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ACCEPTANCE OF HEALTH INTERVENTIONS AND SOCIAL RELATIONS FOR CHRONIC DISEASE SUFFERERS: ASSESSMENT OF THE ACCEPTABILITY OF THE PROLANIS PROGRAM

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Abstract

The prevalence of chronic diseases in Jambi City has tended to increase in the last three years, especially hypertension and diabetes mellitus. Chronic diseases that are high risk, high volume and high cost have an impact on the household economy of sufferers who tend to incur health costs that exceed the family's financial capacity (catastrophic). The existence of the Chronic Disease Management Program (Prolanis) from BPJS Health should contribute to reducing the number of chronic diseases, reducing the burden of disease and improving the social relations of chronic disease sufferers, however the coverage of Prolanis activity is still low and several responses from community experience indicate there are problems with the acceptability of the program. This research aims to measure the level of community acceptability of health interventions and social relations in the Prolanis practice as assessed by analyzing affective attitudes, burden, ethics, intervention coherence, costs, perceived effectiveness and self-confidence of chronic disease sufferers in Jambi City in 2023. The research was conducted with Quantitative research methods use a cross-sectional design. Respondents were selected based on a purposive sampling technique totaling 180 respondents spread across five Puskesmas work areas in Jambi City. The research instrument is a questionnaire. The research results show that the indicators of burden, ethics and effectiveness are the most dominant factors in influencing the acceptability of Prolanis participants. As a recommendation, it is suggested to the government and BPJS Health to increase public understanding of the importance of using Prolanis in an effort to reduce the number of chronic diseases in Jambi City.

Keywords: Program_Acceptance; Chronic_Disease; Health_Interventions; Social_Relations.

INTRODUCTION

Chronic disease is an increasing health problem and is the main cause of death in Indonesia. According to data from the Indonesian Ministry of Health, chronic diseases such as hypertension, diabetes, heart disease, cancer and chronic lung disease are the most common diseases in Indonesia. The prevalence of this disease is increasing every year. In 2018, heart disease was the highest cause of death in Indonesia with a percentage of 22.5%, followed by cancer (13.7%), stroke (8.5%), diabetes (3.9%), and lung disease. chronic obstructive (2.2%). Data from the 2019 Global Burden of Disease Study shows that in the same year, deaths from heart disease in Indonesia reached 268,800 cases, followed by deaths from cancer (166,100 cases), stroke (118,400 cases) and diabetes (51,800 cases) (1).

The prevalence of hypertension reached 34.1%, diabetes 10.3%, heart disease 6.9%, cancer 1.5%, and chronic lung disease 1.1%. In addition, data shows that Indonesians tend to suffer from chronic diseases at a younger age compared to other countries. For example, the average age of diabetes sufferers in Indonesia is 46 years, whereas in developed countries such as the US and Japan, the average age of diabetes sufferers is 60 years. Around 10.3 million people in Indonesia suffered from diabetes

in 2018 and it is estimated that this will continue to increase to 21.3 million people in 2045 (Kemenkes, 2019). The continuous increase in the number of chronic diseases poses serious problems for the Indonesian health system. The impact of untreated chronic diseases is an increase in the number of deaths, a decrease in people's quality of life, a decrease in productivity, health complications and an increase in health costs. Research conducted by Puslitbang-BPPT in 2018 shows that lack of attention to chronic disease prevention can lead to increased death rates due to chronic diseases and high health costs. Research from the Health Research and Development Agency of the Indonesian Ministry of Health also shows that chronic diseases can cause lost productivity and high expenses in the sufferer's family (1).

The Chronic Disease Management Program (Prolanis) is a proactive and integrated health service system launched by the government through PBJS Health since the National Health Insurance (JKN) was implemented in 2014. This program involves participants, health facilities and BPJS Health to maintain the health of participants who suffer from chronic diseases such as type 2 diabetes mellitus and hypertension in order to improve participants' quality of life and optimize the cost of effective and efficient health services. In particular, Prolanis is given to BPJS participants who suffer from type 2 diabetes mellitus and hypertension, who require long-term health attention and regular control. This program consists of activities to help participants manage diabetes and hypertension:

(a) Medical consultations for Prolanis participants,

(b) Education of groups of Prolanis participants,

(c) Reminders via SMS gateway,

(d) Physical activity, and

(e) Home visits.

