

## Using the Theoretical Framework of Acceptability in Assessing Chronic Disease Management Programs

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**Abstract.** *The problem of the increasing incidence of chronic diseases in Indonesia has encouraged the development of the Chronic Disease Management Program. However, in Jambi City, the implementation of various Prolanis initiatives has not been optimal, and community participation in the program is still low. The aim of this research is to describe the public's assessment of Prolanis using the theoretical framework of acceptability. This research is quantitative research with a descriptive approach. 180 respondents were selected using purposive sampling technique. Data analysis uses computerized descriptive statistical analysis. The research results showed that only 50.6% of respondents received Prolanis. The variable with the highest frequency is cost (97.8%). Meanwhile, the variable with the lowest frequency is burden (51.7%). 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:** *Chronic Disease Management Program, Program Assessment, Theoretical Framework of Acceleration.*

## INTRODUCTION

Health problems that are increasing and becoming the main cause of death in Indonesia are chronic diseases. Data from the Indonesian Ministry of Health identifies several chronic diseases that are most common in Indonesia, such as hypertension, diabetes, heart disease, cancer and chronic lung disease. The prevalence of these diseases continues to increase every year. In 2018, heart disease was the main cause of death in Indonesia, accounting for around 22.5% of deaths, followed by cancer (13.7%), stroke (8.5%), diabetes (3.9%), and other diseases. chronic obstructive pulmonary (2.2%) (Kemenkes, 2021). The prevalence of hypertension reached 34.1%, diabetes reached 10.3%, heart disease reached 6.9%, cancer reached 1.5%, and chronic lung disease reached 1.1%. In 2018, around 10.3 million people in Indonesia had diabetes, and estimates show that this number will continue to increase to 21.3 million people in 2045 (Kemenkes, 2019).

The continuous increase in the number of chronic diseases is a serious challenge for the Indonesian health system. The impact of the increasing incidence of uncontrolled chronic diseases includes increasing death rates, reducing people's quality of life, decreasing productivity, health complications, and increasing the burden of health costs. Research conducted by the Health Research and Development Agency of the Indonesian Ministry of Health also shows that chronic diseases can result in loss of productivity and significant financial burden on families who have members suffering from these diseases. (Kemenkes, 2021).

As a result, nearly 2.3 million people each year face financial vulnerability in their household and have the potential to fall into poverty due to the impact of disease.(Nugraheni & Hartono, 2017). When the costs of treating chronic illnesses exceed the financial capacity of patients and their families, it can cause them to become trapped in a cycle of poverty and debt. Situations like this can have a major impact on the national economy by hampering economic growth. Therefore, measures to control chronic diseases are needed to reduce the burden of disease, improve quality of life, and reduce care costs for society and the health system.

The Chronic Disease Management Program (Prolanis) is a proactive and integrated health service system introduced 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 with the aim of caring for participants who suffer from chronic diseases such as type 2 diabetes and hypertension. The focus is to improve participants' quality of life while optimizing health service costs to make them more effective and efficient.

Previous studies regarding the implementation of the Chronic Disease Management Program (Prolanis) in various regions of Indonesia have shown that not all Community Health Centers in Makassar City fully implement all aspects of the activities in the Prolanis program. Of the total 44 existing Community Health Centers, only 39 of them carry out sending reminder messages via SMS gateway, and only 28 Community Health Centers carry out home visits to patients. (Yakin et al., 2021). The success of the Chronic Disease Management Program (Prolanis) in Indonesia is hampered by various factors, including low levels of participant understanding and participation, limited health facilities, and a lack of human resources with adequate training (Fauziah & Indrawati, 2022).

Other studies indicate that there are still National Health Insurance (JKN) participants who have an in-depth understanding of the benefits and relevance of implementing the Chronic Disease Management Program (Prolanis), and also have a low level of participation in the program (Meiriana et al., 2019). Some participants in the Chronic Disease Management

Program (Prolanis) did not comply with the doctor's recommendations and did not maintain discipline in following the recommended therapy (Pramana et al., 2019). Reasons why participants did not take part in the Chronic Disease Management Program (Prolanis) include the lack of medical personnel who have special training in chronic disease management and also the limited health facilities available (Ginting et al., 2020).

