Type 2	42	95.46
Living With Family		
Yes	44	100
No	0	0
Caregiver		
Yes	34	77.27
No	10	22.73
Complications		
Yes	26	59.10
No	18	40.90

Based on the table 1, almost half of the age data is >65 years old amount 21 people (47.72%), gender is half male and half female amount 22 people (50%), the marital status of most is married, amount 33 people (75%), education of almost half completed elementary school/equivalent and almost half high school/equivalent, amount 14 (31.81%). Occupation, most of whom did not work amount 23 people (52.28%), duration of suffering from DM, most of them were >10 years amount 31 people (70.46%), DM type is almost all DM type 2 amount 42 people (95.46%), living with family, all of them live with family amount 44 people (100%), almost all of them have caregivers amount 34 people (77.27%), and most of the complications were no complications amount 26 people (59.10%). Apart from that, self-care management in diabetes mellitus patients.

Table 2 Frequency Distribution of General Data on Respondent Characteristics

Indicator	Frequency Distribution	
	f (person)	Percentage (%)
Category		
Good	17	18.20
Enough	27	13.63

Based on the table above, it shows that the result of self-care management in DM patients at the Public Health Center Kendalsari Malang City most are in the fair category amount 27 people (61.37%), a half are in the good category amount 17 people (38.63%).

Table 3 Crosstab Demographic and Self-Management of Diabetes Mellitus

General Data	Category of Self- Management	
	Good f (%)	Enough f (%)
Age		
36- 45 years old	8 (18.20)	0 (0)
46- 55 years old	6 (13.63)	0 (0)
56- 65 years old	3 (6.81)	6 (13.63)
> 65 years	10 (27.2)	11 (25)
Gender		
Man	12 (27.27)	10 (15.90)
Woman	20 (45.46)	2 (2.24)
Marital status		
Not married yet		
Marry		
Widower		
Widow		
Education		
Not yet	0 (0)	3 (6.81)
Elementary school	6 (13.63)	8 (18.20)
Junior high school	0 (0)	5 (11.36)
Senior high school	14 (31.81)	0 (0)
College	8 (18.20)	0 (0)
Work		
Doesn't work	18 (40.90)	5 (11.36)
Laborer	12 (27.27)	0 (0)
Entrepreneur/trader	5 (11.36)	0 (0)
Private employees	1 (2.27)	0 (0)
Civil servants	3 (6.82)	0 (0)
Long of DM diagnosis		
1-5 years	0 (0)	2 (4.54)
6- 10 years	0 (0)	11 (25)
More than 10 years	31 (70.46)	0 (0)

Based on the table 3, almost half of the age data is >65 years old amount 21 people (47.72%), gender is half male and half female amount 22 people (50%), the marital status of most is married amount 33 people (75%), education of almost half completed elementary school/equivalent and almost half high school/equivalent, amount 14 people (31.81%), occupation, most of whom did not work amount 23 people (52.28%), duration of suffering from DM, most of them were >10 years amount 31 people (70.46%), and all communication officers communicated with officers amount 44 people (100%).

Discuss

Based on table 2, it shows that the description of self-care management in diabetes mellitus patients at the Public Health Center Kendalsari Malang City, in the good category is almost half amount 17 people (38.63%), in the good category, the majority is 27 people (61.37%). Based on table 3, the age data is almost half the age >65 years, amount 21 people (47.72%). In DM sufferers it usually occurs over the age of 30 years and is mostly experienced by adults over 40 years of age because insulin resistance increases at the age of 40-60 years. As age increases, the prevalence of DM increases (Ningrum et al., 2019). Research by Sousa (2011) in Ningrum et al (2019) states that as a person's age increases, their level of maturity increases, so that a person is able to think rationally about the benefits they will receive when carrying out diabetes self-care management.

In the gender data, half men and half women amount 22 people (50%). Gender influences self-care for diabetic clients. It was explained that female clients showed better diabetes self-care behavior than male clients. Self-care activities for diabetes clients should be carried out by all diabetes clients, both men and women, but in reality women are more concerned with their health, so they try as much possible to focus on their disease (Sousa, V. D., Zauszniewski, JA, Musil, CM, Price Lea, PJ, & Davis, 2015). In the marital status data, the majority are married, amount 33 people (75%). Because married people will get attention and support from their partner. This is in line with the fact that marriage will provide benefits for a person's health because they will get attention from their partner. Research shows that someone who is married will live longer than someone who is not married or divorced (Kodriati, 2010).

