

## THE RELATIONSHIP OF ELDERLY BEHAVIOR WITH VISIT COMPLIANCE AT THE ELDERLY POSYANDU REVIEW FROM THE HEALTH BELIEF THEORY IN THE POMALAA PUSKESMAS AREA

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### Abstract

**Background:** An increase in the proportion of the elderly tends to be followed by an increase in health problems caused by degenerative processes. Data from the Kolaka District Health Office in 2019 the number of elderly was 14,440 and those who received health services were 3,547 (24.6%). The low level of health services for the elderly is caused by several factors. This research aims to analyze the relationship between elderly behavior and compliance with visiting the Posyandu for the elderly in terms of health belief model theory in the Pomalaa Health Center area, Kolaka Regency.

**Methods:** This type of research is a cross sectional study conducted from March to April 2021, the sample used are 256 respondents taken by simple random sampling.

**Result:** Using Chi Square Test. The perceived value of vulnerability is  $X^2_{count} = 26,095 > X^2_{table} = 3.841$ , the value of perception of seriousness is  $X^2_{count} = 34,132 > X^2_{table} = 3.841$ , the value of perceived benefit is  $X^2_{count} = 47,026 > X^2_{table} = 3.841$ , the value of perceived obstacle is  $X^2_{count} = 83,542 > X^2_{table} = 3.841$ , the value of intention is  $X^2_{count} = 15.252 > X^2_{table} = 3.841$ .

**Conclusion:** There is a relationship between perceptions of vulnerability, seriousness, benefits, barriers, and intentions with compliance with visiting the elderly at the elderly posyandu in the Pomalaa Health Center area, Kolaka Regency.

**Key words:** *Compliance, Vulnerability, Seriousness, Benefits, Barriers, Intentions.*

## INTRODUCTION

According to the World Health Organization in a projection submitted that there will always be an increase in the percentage of the number of elderly people from the entire world population(1). Data from the United States shows that there will be a 12% increase in the elderly population, in Japan as much as 22.6%, in Germany as much as 20.5% and in China as much as 13%. Meanwhile, in Indonesia, the number of elderly people in 2020 is estimated at 11.34%(2). The Central Bureau of Statistics (BPS) projects that in 2025 one-fifth of Indonesia's population will be elderly. The increase in the number of elderly is expected to be followed by an increase in life expectancy from 59.8 in 1990 to 67.4 in 2005 and to 71.7 in 2020(3).

A report from Riskesdas (2018) shows the needs of the elderly for the level of availability of friendly services for the elderly. Elderly people need quality health in order to remain optimal physically, socially and mentally so that they can remain prosperous and the quality of life of the elderly can improve(4).

Based on data from BPS Southeast Sulawesi, the number of elderly people is 180,455 people and the number of elderly people in Kolaka Regency is 14,440 people consisting of 7,393 male and 7,047 female. Kolaka Regency has 14 Puskesmas spread throughout the Kolaka Regency, the number of Posyandu for the elderly is 131 units and the Posyandu that are recorded to be active in providing screening and education services are 128 units(5).

Data on the coverage of elderly health services at the Kolaka District Health Office shows that the trend of elderly health service coverage is fluctuating or unstable and always changing. Where, in 2017 the number of elderly people was 15,650 and those who received health services were 5,922 (37.8%), in 2018 the number of elderly people was 14,2111 and those who received health services were only 2,331

(16.4%) while in 2019 the number of elderly people as many as 14,440 and those who received health services were 3,547 (24.6%)(6).

From the description of the background of the problem above, it is necessary to know in depth about "The Relationship of Elderly Behavior with Compliance Visiting the Elderly Posyandu in terms of Health Belief Model Theory in the Pomalaa Health Center area, Kolaka Regency".

## METHOD

The research method uses an analytical survey with a cross sectional study approach(7). To find out the relationship between the independent variable and the dependent variable at the Pomalaa Health Center, Kolaka Regency(8). The population in this study was the entire elderly population, namely the age of 60 years or more in the Pomalaa Health Center area for the 2020 period, totaling 762 people, with a research sample of 256 respondents(9). The variables in this study were visiting compliance, perceptions of the level of vulnerability, level of seriousness, benefits, constraints and intentions. Data analysis was carried out using descriptive analysis and inferential analysis, namely Chi Square(10). This data analysis was carried out using the SPSS application.