Several problems that arise in the implementation of the Chronic Disease Management Program (Prolanis) as found in previous research, such as lack of understanding of participants, low participation, non-compliance with doctor's advice, and various experiences related to the program, are part of the elements that measured in the Theoretical Framework of Acceptability (Sekhon et al., 2022). This concept refers to a way to evaluate the extent of health care interventions provided or received by individuals, based on their cognitive and emotional responses to those interventions. It relates to the level of public acceptance of health intervention programs by measuring various aspects such as affective attitudes, burden to be borne, ethical considerations, consistency of intervention, costs, perceived effectiveness experienced, and the level of individual confidence (Sekhon et al., 2017).

Through a preliminary study involving interviews with the person in charge of Prolanis BPJS Health in Jambi City in 2022, it was found that there were 58 registered First Level Health Facilities (FKTP). Of this number, 20 Community Health Centers and 36 Clinics have joined the Prolanis program, while there are still 2 other FKTP (clinics) that have not yet joined. However, not all Prolanis activities are fully carried out by FKTP, especially in Community Health Centers which act as the front guard in maintaining public health.

Of the 20 Community Health Centers in Jambi City, BPJS Health received several complaints regarding the implementation of Prolanis, including complaints that Prolanis supporting examinations and educational exercise sessions were not carried out in several Community Health Centers due to the lack of participant participation, the RPPT was not monitored effectively, and The level of public understanding about Prolanis is still low. This shows that there are problems related to the implementation of Prolanis in Jambi City.

## **RESEARCH METHODS**

The research was carried out using quantitative research methods with a descriptive approach. The research variables consist of independent variables which are part of the theoretical framework of acceptability indicators, including affective attitudes, burden, ethics, coherence, opportunity costs, effectiveness and self-efficacy. The sample is Prolanis participants. Respondents were selected based on a purposive sampling technique totaling 180 respondents spread across five Puskesmas work areas in Jambi City. Data collection was carried out by interviewing respondents using questionnaires. The data obtained was analyzed using statistical software using descriptive statistical analysis.

## **RESULTS AND DISCUSSION**

The Prolanis program held by BPJS Health in Jambi City involves the Community Health Center as the main implementer. There are four core activities carried out by the Puskesmas in this program. First, consult with a doctor or medical personnel who is responsible for medical consultations every month. Second, program participants who suffer from hypertension and diabetes mellitus can take their medication every month. Third, regular supporting examinations, including GDP checks every month, HbA1C every 6 months, and blood chemistry every 6 months. Fourth, program participants receive health education and exercise sessions every month.

Table 1. Frequency Distribution of Respondents' Answers to Question Items Acceptability of the Chronic Disease Management Program

Question Item Criteria	Answer (%)			
	Very	Enough	Not enough	No
<b>1. Feel active participation in the program</b>	11,7 25,6	72,8 58,3	13,9 15,6	1,7 0,6
<b>2. Feel the program provides clear and adequate information about the goals, benefits, and steps involved in chronic disease management</b>	32,8	64,4	2,8	0
<b>3. Feel confident in the effectiveness of the program</b>	25,0	68,3	5,6	1,1
<b>4. Feel that the program can meet expectations in managing chronic diseases</b>	20,0	55,6	21,1	3,3
<b>5. Feel that the quality of the information and material provided by the program is good</b>	28,3 27,4	62,2 65,4	9,4 6,7	0 0,6
<b>6. Feel supported or appreciated by the facilitator or team involved in the program</b>				
<b>7. Feel the program is in line with values and beliefs in chronic disease management</b>				

Acceptability assessment is measured from seven questions based on acceptability indicators. Of the 7 questions, it is known that the majority (>50%) of the frequency distribution of answers is in the sufficient (good) category. The distribution of respondents' answers regarding the acceptability of Prolanis with the greatest frequency was in question 1 that respondents felt they were active enough to participate in the program (72.8%) and question 4 that respondents felt the program was sufficient to meet expectations in managing chronic diseases (68.3%) .

