ORIGINAL ARTICLE

RELATIONS KNOWLEDGE AND ATTITUDE OF NURSES IN WOUND TREATMENT OF DIABETES MELLITUS IN DISTRICT GENERAL HOSPITAL DISTRICT OF CENTRAL TOBELO NORTH HALMAHERA

Alexander O. Maengkom[1]*, Anwar Ramlah Sitti[1], Deswisno Tjatjawi[1]

[1] *Department of Nurse, College of Health Sciences (STIKES) Halmahera, Medika Mandiri Foundation, Halmahera, Indonesia.*

ARTICLE INFO

*Correspondence to Author:
Alexander O. Maengkom
Department of Nurse, College of Health Sciences (STIKES) Halmahera, Medika Mandiri Foundation, Halmahera, Indonesia.

E-mail:
alexander.maengkom@ymail.com

ABSTRACT

Diabetes mellitus is a condition where the sugar levels in the blood is higher than normal (60 mg - 145 mg / dl), because our bodies can release or use the hormone insulin adequately. Wound complication of diabetes mellitus is diabetic wounds may experience problems that are, psychological and social factors are conditions in which usually result in pressure even obstacles in the process of wound treatment and care of diabetes mellitus. This type of research using quantitative methods, with cross sectional approach (cross-sectional) .with a view to determine whether there is a relationship between knowledge and attitude of nurses (independent variable) with DM wound care (dependent variable) in the observation or measurement variables at once and at the same time the same or a point of time apporoach. Samples are taken from the entire portion of the object on conscientious and considered to have the entire population. the sample This is a nurse. 30. Results of statistical test analysis (SPSS) by using chi - square is known that the value (p =, 004 <sig 0.5) it can be concluded that tinggkat nurses knowledge and attitude of nurses received. Based on the research results have shown that there is a relationship of knowledge and attitude of nurses in wound management of diabetes mellitus.

INTRODUCTION

Diabetes mellitus is a metabolic disorder characterized by hyperglycemia associated with abnormalities in the metabolism of carbohydrates, fats and proteins caused by a decrease in insulin secretion or a decrease in insulin sensitivity or both that causes chronic microvascular complications and neuropati.[1]

According to the WHO 2014 prevalence of diabetes mellitus is highest in the region mediteria timur14%. And the lowest in Europe and the western pacific region of 8% -9%. generally low-income countries showed the highest prevalence of diabetes mellitus in the world. The prevalence of diabetes mellitus in a country with a high opinion of the highest in the country Micronesia 22.5%. prevalence of diabetes mellitus in the country with the highest income / upper most in the state of Qatar 23%. Followed by the state of Kuwait 20.1% and the prevalence of diabetes mellitus in countries with low income countries most at 12.1% followed taj ikisan gambia country and chad respectively 9.9%. According to International Data WHO diabetes mellitus is diabetes mellitus type 1 diabetes mellitus type 2, in 2014, 8.5% of adults aged 18 years and older suffer from diabetes mellitus. The main cause of 1.5 million kematian.[2]

Provincial data on prevalence of diabetes mellitus in northern Maluku by 1.3% as many as 44.651 people (Ministry of Health, 2013). based on data from Dr. M. Djamil desert in 2015 the number of patients with diabetes mellitus who poly clinic visits in particular diabetes mellitus. is a disease characterized by blood glucose levels than normal and metabolic disorders korbohritdrat, fats and proteins caused by a relative deficiency of the hormone insulin or absolut.[3]

Based on the basic health research data (riskesdes) in 2013 declared prevalence of diabetes of 1.1% in 2011 increased to 2.4% in 2013. The prevalence of diabetes was lowest for the province of Lampung is 0.7%. In West Sumatra into the greatest prevalence of diabetes mellitus, which was ranked 7th out of 33 provinces with a prevalence of 1.3% .[4]

Indonesia most patients with diabetes mellitus in the world with 9.1 million the number of people with diabetes is the fifth highest number in world.[5]

Based on preliminary data obtained from hospitals Tobelo, wound Data diabetes mellitus, male 6 and female 10 number 16, in the year 2017. And in 2018 the data wounds diabetes mellitus is male 10 and female 8 people , Number 18 people.[6]

METHODS

This type of research using quantitative methods, with cross sectional approach (cross-sectional) .with a view to determine whether there is a relationship between knowledge and attitude of nurses.

Where the research will be conducted at (Hospital) Tobelo research on relationship of knowledge and attitude of nurses in wound care diabetes mellitusin (hospitals) Tobelo.