The aim of the Prolanis program is to encourage participants with chronic diseases, such as type II DM and hypertension, to achieve an optimal quality of life. One indicator of the success of the Prolanis program is that 75% of registered participants must visit First Level Health Facilities and have "good" specific examination results for Type II DM and hypertension in accordance with the relevant clinical guidelines. With good examination results, it is hoped that program participants can prevent disease complications and improve their quality of life. BPJS Health data for 2021, nationally in 2017 there were around 2.2 million JKN participants who received Prolanis Program services, an increase of 3.5 million participants in 2018, 5.5 million participants in 2019, 6.2 million in 2020. Data This shows that the coverage of the BPJS Health Prolanis Program continues to increase from year to year. However, this increase has not been accompanied by an even distribution of FKTP who join the Prolanis program. The target of educating the Prolanis participant group is to form at least 1 Prolanis club in each 1 Club Management Health Facility. The number of FKTPs collaborating with BPJS Health is 20,740 FKTPs, and of that number, there are 8,660 FKTPs (41.76%) who have Prolanis Clubs. The Prolanis Club consists of 6,981 Type 2 DM Clubs and 6,799 Hypertension Clubs. This shows that not all FKTPs collaborate with BPJS Health to organize the Prolanis program. This condition raises questions about the acceptability of Prolanis both from health facilities that provide Prolanis and the community that receives Prolanis services. Several previous studies regarding the implementation of Prolanis in various regions in Indonesia include that not all

Community Health Centers in Makassar City carry out all the activities in the Prolanis program. Of the 44 community health centers, only 39 of them carry out SMS gateway reminders and only 28 community health centers carry out home visiting activities (3). Factors such as lack of understanding and participation of participants, limited health facilities, and limited trained human resources, are obstacles to the success of the Prolanis Program in Indonesia (4). Other research shows that there are still JKN participants who feel they do not fully understand the benefits and importance of carrying out the Prolanis program, and do not participate enough in the program (5). There are Prolanis participants who do not comply with doctor's advice and lack discipline in following the recommended therapy program (6). Apart from that, the lack of medical personnel trained in managing chronic diseases and limited health facilities are the reasons why participants do not take Prolanis (7).

Several factors that caused problems in implementing Prolanis encountered in previous research, such as lack of participant understanding, low participation, not complying with doctor's advice, and various experiences felt with the program, are part of the elements measured by the Theoretical Framework of Acceptability. This concept refers to a way to evaluate how appropriate a health care intervention is provided or received by a person, based on their cognitive and emotional response to the intervention. Relating to people's acceptability of health intervention programs by measuring affective attitudes, burden borne, ethical consequences, intervention coherence, costs, experience of perceived effectiveness, and self-confidence (8).

By using a multi-fact construction through the use of the Theoretical Framework of Acceptability, people's views about the benefits and risks of health interventions can be understood, as well as their subjective experiences of these interventions. This can help to design more appropriate and effective health intervention programs, which are more liked and accepted by the community, and can increase the success of these health interventions (9). In Jambi Province In Jambi Province, the area with the highest prevalence of chronic diseases is Jambi City. Jambi City has always been at the top as the area with the highest incidence of hypertension, diabetes mellitus and heart disease in Jambi Province in the last 3 years. In 2019, it was recorded that 21,092 residents of Jambi City aged ≥ 20 years suffered from hypertension. In 2020, there were 60,188 hypertension sufferers ≥ 15 years old in Jambi City. The incidence of hypertension has always been in the top position from 2016 to 2020 with a percentage range of 13.69% to 23.63% of the 10 most diseases recorded in all health centers in Jambi Province based on the 2020 Jambi Provincial Health Service report. Diabetes mellitus was recorded as 11,447 DM sufferers in Jambi City in 2020.