In educational data, almost half have finished elementary school and almost half have senior high school amount 14 person (31.81%). In management of DM, knowledge is an important factor. A study found that a lack of knowledge can influence self-care management. Meanwhile, patients with low education will find it difficult to learn to care themselves. However, many studies also reveal that there is no relationship between the level of knowledge and DM self-care activities, which means that patients with a high level of education are not necessarily compliant in carrying out DM self-care activities (Kisokanth, Prathapan, Indrakumar, & Joseph, 2014).

In the employment data, the majority did not work, amount 23 people (52.28%). Physical work can also be called physical activity. The great benefits of physical activity in diabetes mellitus include lowering blood glucose levels, preventing obesity, playing a role in overcoming complications, blood lipid disorders and increasing blood pressure (Muizzudin, 2013).

In the data, the duration of suffering from DM was mostly >10 years amount 31 people (70.46%). Patients who suffer from DM for longer will be able to understand the situation they are feeling, both from a physical, psychological, social relations and environmental perspective because the patient already knows and has more experience with the disease, so it will encourage the patient to be better able to anticipate emergencies or things that might happen to the patient someday (Laila, 2017). The higher the level of communication between health workers in terms of providing health education about diabetes self-care management activities, the self-care activities of suffer will increase. Health worker communication is related to the services provided to clients in the form of providing information/education which includes diet activities or eating pattern management, physical exercise, blood sugar monitoring, compliance with taking medication, and health care. This information is adequately conveyed to clients so that clients have an understanding regarding the disease they are experiencing. Communication with health workers, apart from providing information, is also important in complying with treatment planning and improving the achievement of diabetes management results.

Managing self-care for DM involves a range of activities and lifestyle aimed at controlling blood glucose levels, preventing complication and maintaning overall of health. Comprehensive self- care management for diabetes monitoring blood glucose, medication management, healthy eating, physical activity, weight management, stress management, regular medical check-up, footcare, education and awareness.

Conclusion

Management self- care for Diabetic Mellitus almost half of Diabetes Mellitus the majority on enough category amount 27 people (61.37) and in the good category 17 people (38.63%). Patient DM are expected to improve *self-care management behavior* to improve health status and prevent further complications.

The results of this study show that self-management in DM patients in general is self-management behavior in aspects of diet, exercise, blood sugar monitoring, foot care which can be further improved, thereby modifying and facilitating types of exercise and special programs for

DM patients which are carried out in activities Chronic Disease Management Program.

Reference

Allen, N., & Gupta, A. (2019). Current diabetes technology: Striving for the artificialpancreas.Diagnostics,9(1).https://doi.org/10.3390/diagnostic s90100 31

Alligood, M. R. (2017). Nursing Theorist and Their Work-E-Book.In Elsevier HealthSciences.https://books.google.co.id/books?id=l7stDwAAQBAJ&printsec=frontcover&hl=id&source=gbs_ge_summary_r&cad=0#v=onepage&q& f=true

American Diabetes Association. (2021). 2. Classification and diagnosis of diabetes: Standards of medical care in diabetes-2021. Diabetes Care, 44(January), S15–S33. https://doi.org/10.2337/dc21-S002

Amu, Y. (2014). Faktor Resiko Kejadian Diabetes Mellitus Tipe II di RSUD. Prof. Dr. Hi. Aloei Saboe Kota Gorontalo. Program Study Ilmu Keperawatan, Fakultas Ilmu Ilmu Kesehatan dan Keolahragaan Universitas Negeri Gorontalo, 1–13.

Anam, K. (2016). Gaya Hidup Sehat Mencegah Penyakit Hipertensi. Jurnal Langsat, 3(2), 97–102.