Population is the number which consists of the object or subject that has certain characteristics and qualities defined by the researchers to study and then withdrawn kesimpulannya.[19]

The population in this study is that patients with diabetes mellitus in mangalami wound (Hospital) Tobelo is, the number of 34 people.

Samples are taken from the entire portion of the object on conscientious and considered to have the entire population. the sample This is a nurse. 30 orang.Teknik sampling used in this study is, data that can be processed manually through questionnaires using the calculator tabulated then presented in the form of a frequency table.

RESULTS AND DISCUSSION

Overview of Respondents
a. Age Group

Table 1. Frequency Distribution of Respondents by age in public hospitals in North Halmahera Tobelo.

Age	Frequency	Percentage
19-25	4	13.33%
26-35	26	86.67%
Total	30	100%

Source: Primary Data 2018

Based on data in Table 1. shows that out of 36 respondents obtained the number of age19-25 as many as 4 people (13.33%) and 26-35 as many as 26 people (86.67%).

b. Group Education

Table 2. Frequency Distribution of Respondents by gender in public hospitals in North Halmahera Tobelo.

Gender	Frequency	Percentage
Woman	24	80%
Man	6	20%
Total	30	100%

Source: Primary Data 2018

Based on data in Table 2. shows that out of 30 respondents obtained woman as many as 24 people (80%) and man as many as 6 people (20%).

Table 3. Frequency Distribution of Respondents by education in public hospitals in North Halmahera Tobelo.

Education	Frequency	Percentage
SD	0	0%
SMP	0	0%
SMA	0	0%
College	30	100%
Total	30	100%

Source: Primary Data 2018

The results of the data in Table 3 shows that out of 30 respondents with a background in SD from 0 respondents (0%), SMP from 0 respondents (0%), SMA 0 respondents (0%), and College 30 respondents (100%).

Table 4. Respondents Frequency Distribution Based on the work in public hospitals Tobelo North Halmahera.

Work	Frequency	Percentage
PNS	14	46.67%
PTT	0	0%
Contract	16	53.33%
Total	30	100%

Source: Primary Data 2018

The results of the data in Table 4 shows that respondents who are PNS 14 respondents 46.67%, PTT 0 0% respondents, 16 respondents 53.33% contract.

Table 5. Respondents Frequency Distribution Based on Religion in Public Hospital Tobelo North Halmahera.

Religion	Frequency	Percentage
Islam	3	10%
Christian	27	90%
Total	30	100%

Source: Primary Data 2018

The results of the data in Table 5 shows that respondents with Islamic religion respondent number 3 percentage 10%, of respondents with Christianity number 27 percentage of 90%.

Table 6. Respondents Frequency Distribution Based on the level of knowledge of nurses at the General Hospital of North Halmahera Tobelo.

Knowledge level	Frequency	Presentation
Good	28	93.33%
Knowledge	2	6,67%
Less	0	0%
Total	30	100%

Source: Primary Data 2018

Based on Table 6 shows the level of knowledge of nurses at the General Hospital Tobelo, good knowledge of 28 respondents with 93.33% presentation, knowledge, knowledge is quite 2 respondents with a percentage of 6.67% , and knowledge less 0 respondents with a percentage of 0%.

Table 7. Respondents Frequency Distribution Based on the attitude of the nurses at the General Hospital of North Halmahera Tobelo.

The attitude of nurses	Frequency	Presentation
Good	29	96.67%
Pretty	1	3.33%,
Knowledge	0	0%
Total	30	100%

Source: Primary Data 2018

Based on Table 7 shows the attitude of the nurses at the General Hospital Tobelo, good attitude 29 respondents with presentations 96.67%, pretty good attitude 1 respondents with a percentage of 3.33%, and the knowledge of the respondents with a percentage less 0. 0%.

Tabel 8. Frequency distribution based wound treatment of diabetes mellitus in the General Hospital of North Halmahera Tobelo.

DM wound care	Frequency	Presentation
Right	28	93.33%
false	2	6,67%
Total	30	100%

Source: Primary Data 2018

Based on Table 8 shows the frequency distribution based wound care diabetes mellitus, correctly answer 28 93.33% of respondents with a presentation of wrong answers 2 respondents with a percentage of 6.67%.

CONCLUSION

1. The level of knowledge of nurses with the highest presentation of 28 respondents 93.33%, knowledge, knowledge is quite 2 respondents with a percentage of 6.67% .and knowledge less 0 respondents with a percentage of 0%.
2. The attitude of a good nurse 29 respondents with presentations 96.67%, pretty good attitude 1 respondents with a percentage of 3.33%, and the knowledge of the respondents with a percentage less 0. 0%.