Research carried out by the team regarding catastrophic patterns in Jambi City, found that 30.1% of JKN Mandiri participants were at risk of experiencing catastrophic expenditure, the dominant factor influencing this was their history of disease, namely chronic diseases including hypertension and diabetes mellitus (10). This condition results in an increase in the economic burden on households in Jambi City(11). The presence of the Prolanis program from BPJS Health seeks to prevent this condition, but the community's acceptability of the program still needs to be reviewed so that the health interventions and social relations carried out can be optimal. Preliminary studies through interviews with the person in charge of Prolanis BPJS Jambi City Health revealed that in 2022 there will be 58 First Level Health Facilities (FKTP) recorded, 20 Community Health Centers and 36 Clinics have joined Prolanis but there are still 2 other FKTPs (clinics) that have not yet joined. However, not all Prolanis activities have

been carried out completely by FKTP, especially at Community Health Centers which are at the forefront of maintaining public health. Of the 20 Community Health Centers in Jambi City, at several other Community Health Centers Prolanis supporting examinations and educational exercise activities were not taking place. Several complaints received by BPJS Health regarding the implementation of Prolanis included; From the community's perspective, the change of PIC (Person in Charge) or person in charge of Prolanis which often occurs due to transfers or double workloads at FKTP reduces the PIC's performance in the eyes of the community.

Many PICs do not focus on Prolanis activities, this also triggers the RPPT which is not properly monitored, whereas from the FKTP perspective, public understanding of Prolanis is still low. If we look at the scope of the two concurrent programs, Jambi City BPJS Health has a Chronic Disease Management Program Club activity which is a combination of Prolanis-PRB (Referral Program). On average, the Prolanis Club activities at the Jambi City Health Center are attended by only a portion of Type II DM sufferers and hypertension sufferers recorded in Jambi City. The average coverage of the Chronic Disease Management Program Club which is a combination of Prolanis-PRB (Active Referral Program) in 2022 is only around 28% to 56% of the 20 Community Health Centers in Jambi City. The health centers with the lowest levels of Chronic Disease Management Program Club activity in 2022 are Tahtul Yaman Health Center (28%) and Olak Kemang Health Center (29%). Meanwhile, the highest coverage is Simpang IV Sipin Community Health Center (56%) followed by Kenali Besar Community Health Center (53%)(12). Supposedly, with Prolanis, community problems regarding the management of chronic diseases can be reduced, but several complaints about the implementation of Prolanis by the community and coverage achievements that are still far below the target are supported by the results of previous research by the research team indicating that there are problems with the acceptability of Prolanis in Jambi City. This problem is the background for the need for a review of the extent of public acceptance or the level of public acceptability of Prolanis.

METHODS

The research was conducted using quantitative research methods using a cross-sectional design. Respondents were selected based on a purposive sampling technique totaling 180 respondents spread across five Puskesmas work areas in Jambi City. The research instrument is a questionnaire.

RESULTS AND DISCUSSION

Prolanis in Jambi City, which is organized by BPJS Health, has 4 main activities that will be carried out by the Community Health Center as the technical implementation unit of the program, namely

a) Consultation activities with doctors/medical personnel appointed as the person in charge of medical consultations at the Community Health Center every month,

b) Taking medicine every month. month for prolanis participants who suffer from hypertension and diabetes mellitus,

c) Regular supporting examinations, including monthly GDP checks, HbA1C every 6 months and blood chemistry every 6 months,

d) Education and exercise every month.

Table 1: Frequency Distribution of Prolanis Activities Participated in by Respondents

Prolanis Activities	Criteria	(f)	(%)
Health Consultation per month	- Seldom - Routine	111 54	67,3 32,7
Taking medication per month	- Seldom - Routine	11 169	6,1 93,9
Supporting examinations every 6 months	- Seldom - Routine	98 82	54,4 45,6
Education and exercise per month	- Seldom - Routine	131 49	72,8 27,2

The distribution of Prolanis activities participated in by respondents shows that there are more respondents who do not regularly participate in medical health consultation activities per month (67.3%) than those who regularly participate in consultation activities. There were more respondents who regularly took part in medication collection activities every month (93.9%) than those who did not regularly. There were more respondents who did not regularly participate in supporting examination activities every 6 months (54.4%) than respondents who regularly participated.

There were more respondents who did not regularly participate in educational and gymnastics activities every month (72.8%) compared to those who regularly participated. The results of univariate analysis on the Prolanis acceptability variable show that the distribution of respondents who accept and who do not accept the program has a frequency difference that is not large (0.6%). Respondents who said they accepted the program were 50.6%, while respondents who said they did not accept the program were 49.4%.