Angeli, J. M., Harpster, K., Huijs, L., Seid, M., Sheehan, A., & Schwab, S.M. (2019). Patient-Centered Goal Setting in Developmental Therapy: Discordance between Documented Goals and Caregiver-Perceived Goals.PediatricQuality&Safety,4(4),e199. https://doi.org/10.1097/pq 9.0000000000000199

Ardiani, H. E., Permatasari, T. A. E., & Sugiatmi, S. (2021). Obesitas, Pola Diet, dan Aktifitas Fisik dalam Penanganan Diabetes Melitus pada Masa Pandemi Covid-19. Muhammadiyah Journal of Nutrition and Food Science (MJNF), 2(1), 1. https://doi.org/10.24853/mjnf.2.1.1-12

Arianti, Yetti, K., & Nasution, Y. (2015). Hubungan Antara Perawatan Kaki dengan Risiko Ulkus Kaki Diabetes di Rumah Sakit PKU Muhammadiyah Yogyakarta. Muhammadiyah Journal of Nursing, 2008, 9–18.

Asamoah-Boaheng, M., Sarfo-Kantanka, O., Tuffour, A. B., Eghan,B.,&Mba nya, J. C. (2019). Prevalence and risk factors for diabetes mellitus among adults in Ghana: A systematic review and meta-analysis.International Health, 11(2), 83-92.https://doi.org/10.1093/in thealth/ihy067

Atkinson, M. A. (2012). The pathogenesis and natural history of type 1 diabetes. Cold Spring Harbor Perspectives in Medicine, 2(11), 1–18. https://doi.org/10.1101/cshperspect.a007641

Azizah, N. (2020). Hubungan Indeks Massa Tubuh Dengan Kadar Gula Darah Puasa Pasien Rawat Jalan Diabetes Melitus Tipe 2 Di Rsup Dr.Wahidin Sudirohusodo Makassar Periode Januari-Desember 2018.Khazanah:JurnalMahasiswa,12(1),2532.https://doi.org/10.20 85/khazanah.vol12.iss1.art6

Baynest, H. W. (2015). Classification, Pathophysiology, Diagnosis and \ Management of Diabetes Mellitus. Journal of Diabetes & Metabolism,06(05). https://doi.org/10.4172/2155-6156.1000541

Bellou et al. (2018). Risk factors for type 2 diabetes mellitus: An exposure wideumbrellareviewofmetaanalyses..https://www.ncbi.nlm.nih.gov/ mc/articles/PMC5860745/pdf/pone.0194127.pdf

Bustan, M. N. (2007). Epidemiologi Penyakit Tidak Menular Cetakan 2.Rineka Cipta.

Chaidir, R., Wahyuni, A. S., & Furkhani, D. W. (2017). Hubungan Self Care Dengan Kualitas Hidup Pasien Diabetes Melitus. Jurnal Endurance, 2(2), 132. https://doi.org/10.22216/jen.v2i2.1357

Citra Windani, M. S1, Mohammad Abdul, Z. S2, U. R. (2019). Gambaran Self-Manajemen Pada Pasien Diabetes Melitus Tipe II di Puskesmas Tarogong Kabupaten Garut. 15(1), 1–11.

Eva Decroli, S.-K. F. (2019). Diabetes Melitus Tipe 2 (S.dr.\Alexander Kam & S. dr. G. P. D. dr. A. R. dr. Yanne Pradwi Efendi (eds.)). Pusat Penerbitan Bagian Ilmu Penyakit Dalam Fakultas Kedokteran Universitas Andalas.

Erida Silalahi, L. (2021). Efektivitas Edukasi Self-Care Terhadap Perilaku Manajemen Diri pada Pasien Diabetes Melitus di Wilayah Puskesmas Sukapura Jakarta. Media Publikasi Promosi Kesehatan Indonesia, Vol. 4(No. 1), 15–22.