Table 2. Frequency Distribution of Respondents' Answers to Affective Attitude Question

Question Item Criteria	Items			
	Answer (%)			
	Very	Enough	Not enough	No
<b>1. Feel interested in getting involved in the Prolanis program</b>	25,6	61,7	12,8	0
<b>2. Feel confident that Prolanis can help improve the quality of life for those suffering from chronic diseases</b>	47,8	51,1	1,1	0
<b>3. Feel optimistic about the benefits that can be obtained from Prolanis in reducing the impact of chronic diseases</b>	42,2	56,7	1,1	0
<b>4. Feel that the availability of resources and facilities needed to carry out a chronic disease management program is adequate</b>	23,3	65,0	11,7	0
<b>5. Feeling that the community supports chronic disease management programs</b>	45,0	53,3	1,7	0
<b>6. Through Prolanis, I feel more helped to actively manage chronic diseases</b>	51,7	43,3	5,0	0

Affective attitude assessment is measured through 6 questions. The distribution of answers in the sufficient (positive) category with the greatest frequency was in statement item 4 that the respondent's availability of resources and facilities needed to carry out a chronic disease management program was adequate (65%). Meanwhile, the answer with the lowest frequency in statement 6 was that only 43.3% of respondents felt it was more helpful to manage chronic diseases actively through Prolanis.

Table 3. Frequency Distribution of Respondents' Answers to Burden Question Items

Question Item Criteria	Answer (%)	
	Yes	No
<b>1. Feeling a high time burden to take Prolanis</b>	16,1	82,8
<b>2. Feeling difficult to access the health services needed in the Prolanis program</b>	22,1	77,8
<b>3. Feel that the Prolanis program interferes with daily activities</b>	8,9	91,1
<b>4. Feeling that the Prolanis program causes emotional burden</b>	7,8	92,2
<b>5. Feeling that the Prolanis program causes physical burden</b>	45,6	54,4

The assessment regarding the burden felt by respondents in participating in the program was measured through 5 questions. The distribution of answers in the no category (easy to implement/not burdensome) with the greatest frequency was in statement item 4 that respondents felt that the Prolanis program did not cause emotional burden (92.2%). Meanwhile, the answer with the lowest frequency in statement 5 was that 54.4% of respondents felt that participating in the Prolanis program did not cause physical burden (54.4%). This means that some respondents felt that the Prolanis program caused physical burden (45.6%).

Table 4. Frequency Distribution of Respondents' Answers to Ethics Questions

Question Item Criteria	Answer (%)			
	Very	Enough	Not enough	No
<b>1. Feel that the information provided by this chronic disease management program regarding procedures, risks and benefits is transparent</b>	5,0	85,0	8,9	1,1
<b>2. Feel that the program keeps personal and medical information confidential</b>	36,7	60,0	3,3	0
<b>3. Feel that this program respects patient rights and provides freedom in making decisions regarding chronic disease management</b>	39,4	57,2	3,3	0
<b>4. Feel that this chronic disease management program complies with ethical standards established in the health sector</b>	20,6	63,3	3,3	0

The assessment of respondents' perceived ethical implementation in participating in the program was measured through 4 questions. The distribution of answers in the sufficient category (good ethical implementation) with the greatest frequency was in statement 1 that respondents felt that the information provided by this chronic disease management program regarding procedures, risks and benefits was quite transparent (85.0%). Meanwhile, the answer with the lowest frequency in statement 3 was that 57.2% of respondents felt that this program was sufficient in respecting patient rights and providing freedom in making decisions regarding chronic disease management.