## RESULT

The table 1 shows that from 117 respondents based on the level of vulnerability in the sufficient category, there are 69 people (59.0%) with sufficient visiting compliance and 48 people (41.0%) who lack it. Furthermore, 139 respondents based on the level of vulnerability in the less category, there were 37 people (26.6%) with sufficient visiting compliance and 102 people (78.6%) who lacked it. The results of the chi square test, obtained the value of  $X^2_{count} = 26,095 > X^2_{table} = 3.841$ , and the result of the closeness of phi is 0.327.

The table 2 shows that from 97 respondents based on the level of seriousness of the sufficient category, there are 63 people (64.9%) with sufficient visiting compliance and 34 people (35.1%) who lack. Furthermore, 159 respondents based on the level of seriousness in the less category, there were 43 people (27.0%) with sufficient visiting compliance and 116 people (73.0%) who lacked it. The results of the chi square test, obtained the value of  $X^2_{count} = 34,132 > X^2_{table} = 3.841$ , and the result of the closeness test of phi is 0.373.

Table-3 shows that of the 93 respondents based on the sufficient category of benefits, there are 65 people (69.9%) with sufficient visiting compliance and 28 people (30.1%) who lack it. Furthermore, 163 respondents based on the benefits of the less category, there were 41 people (25.2%) with sufficient visiting compliance and 122 people (74.8%) who lacked it. The results of the chi square test, obtained the value of  $X^2_{count} = 47,026 > X^2_{table} = 3.841$ , and the result of the closeness test of phi is 0.437.

Table-4 shows that of the 102 respondents based on the sufficient barrier category, there are 78 people (76.5%) with sufficient visiting compliance and 24 people (23.5%) who lack it. Furthermore, 154 respondents based on the poor category barriers, there were 28 people (18.2%) with sufficient visiting compliance and 126 people (81.8%) who lacked it. The results of the chi square test, obtained the value of  $X^2_{count} = 83.542 > X^2_{table} = 3.841$ , and the result of the closeness of phi is 0.579.

Table 5 shows that of the 114 respondents based on the sufficient category intention, there are 63 people (55.3%) with sufficient visiting compliance and 51 people (44.7%) who lack it. Furthermore, 142 respondents based on the category of less intention, there were 43 people (30.3%) with sufficient visiting compliance and 99 people (69.7%) who lacked it. The results of the chi square test, obtained the value of  $X^2_{count} = 15.252 > X^2_{table} = 3.841$ , and the result of the closeness test of phi is 0.252.

**Table 1**  
**Vulnerability Perception Relationship with Elderly Visiting Compliance**

Vulnerability	Compliance Visit				Amount		Statistic test
	Enough		Not enough				
	n	%	n	%	n	%	
Enough	69	59.0	48	41.0	117	100	X2 hits = 26,095 X2 tabs = 3.841 = 0.327
Not enough	37	26.6	102	73.4	139	100	
Total	106	41.4	150	58.6	256	100	

Source: Primary data 2021

**Table 2**  
**The Relationship between Perception of Seriousness and Compliance with Elderly Visits**

Seriousness	Compliance Visit				Amount		Statistic test
	Enough		Not enough				
	n	%	n	%	n	%	
Enough	63	64.9	34	35.1	97	100	X2 hits = 34,132 X2 tabs = 3.841 = 0.373
Not enough	43	27.0	116	73.0	159	100	
Total	106	41.4	150	58.6	256	100	

Source: Primary data 2021

**Table 3**  
**Benefit Relationship with Elderly Visiting Compliance**

Benefit	Compliance Visit				Amount		Statistic test
	Enough		Not enough				
	n	%	n	%	n	%	
Enough	65	69.9	28	30.1	93	100	X2 hits = 47,026 X2 tabs = 3.841 = 0.437
Not enough	41	25.2	122	74.8	163	100	
Total	106	41.4	150	58.6	256	100	

Source: Primary data 2021

**Table 4**  
**The Relationship between Perception of Obstacles and Compliance with Elderly Visits**

Resistance	Compliance Visit				Amount		Statistic test
	Enough		Not enough				
	n	%	n	%	n	%	
Enough	78	76.5	24	23.5	102	100	X2 hits = 83.542 X2 tabs = 3.841 = 0.579
Not enough	28	18.2	126	81.8	154	100	
Total	106	41.4	150	58.6	256	100	