Ezeani, I. U. ., Chukwuonye, I. I. ., Onyeonoro, U. U. ., Chuku, A. . dan, & Ogah, O. S. (2020). Prevalence and Risk Factors for Diabetes Mellitus in A State in South East Nigeria: Results of a Population Based House to House Survey. Current Diabetes Reviews, 16(2).https://doi.org/10.2174/1573399815666190619142708

Fanani, A. (2020). Hubungan Faktor Risiko dengan Kejadian Diabetes Mellitus. Jurnal Keperawatan, 12(3), 371–378. Goguen, J., & Gilbert,

J. (2018). Hyperglycemic Emergencies in Adults. Canadian Journal ofDiabetes,4\2,S109S114.https://doi.org/10.1016/j. jcj d.2017.10.013

Gupta, A., Sharma, M., & Sharma, J. (2015). A Role of Insulin in different types of Diabetes. International Journal Current Microbiology and Applied Science, 4(1), 58–77.

Handriana, I., & Hijriani, H. (2020). Gambaran self care management pada pasien diabetes mellitus di wilayah kerja Puskesmas Majalengka. Prosiding Senantis 2020, 1(1), 1189–1194.

Hapsari, P. N. (2014). Hubungan Antara Kepatuhan Penggunaan Obat Dan Keberhasilan Terapi Pada

Pasien Diabetes Mellitus Instalasi Rawat JalanDiRsXSurakarta.8(33),44.http://lib.ui.ac.id/file?file=pdf/abstrak/ id_ abstrak20281676.pdf

Hastuti, A. P., Suprawoto, D. N., Roesardhyati, R., Kurniawan, A. W., & Soares, D. (2024). Family Empowerment to Fullfillment Nutrition in Stunted Children. Babali Nursing Research, 5(1), 54-66.

Hastuti, A. P., Sukartini, T., Arief, Y. S., Nursalam, N., Roesardhyati, R., Kurniawan, A. W., & Suprawoto, D. N. (2024). Women's empowerment based on self-regulated learning as mother's ability to fulfill nutrition in stunted children. The Medical journal of Malaysia, 79(1), 28-33.

Ardhiles Wahyu Kurniawan, Ratna Roesardhyati, Apriyani Puji Hastuti, Risky Siwi Pradini, & Ambarika, R. (2024). Smart Health Village in Improving Disaster Preparedness. *Journal Of Nursing Practice*, *7*(2), 305–313. https://doi.org/10.30994/jnp.v7i2.491

Hardianti Arifin, Afrida, E. (2020). Hubungan Self Care dengan Kualitas Hidup Pada Pasien Diabetes Melitus Tipe 2 di Wilayah Kerja Puskesmas Cimahi Tengah. Jurnal Ilmiah Kesehatan Diagnosis,15,82. http://jurnal.stikesnh.ac.id/index.php /jikd/article/view/397

Hidayah, M. (2019). Hubungan Perilaku Self-Management Dengan Kadar Gula Darah Pada Pasien Diabetes Mellitus Tipe 2 Di Wilayah Kerja Puskesmas Pucang Sewu, Surabaya. Amerta Nutrition,3(3),176. https://doi.org/https://doi.org/10.20473/amnt.v3i3.2019.176-182

Ibrahim. (2018). Pengaruh Diet Terhadap Kadar Gula Darah Pasien Diabetes Melitus Tipe II. Jurnal Kesehatan Saintika Meditory, IDF. (2017). Eighth edition 2017. In IDF Diabetes Atlas, 8th edition. https:// www.idf.org/aboutdiabetes/type-2-diabetes.html

IDF. (2019). In IDF Diabetes Atlas Ninth Edition: International Diabetes Federation. https://www.diabetesatlas.org/en/.

Istiyawanti, H., Udiyono, A., Ginandjar, P., & Adi, M. S. (2019). Gambaran Perilaku Self Care Management Pada Penderita Diabetes Melitus Tipe 2. Jurnal Kesehatan Masyarakat (e-Journal), 7(1), 155–167.

