



**THE RELATIONSHIP OF THE CHRONIC DISEASE MANAGEMENT PROGRAM
(PROLANIS) AND HYPERTENSION IN THE WORKING AREA OF THE
DARUSSALAM PUSKESMAS MEDAN CITY
YEAR 2024**

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ABSTRACT

Prolanis is a program for managing chronic diseases such as hypertension and diabetes mellitus which is quite effective and efficient, but there are still many people who have not utilized this service. Hypertension is considered a serious health problem because it often occurs without complaints and can cause death (silent killer). The aim of this research is to analyze the relationship between the chronic disease management program (Prolanis) and hypertension in the work area of the UPT Puskesmas Darussalam Medan City in 2024. This type of research is quantitative with a cross-sectional research design approaches. The number of samples was determined using the Slovin formula as many as 93 people. Primary data collection was carried out directly through questionnaires and secondary data was obtained from the Darussalam Health Center, Medan City. Data analysis was carried out using univariate and bivariate methods. Univariate analysis was carried out to obtain a description of the research variables and bivariate analysis was carried out to test the hypothesis of the relationship between Prolanis and hypertension. Hypothesis testing uses the Chi-square statistical test. Based on statistical analysis, medical consultation was obtained ($p=0.000$), group education ($p=0.000$), SMS gateway reminder ($p=0.000$), home visit ($p=0.001$), health status monitoring ($p=0.000$). All variables studied are related to whether blood pressure is controlled or not, where these various variables, if implemented properly, will be beneficial for the stability of blood pressure. It is hoped that this research can provide recommendations for further improving chronic disease management programs to achieve a more optimal quality of life.

Keywords: Prolanis and Hypertension

INTRODUCTION

Hypertension is called the silent killer because it often occurs without complaints, so sufferers do not know that they have hypertension and are discovered after complications occur. Target organ damage due to hypertension complications depends on the magnitude of the increase in blood pressure and the length of time the blood pressure condition has been

undiagnosed and untreated (Ekasari, Mia Fatma. 2021)

WHO data for 2018 shows that hypertension attacks 22% of the world's population. Based on predictions by 2025, as many as 29% of adults throughout the world will experience hypertension (WHO, 2018). In the United States, nearly 50 million people are diagnosed with hypertension, namely 69% of adults aged 18 years are aware of their hypertension. A

total of 58% underwent treatment but only 31% were controlled. Hypertension in the Americas has a lower prevalence than in Europe. Hypertension in the United States has a prevalence of 20.3% and Canada 21.4%, while in several countries such as Sweden 38.4%, Italy 37.7%, England 29.6%, Spain 40% and Germany 55.3% (Angraeni N, 2020)

In Southeast Asia, the incidence of hypertension reaches 36%. In Indonesia, the prevalence rate of hypertension known through measurements at ages ≥ 18 years is 25.8%. The incidence of hypertension in the elderly in Indonesia aged 55-64 years is 45.9%, aged 65-74 years is 57.6% and aged > 75 years is 63.8%

Based on the 2018 North Sumatra Riskesdas, the prevalence of hypertension based on measurement results in residents ≥ 18 years of Medan City with a prevalence of 25.21% with a proportion of medication compliance 62.93, non-routine 18.25%, non-medication 10.98% (Riskesdas 2018)

Along with the increasing problem of hypertension, the government has established various health service policies for hypertension sufferers to improve the health status and quality of life of hypertension sufferers. Health services at the community level, such as health insurance in the program, are felt to be ineffective because there are many problems with referrals to hospital for hypertension sufferers. Since 2014, BPJS Health has implemented a chronic disease management program (Prolanis) which is a health service system for managing

hypertension and type II diabetes mellitus (Rosdiana, AI, Raharjo, BB, & Indarjo, S, 2017)

The chronic disease management program (Prolanis) is a health service system and proactive approach that is implemented in an integrated manner involving participants, health facilities and BPJS health in the context of maintaining health for BPJS health participants who suffer from chronic diseases to encourage participants with chronic diseases to achieve a better quality of life. optimally with cost-effective and efficient health services. The aim of Prolanis is to encourage participants who suffer from chronic diseases to achieve an optimal quality of life with an indicator that 75% of registered participants who visit first level health facilities have "good" results in accordance with the relevant clinical guidelines so as to prevent disease complications from arising. The Prolanis activities consist of Medical Consultation, Prolanis Participant Education, SMS Gateway Reminder, Home Visit, Club Activities (Gymnastics)/Health Status Monitoring (BPJS Health. 2014)

This Prolanis activity will be very beneficial for the health of BPJS participant users, apart from that, this Prolanis activity can also help BPJS health in dealing with incidents of non-communicable diseases, where funding for patients with chronic diseases is very high, for this reason it is necessary to make preventive efforts related to chronic diseases. The role of community health centers in the JKN (National Health

Insurance) era as primary service providers is increasingly being enhanced because all FKTPs (First Level Health Facilities) including community health centers are the first facilities used by patients who are expected to be able to solve health problems (Sari, PDP 2017)

Darussalam Community Health Center is one of the Community Health Centers in Medan City which has a Prolanis program which has a high number of cases of hypertension. Of the 10 largest disease cases in the Darussalam Health Center Working Area, Medan City in 2023, hypertension is still in first place with the highest number of diseases in the health center. In 2023, hypertension data from January to November can be seen that the number of hypertension patients has reached 1,437 patients with hypertension in the Darussalam Health Center Working Area, Medan City (2023 Annual Report)

"Based on the description above, this research is aimed at analyzing the relationship between the chronic disease management program (prolanis) and the incidence of hypertension in the working area of the UPT Puskesmas Darussalam, Medan City in 2024."