Source: Primary data 2021

**Table 5**  
**Relationship of Intentions with Elderly Visiting Compliance**

Intention	Compliance Visit				Amount		Statistic test
	Enough		Not enough				
	n	%	n	%	n	%	
Enough	63	55.3	51	44.7	114	100	X2 hits = 15.252 X2 tabs = 3.841 = 0.252
Not enough	43	30.3	99	69.7	142	100	
Total	106	41.4	150	58.6	256	100	

Source: Primary data 2021

## DISCUSSION

### *Vulnerability Perception Relationship with Elderly Visiting Compliance*

According to Belcher (2005) a person's risk or vulnerability is one of the stronger perceptions in encouraging people to adopt healthy behaviors. The greater the perceived risk, the greater the likelihood in behavior to reduce risk(11). The results of the chi square test analysis with a

significance level of 95%, it was found that there was a relationship between the perceived level of vulnerability and compliance with visiting the elderly at the Posyandu for the elderly at the Pomalaa Health Center, Kolaka Regency. Then, the results of the closeness test of the phi relationship are 0.327 or show a weak relationship.

This study is relevant to research conducted by Hana Maulida Muflikhah (2016) which states that the perception of

disease susceptibility has a significant relationship with the use of the Posyandu for the elderly in Bulusan Village with a p-value of  $0.000 < 0.05$  (12). Likewise with research conducted by Prihatiningsih (2020). The results of statistical tests using Rank Spearman showed that there was a relationship between aspects of disease susceptibility and the use of health services for the elderly(13).

Perceived susceptibility to disease complications explains that people will be more motivated to behave in a healthy way if they believe that aging will cause disease and disease complications that are dangerous and can cause death(14).

### ***The Relationship between Perception of Seriousness and Compliance with Elderly Visits***

According to Notoatmodjo, individual actions to seek treatment and disease prevention will be driven by the seriousness of the disease to the individual or society. The construct of perceived seriousness speaks to the individual's beliefs about the seriousness or severity of the disease(15). The results of the chi square test analysis with a significance level of 95%, obtained the value of  $X^2_{count} = 34,132 > X^2_{table} = 3.841$ , so  $H_0$  is rejected. This means that there is a relationship between the level of perceived seriousness and compliance with visiting the elderly at the Posyandu for the elderly at the Pomalaa Health Center, Kolaka Regency. In addition, the results of the closeness test of the phi relationship are 0.373 or show a weak relationship.

The dimension of perception of seriousness is the elderly's perception of the seriousness or impact that will occur when the elderly do not visit to check their health at the elderly posyandu. The elderly consider that visiting the posyandu is important to avoid unwanted health effects, such as becoming sick or having disease complications. The results of this study are

in line with research conducted by Yenita (2011) which shows that individual perceptions of the seriousness of the disease or the threat of disease that will be obtained when not taking health actions are the main drivers in taking health actions(16).

This perception is an individual's view of the severity of the illness. This view encourages a person to seek treatment for the disease he is suffering from. This seriousness is compounded by the consequences of an illness, such as death, reduced physical and mental function, disability, and its impact on social life(17).

### ***The relationship between perceived benefits and compliance with elderly visits***

A person will tend to adopt a healthy behavior when he feels the behavior is beneficial to improve his health. In general, the benefits of action are more decisive than the obstacles that may be found in carrying out the action.

The results of the chi square test analysis with a significance level of 95%, obtained the value of  $X^2_{count} = 47,026 > X^2_{table} = 3.841$ , so  $H_0$  is rejected. This means that there is a relationship between the level of perceived seriousness and compliance with visiting the elderly at the Posyandu for the elderly at the Pomalaa Health Center, Kolaka Regency. In addition, the results of the closeness test of the phi relationship are 0.437 or indicate a moderate relationship.

The results of the study are in accordance with the Health Belief Model theory in Glanz (2008), which explains that the low perception of the benefits of visiting the Posyandu for the elderly can affect a person's willingness or motivation to obediently visit the Posyandu for the elderly. This is because the perception of benefits is a strong predictor in the health belief model that underlies various choices of actions including behavioral changes to reduce the threat of a disease. A person's tendency to want to check their health can



be motivated by a disease that has been suffered previously. In addition, the perceived benefits of going to the posyandu can also be a contributing factor(18).