Table 5. Frequency Distribution of Respondents' Answers to Coherence Question Items

Question Item Criteria	Answer (%)	
	Yes	No
<b>1. Feel that the information provided in the chronic disease management program is consistent with existing medical knowledge</b>	98,9	1,1
<b>2. Feel that the recommendations for this program are appropriate to the health conditions required</b>	99,4	0,6
<b>3. Feel that this program provides clear and easy to understand information regarding steps to manage chronic diseases</b>	97,2	2,8
<b>4. Feel there is consistency between the advice and direction given by health experts in the program</b>	93,9	6,1
<b>5. Feel this program provides a comprehensive and integrated approach to chronic disease management</b>	75,0	25,0

The assessment of program coherence that respondents felt in participating in Prolanis was measured through 5 questions. The distribution of answers in the yes (coherent) category with the greatest frequency was in statement item 3 that this program provides clear and easy to understand information regarding steps for managing chronic diseases (97.2%). Meanwhile, the answer with the lowest frequency in statement 5 was that 75.0% of respondents felt that this program was coherent in providing a comprehensive and integrated approach to chronic disease management.

Table 6. Frequency Distribution of Respondents' Answers to Cost Question Items

Question Item Criteria	Answer (%)	
	Yes	No
<b>1. Feel that the costs required to participate in this chronic disease management program are affordable</b>	98,9	1,1
<b>2. Feel that the costs incurred are commensurate with the benefits obtained from the chronic disease management program</b>	98,3	1,7
<b>3. Feel that this program can provide a solution or help you overcome the burden of costs incurred due to chronic illness</b>	99,4	0,6

The assessment of the costs that respondents have to bear in taking Prolanis is measured through 3 questions. The distribution of answers in the yes category (cheap/not burdensome) with the greatest frequency was in statement item 3 that respondents felt this program could provide a solution or help overcome the burden of costs incurred due to chronic diseases (99.4%). As many as 98.9% of respondents felt that the costs incurred to participate in this chronic disease management program were affordable and as many as 98.3% of respondents felt that the costs incurred were commensurate with the benefits obtained from the chronic disease management program.

Table 7. Frequency Distribution of Respondents' Answers to Effectiveness Question Items

Question Item Criteria	Answer (%)			
	Very	Enough	Not enough	No
<b>1. Agree that this program is effective in helping manage the symptoms and conditions of your chronic disease</b>	18,3	81,7	0	0
<b>2. Feel the program provides the knowledge and skills necessary to better manage chronic disease</b>	35,0	55,0	5,0	5,0
<b>3. Feel there are positive changes in your lifestyle caused by this program in chronic disease management</b>	36,1	50,0	13,9	0
<b>4. Feel that this program has provided positive results in reducing the frequency or severity of chronic disease symptoms</b>	32,2	64,4	3,3	0
<b>5. Agree that this program provides long-term benefits in chronic disease management</b>	50,6	42,8	6,7	0
<b>6. Feel the program helps improve overall quality of life by managing chronic disease</b>	50,6	42,2	6,7	0,6

The assessment of respondents' perceived effectiveness in following Prolanis was measured through 6 questions. The distribution of answers in the quite (effective) category with the greatest frequency was in statement item 1 that respondents agreed that this program was quite effective in helping manage the symptoms and conditions of chronic diseases suffered (81.7%). Meanwhile, only some respondents agreed that this program provided sufficient long-term benefits in managing chronic diseases (42.8%) and only some respondents felt that this program was sufficient to help improve overall quality of life by managing chronic diseases (42.2%).

Table 8. Frequency Distribution of Respondents' Answers to Self-Efficacy Question Items

Question Item Criteria	Answer (%)			
	Very	Enough	Not enough	No
1. Feel confident that you are able to follow the steps recommended in this chronic disease management program	30,6	60,0	9,4	0
2. Feel confident that you can change your lifestyle to suit the recommendations of the chronic disease management program	32,8	62,2	5,0	0
3. Feel confident that you can comply with the treatment and therapy recommended in the chronic disease management program	41,1	56,7	2,2	0
4. Feel confident that you can get the support needed from the surrounding environment in undergoing a chronic disease management program. Agree that this program provides long-term benefits in managing chronic diseases	55,0	43,3	1,7	0
5. Feel confident that you can achieve the goals set in this chronic disease management program	53,3	40,6	6,1	0

The assessment of respondents' self-efficacy in taking Prolanis was measured through 5 questions. The distribution of answers in the quite (confident) category with the greatest frequency was in statement item 2 that respondents felt confident they could change their lifestyle to comply with recommendations for chronic disease management programs (62.2%). The largest frequency distribution is also found in the very confident category in statement item 4 that respondents are very confident that they can get the support needed from the surrounding environment in undergoing a chronic disease management program. Agree that this program provides long-term benefits in managing chronic diseases (55%).