Table 2: Frequency Distribution of Acceptability and Acceptability Indicators of Prolanis

Variable	Measure Results	f	(%)
Program Acceptability	- Accept - Reject	91 89	50,6 49,4
Affective Attitude	- Accept - Reject	97 83	53,9 46,1
Burden	- Light - Heavy	87 93	48,3 51,7
Ethics	- Good - Deficient	95 85	52,8 47,2
Coherence	- Coherent - Incoherent	134 46	74,4 25,6
Cost	- Affordable - Unreachable	176 4	97,8 2,2
Effectiveness	- Effective - Ineffective	94 86	52,2 47,8
Self-efficacy	- Certain - Not sure	100 80	55,6 44,4

The frequency distribution of most of the Prolanis acceptability indicators is also known to have small frequency differences. The difference in frequency in each variable category is, affective attitude with a difference of 7.8%, burden of 3.4%, ethics of 5.6%, effectiveness of 4.4% and self-efficacy of 11.2%. A fairly large frequency difference occurs in the coherent variable category at 48.8% and costs at 95.6%. There were more respondents with good affective attitudes (53.9%) compared to respondents with

less good affective attitudes (46.1%). More respondents stated that the burden of taking Prolanis was heavy (51.7%) compared to those who stated it was light (48.3%). There were more respondents who stated that the application of Prolanis ethics was good (52.8%) compared to those who stated that the application of ethics was not good (47.2%). Respondents who stated that the implementation of the Prolanis program was more coherent (74.4%) compared to less coherent statements (25.6%). The statement about the cost of participating in the Prolanis program being affordable was the highest frequency among all Prolanis acceptability indicators (97.8%). The frequency distribution of Prolanis' effectiveness statements is more in the effective category (52.2%) compared to the less effective category (47.8%). There were more respondents who stated they were confident in the Prolanis program (55.6%) compared to the distribution of respondents who stated they were less confident (44.4%).

Table 3: Indicators Related to Prolanis Acceptability

Variable		Program Acceptability (%)		*OR (95% CI)*	*P-Value*
		Accept	Reject		
Affective Attitude					
	Accept Reject	61 (62,1) 30 (36,1)	36 (37,1) 53 (63,9)	1,740 (1,256-2,406)	0,000**
Burden					
	Light Heavy	60 (69,0) 31 (33,3)	27 (31,0) 62 (66,7)	2,069 (1,502-2,850)	0,000**
Ethics					
	Good Deficient	59 (62,1) 32 (37,6)	36 (37,9) 53 (62,4)	1,650 (1,203-2,262)	0,001**
Coherence					
	Coherent Incoherent	73 (54,5) 18 (39,1)	61 (45,5) 28 (60,9)	1,392 (0,940-2,061)	0,072*
Cost					
	Affordable Unreachable	88 (50,0) 3 (75,0)	88 (50,0) 1 (25,0)	0,667 (0,371-1,196)	0,323*
Effectiveness					
	Effective Ineffective	66 (70,2) 25 (29,1)	28 (29,8) 61 (70,9)	2,415 (1,693-3,446)	0,000**
Self-efficacy					
	Certain Not Sure	65 (65,0) 26 (32,5)	35 (35,0) 54 (67,5)	2,000 (1,414-2,830)	0,000**

(*= p > 0.005, ** = p ≤ 0.005)

The results of the bivariate analysis showed that respondents who received Prolanis were more likely to be in the group with good affective attitudes (62.1%), who considered the program burden to be light (69.0%), implementing good ethics (62.1%), the program coherent (54.5%), effective program implementation (70.2%) and confident self-efficacy statements with the program (65.0%). Meanwhile, regarding the cost indicator, the group of respondents who received or did not receive the Prolanis program showed the same frequency that the costs incurred to participate in Prolanis were affordable, namely 50% in the group that received it and 50% in the group that did not receive it.

The results of the chi-square test in bivariate analysis to see the relationship between the variables that are indicators and the acceptability of Prolanis show that there is a significant relationship (p-value ≤ 0.05) between the variables affective attitude

(p=0.000), burden (p=0.000), ethics (p=0.001), effectiveness (p=0.000) and self-efficacy (p=0.000) with the acceptability of Prolanis. Meanwhile, there is no significant relationship between the variables coherence (p=0.072) and cost (=0.323) with the acceptability of Prolanis because it has a p value > 0.005.