In this study, the elderly who have a good perception of benefits will obediently check their health at the Posyandu for the elderly compared to the elderly who have a perception of less benefit. Respondents with a good perception of benefits are mostly aware that they will be healthier in their behavior, can know the taboos or trigger factors for diseases that must be avoided, their bodies will be healthier because they participate in activities such as elderly gymnastics. A person's perception is influenced by individual knowledge regarding the benefits of an action on his health status, where the lower a person's knowledge, so the perception will not be good, and conversely, with good knowledge, the respondent's attitude will be better(19).

### ***Relationship between Perception of Obstacles and Compliance with Elderly Visits.***

The results of the chi square test analysis with a significance level of 95%, obtained calculated  $X^2_{value} = 83,542 > X^2_{table} = 3.841$ , so  $H_0$  is rejected. This means that there is a relationship between perceived barriers to compliance with visiting the elderly at the Posyandu for the elderly at the Pomalaa Health Center, Kolaka Regency. In addition, the results of the closeness test of the phi relationship are 0.579 or show a strong relationship. In line with research conducted by Anisa (2016), the results of hypothesis testing using the Spearman Rank test show a p value of  $0.045 = 0.05$ , which means that there is a significant relationship between the perception of barriers felt by respondents in an effort to quit smoking and the type of smoking behavior(20).

Perception of barriers is a negative aspect contained in a certain health action,

which may be a barrier to perform disease prevention behavior. If the elderly do not attend the elderly posyandu, several bad possibilities can occur, such as the elderly being neglected, decreasing self-esteem, and feeling alienated due to decreased physical abilities. The negative perception of the elderly about the Posyandu for the elderly causes them not to be interested in joining the Posyandu for the elderly. The obstacles for the elderly not to attend the elderly posyandu are inadequate posyandu facilities, the lack of posyandu activities such as elderly gymnastics and very lacking health check tools, causing the elderly to prefer not to come to the elderly posyandu.

This can be one of the factors that the elderly are less active in utilizing the posyandu because posyandu activities are very less diverse, and make the elderly lazy to visit the posyandu for the elderly. This proves that there is a need for innovations in activities or services provided by health workers and posyandu cadres. Whether it's a simple laboratory examination, elderly exercise, or providing counseling using interesting media for the community. The availability of facilities and infrastructure is one of the factors that play a role in health behavior, with the availability of this equipment will show the elderly to come to the posyandu for the elderly(21).

### ***Relationship of Intentions with Elderly Visiting Compliance***

Many factors certainly influence the decision-making of the elderly to be active in participating in the Elderly Posyandu. The decision making is based on an awareness, which starts from the intention (intention) so that a behavior is formed. The results of the chi square test analysis with a significance level of 95%, obtained the value of  $X^2_{count} = 15.252 > X^2_{table} = 3.841$ , so  $H_0$  is rejected. This means that there is a relationship between intention and compliance with visiting the elderly at the Posyandu for the elderly at the Pomalaa

Health Center, Kolaka Regency. In addition, the results of the closeness test of the phi relationship are 0.252 or show a weak relationship.

The intention of the elderly in this study is a desire that the elderly have to attend the Elderly Posyandu based on perceived perceptions. The intention of the elderly to participate in the Elderly Posyandu is a step before the behavior occurs to actively participate in the Elderly Posyandu. The facts on the ground show that the majority of the elderly who intend to actively participate in the Elderly Posyandu think that the elderly want themselves to be healthy. Good intentions will encourage motivation to do good. Good actions will give good results too. If this is done continuously, it will be internalized and persistent in a person. So that will create a person with good behavior, and vice versa. In addition to wanting him to be healthy,

According to Ajzen, behavioral intentions can predict how someone behaves in certain situations. The intention to do something or behave in a certain way will appear if there is a positive attitude, support for subjective norms and the ability to do this. A behavior tends to be carried out if the individual has a knowledge base and is emotionally committed to performing the behavior. Intention is a strong predictor to show how far a person will try to make his wish come true (22).

## CONCLUSION

In this study, there was a weak relationship between the level of vulnerability, level of seriousness, and perceived intention with compliance with visiting the elderly at the Posyandu for the elderly at the Pomalaa Health Center, Kolaka Regency. There is a moderate relationship between perceived benefits and compliance with visiting the elderly at the Posyandu for the elderly at the Pomalaa Health Center, Kolaka Regency. There is a strong

relationship between perceived barriers and compliance with visiting the elderly at the Posyandu for the elderly at the Pomalaa Health Center, Kolaka Regency.

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