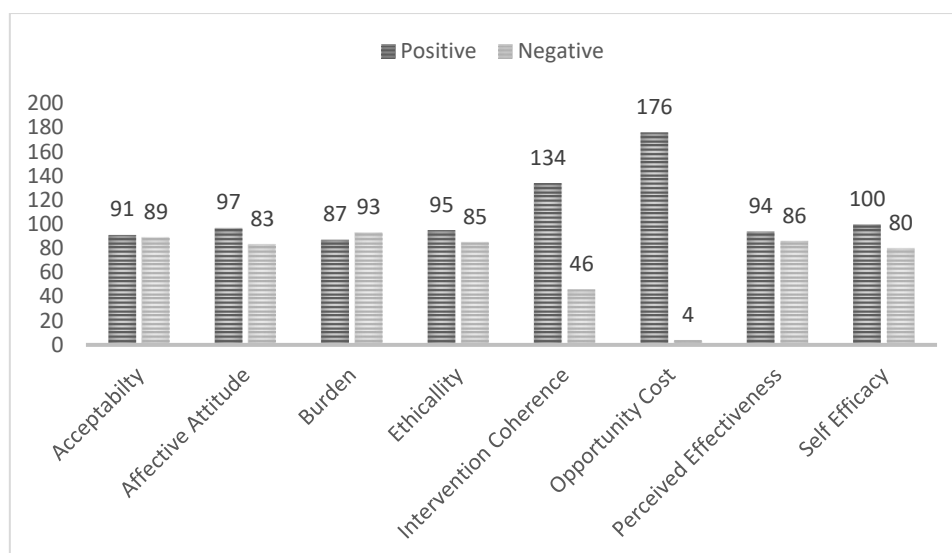


Figure 1. Distribution of assessments of Prolanis using the theoretical framework of acceptability

The results of the respondents' assessment of Prolanis based on the theoretical framework of acceptability indicators showed that some (50.6%) of the participants in this study or survey revealed that they accepted the Prolanis program. The difference between those who received and those who didn't was that big, only 0.6%. Even though these two groups are almost equal, it needs to be a concern for BPJS Health and Community Health Centers who collaborate in administering Prolanis that some respondents may have disagreements or doubts about this program. In practice, these results can be a basis for better understanding participants' attitudes and views towards the Prolanis program. For respondents, the burden variable is the biggest indicator that contributes to the assessment that it tends to be burdensome for them to take part in Prolanis activities. The burden aspect in this case is the burden of time, energy, physical and emotional. Therefore, more efforts are needed from BPJS Health and Community Health Centers to motivate and convince the public that Prolanis activities do not have a heavy impact on participants.

Previous research on the use of Prolanis in managing chronic diseases suffered by the community shows that the community's interest in participating in activities is low because the community still lacks understanding about this program. (Bella et al., 2021). Apart from that, several factors such as limited resources in implementing Prolanis activities are obstacles to carrying out activities optimally (Salsabilah et al., 2023). There is also an impact on the quality of life that is still not significant for sufferers (Manninda et al., 2021). Low motivation to change a healthy lifestyle so they don't follow Prolanis (Solida et al., 2021). The limited

information obtained about the description of Prolanis also hinders people from participating in this program (Rachmawati et al., 2019).

Therefore, the results of this descriptive analysis can be a starting point for understanding participants' attitudes towards the Prolanis program and can help in formulating policies, decision making, or more comprehensive in-depth research. These results can also be used to design further policies or actions related to the Prolanis program recommended for community health centers and BPJS Health.

## **CONCLUSIONS AND RECOMMENDATIONS**

The Chronic Disease Management Program (Prolanis) has not been fully accepted by the public. Respondents who received Prolanis were 50.6%. The variable with the highest frequency is cost (97.8%). Meanwhile, the variable with the lowest frequency is burden (51.7%). Recommended for community health centers 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 in Jambi City.

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