METHOD

This type of research is quantitative research with the research design being cross-sectional with independent and dependent variables only once at a time. This research was conducted in the UPT work area of the Darussalam Health Center, Medan City, North Sumatra Province, starting from March to April 2024. The population was all BPJS participants registered with Prolanis with hypertension, totaling 1,437 participants. Based on the results of calculating the number of samples using the Slovin formula, the sample size was 93 people. Data was collected through interviews with the help of questionnaires and observation. Data analysis was carried out univariately to describe the frequency distribution of each variable. Bivariate analysis was carried out using the Pearson Chi-Square test at a confidence level of 95% with $\alpha < 0.05$.

RESULTS AND DISCUSSION

Respondent Characteristics

Respondent characteristics consist of gender, age, marital status, length of suffering, education, employment, income as presented in table 1.

Table 1 Characteristics of Respondents

No	Characteristics	Category	Number (n)	Percentage%
1.	Gender	Man	40	43.0 %
		Woman	53	57.0 %
2	Age	42 – 51	17	18.3 %
		52 – 61	18	19.4 %

No	Characteristics	Category	Number (n)	Percentage%
		62 – 71	34	36.6 %
		72 - 82	24	25.8 %
		Marry	63	67.7 %
3	Marital status	Widow	19	20.4 %
		Widower	11	11.8 %
		< 1 Year	42	45.2 %
4	Long Suffering	> 1 Year	51	54.8%
		No school	4	4.3 %
5	Education	elementary school	13	14.0 %
		JUNIOR HIGH SCHOOL	18	19.4 %
		SENIOR HIGH SCHOOL	40	43.0 %
		S1	18	19.4 %
6	Work	Doesn't work	10	10.8 %
		Housewife	41	44.1 %
		Laborer	16	17.2 %
		Employee	14	15.1 %
		Businessman	12	12.9 %
7	Income	<Rp 500,000	19	20.4 %
		IDR 500,000 – IDR 900.00	35	37.6 %
		>Rp 1,000,000	39	41.9 %

Based on table 1 above, the characteristics of the Darussalam health center respondents are that the majority are female, 53 people, with the majority aged 62 - 71, 34 people, 63 people in marital status, 51 people who have suffered from hypertension >1 year for a long time, the majority have education. high school as many as 40 people. The majority of housewives work as 41 people and the

majority earn >Rp 1,000,000 as many as 39 people.

Univariate Analysis

Univariate analysis presents the frequency distribution of blood pressure variables, medical consultations, group education, gateway SMS reminders, home visits, health status monitoring.

Table 2 Frequency distribution of Blood Pressure in the Darussalam Health Center Medan Working Area

No	Category	Amount
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		N	%
1	Mild Hypertension	20	21.5
2	Moderate Hypertension	40	43.0
3	Severe Hypertension	33	35.5
Amount		93	100.0

Based on table 2 above, respondents from Darussalam Health Center based on hypertension blood pressure, 20 (21.5%) people had mild hypertension, 40 (43.0)

people had moderate hypertension, 83 (35.5%) people had severe hypertension.

Table 3 Frequency Distribution of Medical Consultations at Darussalam Health Center Medan

No	Category	Amount	
		N	%
1	Good	59	63.4
2	Not good	34	36.6
Amount		93	100.0

Based on table 3 above, it was found that the majority of medical consultations were in the good category, 59 people

(63.4%) and the minority in the unfavorable category, 34 people (36.6%).

Table 4 Frequency Distribution of Group Education at Darussalam Health Center Medan

No	Category	Amount	
		N	%
1	Good	48	51.6
2	Not good	45	48.4
Amount		93	100.0

Based on table 4 above, it was found that the education group in the good

category was 48 people (51.6%) and the less good category was 45 people (48.4%).

Table 5 Frequency Distribution of Gateway SMS Reminders at Darussalam Health Center Medan

No	Category	Amount	
		N	%
1	Good	47	50.5

2	Not good	46	49.5
Amount		93	100.0

Based on table 5 above, it is found that the majority of SMS Gateway Reminders are in the good category, 47

people (50.5%) and the minority in the poor category, 46 people (49.5%).

Table 6 Frequency Distribution of Home Visits at Darussalam Health Center Medan

No	Category	Amount	
		N	%
1	Good	49	52.7
2	Not good	44	47.3
Amount		93	100.0

Based on table 6 above, it was found that 49 people (52.7%) in the home visit

activity category were good and 44 people (47.3%) were not good.