At the multivariate analysis stage, all independent variables which are indicators of Prolanis acceptability are included as candidates for multivariate analysis modeling through bivariate selection. Only variables with a p-value < 0.25 can be selected as candidates while variables with a p-value ≥ 0.25 will be excluded. . Next, gradual modeling is carried out, the variables will be sorted based on the highest p-wald sig, p-wald > 0.005 with the highest values being removed one by one until a p-wald sig ≤ 0.05 is obtained.

The gradual modeling process for each variable that is removed pays attention to changes in the OR.Exp(B) value of the main variable after the matching candidate variable is removed. If the change in the OR value is ≥10% then the variable is contradictory and will be re-entered into gradual modeling. Next, an interaction test between independent variables was carried out to see whether there was an interaction between the variables by paying attention to the omnibus value.

The bivariate selection results show that the cost variable has a p value > 0.25 so that the cost variable is not included in the phased modeling candidate. There are 6 variables included in the multivariate stepwise modeling, namely affective attitude, burden, ethics, coherence, cost, effectiveness and efficacy. In the first stage of modeling the multivariate analysis, it is known that variables that have a p-wald sig > 0.005 are coherence variables. Therefore, the coherence variable was excluded in subsequent modeling while still paying attention to changes that occurred in the OR Exp (B) value.

Table 4: Multivariate Analysis Modeling Results

Variable	Sig. P-Wald			
	Model 1	Model 2	Model 3	Model 4
Affective attitude	0,473	0,472*	-	-
Burden	0,001	0,001	0,000	0,000
Ethics	0,026	0,024	0,013	0,010
Coherence	0,979*	-	-	-
Effectiveness	0,001	0,001	0,001	0,000
Self-efficacy	0,318	0,316	0,279*	-

(*= p > 0.25)

The results of stepwise modeling in multivariate analysis occur through four stages that produce three variables. The variables released in the first stage were coherence (p=0.979), in the second stage affective attitude (p=0.472) and in the third stage the variable self-efficacy (p=0.279). In the fourth stage, variable results were obtained that had a sig p-wald ≤ 0.05, namely burden (p=0.000), ethics (p=0.010) and effectiveness (p=0.000). The change in OR value for each of the excluded variables did not reach 10%, therefore there were no confounding variables in this analysis.

The results of the interaction test show p-value = 0.387 on the Omnibus sig, the value obtained is >0.05. Based on the test results, it can be concluded that there is no interaction between the burden variable and ethics, the effectiveness variable with ethics and the burden variable with effectiveness in influencing the acceptability of Prolanis.

Table 5: Indicators that have the most dominant influence on the acceptability of Prolanis

Variable	B	Wald	Sig. P-Wald	OR Exp (B) (95% CI)
Burden	1,330	14,280	0,000	3,781 (1,897-7,573)
Ethics	0,910	6,692	0,010	2,485 (1,247-4,952)
Effectiveness	1,463	17,545	0,000	4,318 (2,178-8,561)

The final results of the multivariate modeling showed that the burden, ethics and effectiveness variables had a p-wald ≤ 0.05, meaning that these three variables were indicators that had an influence in shaping society's acceptability of the Prolanis program. The largest OR value and the smallest significance value are owned by the effectiveness variable, so that the most dominant variable influencing the acceptability of Prolanis is effectiveness.

People who believe that Prolanis is an effective program will be 4.3 times more likely to receive the Prolanis program better. Next is the burden variable which shows that people who think the burden caused by the Prolanis program is light will be 3.8 times more likely to receive Prolanis. People who think that good ethics are applied in the Prolanis program will have a 2.5 times chance of receiving Prolanis better.

CONCLUSION

The health and social relations interventions attempted by the government in the form of the Prolanis program organized by BPJS Health have not yet received good acceptance from chronic disease sufferers. Acceptance of the Prolanis Program in Jambi City is still at 50.6%. The most dominant factors influencing the acceptance of chronic disease management programs are the variables of burden, ethics and program effectiveness. It is recommended to the government and BPJS Health in Jambi City to increase public understanding of the importance of using Prolanis in an effort to reduce the number of chronic diseases and improve the social relations of sufferers.

Conflıct of Interest

There is no conflict of interest in this article.

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