The results of the chi-square test analysis showed that there was a relationship of knowledge and attitude of nurses in wound management of diabetes mellitus that of 30 respondents was obtained, (p =, 004 where the p-value less than the value sig <0.05).

REFERENCES

1. Said Kudo et al. Effects Of The Decrease Of Boold Suger Levels In Patients With Diabetes Melitus. Internasional Journal Of Health Medicine and Current Research, September 2016; Vol 1 (issue 01) : pp.39-43,Doi : 10.22301/IJHMCR. 2528-3189.39.
2. World health organization. Diabetes mellitus 2016 june (cited sep 29). Available from: http:// www. Who. Int/ mediacntre/ facts heets/fs 312/ en/ *jurnal e- biomedik (eBm), vol 4, no 2.*
3. Dinkes Malut.Profil Dinas Kesehatan Provinsi Maluku Utara, 2016.
4. Depertement Kesehatan RI (Dep.Kes. RI) Badan Penelitian Pengembangan Kesehatan, Riset Kesehatan Dasar (Riskesdes), Laporan Nasional 2013 (cited 2018 may 20); Available from: http :// www.depkes .go.id/ resources/ general/ Hasil % 20 Riskesdes.
5. Soyjoy. Diabetes and me. 1st ed. Jakarta : PT Elex media komputindo, 2015.p, 2. *Jurnal e- biomedik (eBm), vol 4, no 2.*
6. Anonim 1 Data rekam medik (RSUD) Tobelo luka diabetes mellitus, laki – laki 6 orang dan perempuan 10 orang jumlah 16 orang, di Tahun 2017. Dan di Tahun 2018 data luka diabetes mellitus adalah laki – laki 10 orang dan perempuan 8 orang.
7. Sofiana Elita. V., Utomo W. penderita diabetes mellitus Tipe 2. Jurnal Stikes Muhammadiyah Riau progrom ilmu keperawatan.2012.
8. Widhiarsi E. *diabetes mellitus RSUD Dr. meowardi.* Karya tulis IIMiah strata Satu fakultas IImu kesehatan universitas muhammadiyah Surakarta. 2012
9. Margolis DJ, Hampton M, Hoffstad O, Malay S, Thom S. Health literacy and diabetic foot ulcer healing. Wound Repair and Regeneration. 2015; 23: 299-301 Jurnal Luka Indonesia Vol. 4(1): p-ISSN: 2442-2665 e-ISSN: 2614-3046.4142.
10. Nuralif, H.A & kusuma, H. 2015; aplikasi asyhan keperawatan berdasarkan diagnose medis nanda dan NIC- NOC Yogyakarta : medi Action.
11. Susanto,T. Diabetes, Deteksi, Pencegahan, Pengobatan. Buku Pintar ISBN. Jakarta. 2013.
12. Notoatmodjo,Soekidjo.Promosi Kesehatan dan Perilaku Kesehatan.Jakarta: Rineka cipta, karya tulis Ilmiah Dwi vinti.2012.
13. PERKENI.Konsensus Pengelolaan dan Pencegahan Diabetes Melitus Tipe 2 di Indonesia.Jakarta: jurnal Endureance vol, 3 no.1.
14. Motoatmodjo, S. Metodologi Penelitian Kesehatan. Jakarta: Rineka Cipta. 2014; e – jurnal keperawatan (e- kp) vol 5 no 1.
15. Sujarweni WV. Metode Penelitian Keperawatan. Edisi Ke- 1 Yogyakarta: Gava Media, 2014.
16. Nizam Hasneli, Arneliwati faktor – factor yang mempengaruhi pengetahuan diabetes mellitus, e- journal keperawatan (e-Kp) vol 5 2014.
17. Mapanawang A.L. Identifikasi and analysis of estrone in gedi (abelmoschus manihot jatropah milifi daeup horbiaceae) of maturepregnant. Internasional journal of Current research. 2016; Vol 2, 28 (5): 31502-3.
18. Arend L. Mapanawang Et Al. Relationalship between gas aseton concentration by ages And gender types of diabetes patiens using photoacoustic sp ectroscopy, Internasional journal of current medical and research medicine 2018; vol 3 issue 01: Pp 72- 776.

DOI: 10.22301/IJHMCR. 2528-3189.772, diakses 17 mei 2018.

19. Mapanawang. Riset Di Bidang Kesehatan. Tobelo: Medika Mandiri Halmahera, 2016.

20. Mariya Sepiyanti. 2013. Hubungan Tingkat Pengetahuan dengan Sikap Perawat tentang Perawatan Luka Diabetes Menggunakan Tehnik Moist Wound Healing. http://download.portalgaruda.org. (Accessed 12 Mei 2015).

****