Jelantik, Ig. M. G., & Haryati, H. E. (2017). Hubungan Faktor Risiko Umur, Jenis Kelamin, Kegemukan Dan Hipertensi Dengan Kejadian Diabetes Mellitus Tipe II di Wilayah Kerja Puskesmas Mataram. Journal of Chemical Information and Modeling, 53(9), 21–25. http://www.elsevier.com/locate/scp

SELFCARE MANAGEMENT IN DIABETIC

ORIGINALITY REPORT

15%	13%	8%	2%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to University of Hull Student Paper	1%
2	krex.k-state.edu Internet Source	1%
3	oamjms.eu Internet Source	1%
4	worldwidescience.org Internet Source	1%
5	jurnal.unsil.ac.id Internet Source	1%
6	repository.unhas.ac.id Internet Source	1%
7	Submitted to Badan PPSDM Kesehatan Kementerian Kesehatan Student Paper	<1%
8	downloads.hindawi.com Internet Source	<1%
9	www.statpearls.com Internet Source	<1%

10	www.world-today-news.com Internet Source	<1%
11	Fatma Özkan Tuncay, Dilek Avcı. "Association between self-care management and life satisfaction in patients with diabetes mellitus", European Journal of Integrative Medicine, 2020 Publication	<1%
12	Levi Tina Sari, Wahyu Wibisono, Nevy Norma Renityas. "The Effectiveness of Reflexology Massage to The Reduction of Blood Sugar Level of Elderly with Type 2 Diabetes Mellitus", Jurnal Ners dan Kebidanan (Journal of Ners and Midwifery), 2022 Publication	<1%
13	Pouya Saeedi, Inga Petersohn, Paraskevi Salpea, Belma Malanda et al. "Global and regional diabetes prevalence estimates for 2019 and projections for 2030 and 2045: Results from the International Diabetes Federation Diabetes Atlas, 9th edition", Diabetes Research and Clinical Practice, 2019 Publication	<1%
14	www.researchgate.net Internet Source	<1%
15	ejournal.lldikti10.id Internet Source	<1%

16	journal.stieamkop.ac.id Internet Source	<1 %
17	jurnal.fkip.unila.ac.id Internet Source	<1 %
18	ejournal.seaninstitute.or.id Internet Source	<1 %
19	ejournal.stikeskesosi.ac.id Internet Source	<1 %
20	scholar.unair.ac.id Internet Source	<1 %
21	www.gssrr.org Internet Source	<1 %
22	Anita Joeliantina, Nur Lailia Antasyia, Irfany Nurul Hamid, Dewi Purnamawati. "Quality of Life of Patients with Diabetes Mellitus Based on Their Characteristics", Jurnal Keperawatan Terpadu (Integrated Nursing Journal), 2023 Publication	<1 %
23	Williara Queiroz de Oliveira, Iramaia Angélica Neri-Numa, Henrique Silvano Arruda, David Julian McClements et al. "Encapsulated flavonoids for diabetic foods: The emerging paradigm for an effective therapy", Trends in Food Science & Technology, 2022 Publication	<1 %
	bio-protocol.org	

24	Internet Source	<1%
25	digitalcommons.olivet.edu Internet Source	<1%
26	eprints.lancs.ac.uk Internet Source	<1%
27	link.springer.com Internet Source	<1%
28	static-curis.ku.dk Internet Source	<1%
29	www.goldenratio.id Internet Source	<1%
30	www.ukinstitute.org Internet Source	<1%
31	Fitriyanti Nurdin. "Persepsi Penyakit dan Perawatan Diri dengan Kualitas Hidup Diabetes Mellitus Type 2", Jurnal Keperawatan Silampari, 2021 Publication	<1%
32	Tuho Konsultasi Mendrofa, Ermi Girsang, Sri Lestari Ramadhani Nasution, Chrismis Novalinda Ginting. "Prevalence and Determinants of Drug Adherence in Type 2 Diabetes Mellitus Patients", Jurnal Aisyah : Jurnal Ilmu Kesehatan, 2022 Publication	<1%

33	bmcprimcare.biomedcentral.com Internet Source	<1 %
34	journal.um-surabaya.ac.id Internet Source	<1 %
35	obsessivelyoutspoken.com Internet Source	<1 %
36	repository.stikesdrsoebandi.ac.id Internet Source	<1 %
37	studentsrepo.um.edu.my Internet Source	<1 %
38	www.randwickresearch.com Internet Source	<1 %
39	Giuseppe Mancia, Guido Grassi, Konstantinos P. Tsioufis, Anna F. Dominiczak, Enrico Agabiti Rosei. "Manual of Hypertension of the European Society of Hypertension", CRC Press, 2019 Publication	<1 %

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	On		