Table 7 Frequency Distribution of Health Status Monitoring at Darussalam Health Center Medan

No	Category	Amount	
		N	%
1	Good	56	60.2
2	Not good	37	39.8
Amount		93	100.0

Based on table 7 above, it was found that the majority of health status monitoring was in the good category, 56 people (60.2%) and the minority in the poor category, 37 people (39.8%).

medical consultation and group education. Gateway sms reminder, home visit, monitoring health status with hypertension.

Relationship between medical consultation and hypertension

Bivariate Analysis

Bivariate analysis presents research results regarding the relationship between

The relationship between medical consultation and hypertension is presented in table 8

Table 8 Relationship between medical consultations and hypertension at the Darussalam Health Center, Medan City in 2024

Hypertension	Amount
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		Light		Currently		Heavy		N	%	p value
		n	%	n	%	n	%			
Medical Consultation	Good	20	33.9	30	50.8	9	15.3	59	100.0	0,000
	Not good	0	0.0	10	29.4	24	70.6	34	100.0	
Amount		20		40		33		93		

Chi Square obtained a p value of 0.000, so this means that the Group Education variable is related to hypertension. Statistical test results using the chi square test. The calculation results obtained p value = $0.000 < 0.05$, then H_a is accepted. In conclusion, there is a relationship between medical consultation and hypertension in the UPT Working Area

of the Darussalam Health Center, Medan City.

Relationship between group education and hypertension

The relationship between group education and hypertension is presented in table 9

Table 9 Relationship between Group Education and Hypertension at the Darussalam Health Center, Medan City, 2024

		Hypertension						Amount		p value
		Light		Currently		Heavy		N	%	
		n	%	n	%	n	%			
Group Education	Good	20	41.7	19	39.6	9	18.8	48	100.0	0,000
	Not good	0	0.0	21	46.7	24	53.3	45	100.0	
Amount		20		40		33		93		

Based on the results of the Chi Square analysis, it can be seen that the Group Education variable obtained a p value of 0.000, so this means that the Group Education variable is related to hypertension. Statistical test results using the chi square test. The calculation results obtained p value = $0.000 < 0.05$, then H_a is accepted. In conclusion, there is a

relationship between group education and hypertension in the Darussalam Health Center UPT Working Area, Medan City.

Relationship between Gateway SMS Reminder and Hypertension

The relationship between gateway SMS reminders and hypertension is presented in table 10

Table 10 Relationship between Gateway SMS Reminder and Hypertension at Darussalam Health Center, Medan City in 2024

		Hypertension						Amount		p value
		Light		Currently		Heavy		N	%	
		n	%	n	%	n	%			
Gateway SMS Reminder	Good	20	42.6	17	36.2	10	21.3	54	100.0	0,000
	Not good	0	0.0	23	50.0	23	50.0	39	100.0	
Amount		20		40		33		93		

Based on the results of the Chi Square analysis, it can be seen that the SMS Gateway Reminder variable has a p value of 0.000, so this means that the SMS Gateway Reminder variable is related to hypertension.

The results obtained through the chi square test p value = 0.000 < 0.05, then Ha is accepted. In conclusion, there is a

relationship between SMS Reminder and hypertension in the Darussalam Health Center UPT Working Area, Medan City. The

Relationship between Home Visits and Hypertension

The relationship between home visits and hypertension is presented in table 11.

Table 11 Relationship between Home Visits and Hypertension at Darussalam Health Center, Medan City in 2024

		Hypertension						Amount		p value
		Light		Currently		Heavy		N	%	
		n	%	n	%	n	%			
Home Visit	Good	18	36.7	15	30.6	16	32.7	49	100.0	0.001
	Not good	2	4.5	25	56.8	17	38.6	44	100.0	
Amount		20		40		33		93		

Based on the results of the Chi Square analysis, it can be seen that the home visit variable obtained a p value of 0.001, so this means that the home visit variable is related to hypertension. Statistical test results using the chi square test. The calculation results obtained p value = 0.001 < 0.05, then Ha is accepted. In conclusion, there is a relationship between

Home Visits and hypertension in the Darussalam Health Center UPT Working Area, Medan City.

Relationship between monitoring health status and hypertension

The relationship between monitoring health status and hypertension is presented in table 12.

Table 12 Relationship between Health Status Monitoring and Hypertension at Darussalam Health Center Medan City in 2024

		Hypertension						Amount		p value
		Light		Currently		Heavy		N	%	
		n	%	n	%	n	%			
Health Status Monitoring	Good	20	35.7	22	39.3	14	25.0	56	100.0	0,000
	Not good	0	48.6	18	48.6	19	51.4	37	100.0	
Amount		20		40		33		93		

Based on the results of the Chi Square analysis, it can be seen that the Health Status Monitoring variable obtained a p value of 0.000, so this means that the Health Status Monitoring variable is related to hypertension. The calculation results obtained p value = $0.000 < 0.05$, then H_a is accepted.

CONCLUSION

All the variables studied are related to whether blood pressure is controlled or not, where these various variables, if implemented properly, will be beneficial for the stability of blood pressure. Based on these results, it is necessary to strengthen the implementation of various efforts to control blood pressure through medical consultations, group education, SMS gateway reminders, home visits, monitoring health status.

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