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Influence of Predisposing Factors of Elderly on the Utilization of Health Services At the Health Centre in Sidoarjo District

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Abstract

Context: Sidoarjo District is one of the districts in East Java Province, Indonesia which has an increase in the number of people aged 60 years and over each year. The achievement of health service performance indicators for residents aged 60 years and over in Sidoarjo District has not reached the standard of 60.31% of the target of 100%. Based on the results of the interviews, information was obtained that the target had not been achieved due to individual internal factors. The purpose of this study was to analyze the influence of predisposing factors of elderly individuals on the utilization of elderly health services held by the Sidoarjo district health centre. This type of research is analaitic observational and cross sectional. The population in this study were elderly people in Sidoarjo District. The sampling technique is proportional stratified random sampling so that the sample is 200 people. Data analysis using statistical tests of the influence of the dependent and independent variables.

The results showed that the predisposing factors of the elderly who influenced the utilization of Integrated Services Post for elderly were age ($p = 0.029$) and gender ($p = 0.000$). The predisposing factors for the elderly that influence the utilization of Community Health Centre services are Spatial Factors ($p = 0,000$). The older the age increases the higher the utilization of the elderly Integrated Services Post for elderly. The utilization of Integrated Services Post for elderly services for elderly men is lower than for women. Elderly people who live in rural areas use health centres more than the elderly in urban areas. The recommendation of this study is that health centre needs to give education about the importance of medical examinations at older age can be done since the pre-elderly age. Integrated Services Post for elderly cadres can persuade elderly women to invite their husbands to take medical examinations. Elderly in addition to rural areas, namely urban and small urban areas, they need to get socialization regarding elderly health care programs in health centres to increase the interest of small urban and urban seniors to health centres.

Keywords: *Elderly, predisposing factors, utilization of healthcare.*

Introduction

The elderly population in Indonesia is predicted to increase higher than the elderly population in the world

after the year 2100.⁽¹⁾One of the districts in Indonesia that has an increase in the number of elderly population each year is Sidoarjo District. The increase in the number of elderly people is followed by the increase in diseases faced by the elderly population. The increasing number of elderly residents with a variety of diseases is felt because the aging process needs to be followed by an increase in visits of the elderly in health and routine examinations in health service activities held. Health service activities are held in the community health centre and outside the building in the form of an elderly Integrated Services Post for elderly. Health service activities are carried out

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in the form of promotive, preventive and rehabilitative activities. The population of the elderly has not been followed by an increase in the scope of utilization of health services by the elderly in Sidoarjo District. Coverage of elderly who get health services according to standards from 2014 to 2017 in Sidoarjo District has not yet reached the predetermined target of 100%. Coverage of elderly who get health services according to standards in 2017 is 60.31%.⁽²⁾

According to Green (1980) there are several factors that influence changes in health behavior, one of which utilizes health services to check health status. The influencing factors consist of predisposing factors, enabling factors, and reinforcing factors.⁽³⁾ Predisposing factors consist of Socio demographic factors such as age, gender, education level, and marital status; Economic factors such as employment, income level; and spatial factors such as the area of residence. Enabling Factors consists of facilities or facilities available such as information from mass media. Reinforcing factors consist of reference group attitudes and behaviors that can influence changes in a person's behavior.

Material and Method

This research is observational analytic research because researchers only make observations without giving treatment or intervention to the respondents and aim to determine the effect of the variables to be studied. The design of this study uses quantitative design. Based on the duration of the study, this study included a cross sectional study. Data retrieval is done by using questionnaire instruments and interviews with elderly people in several health centre areas in Sidoarjo District.

Instrument of data collection is a questionnaire. The study sample was 200 elderly people in Sidoarjo District who were calculated using proportional stratified random sampling technique. The independent variables in this study were individual predisposing factors in the form of socio-demographic factors, economic factors, and spatial factors. The dependent variable in this study is the score on the utilization of health services for elderly.

Calculation of the level of wrinkle utilizing elderly health services is by giving a score on each item question.

The scores on each question are explained as follows:

- a. Never (not utilized at all in the last 3 months) = 1
- b. Rarely (using the Integrated Services Post for elderly 1 time in the last 3 months or utilizing a Community Health Centre 1-2 times in the last 3 months) = 2
- c. Frequently (utilizing the Integrated Services Post for elderly 2 times in the last 3 months or utilizing the Community Health Centre 3 times in the last 3 months) = 3
- d. Always (utilizing the Integrated Services Post for elderly 3 times in the last 3 months or utilizing the Community Health Centre >3 times in the last 3 months = 4)

Measurements by adding up scores from the utilization of the Integrated Services Post for elderly as well as the utilization score of the Community Health Centre. The number of scores is categorized into three groups, namely:

- a. No = 4 - 7
- b. Rarely = 8 - 11
- c. Often = 12-15
- d. Always = 16-18

Findings:

- A. Distribution of respondents based on Predisposing Factors:** Predisposing factors are factors that come from within an individual that can affect in a person's behavior. Predisposing factors consist of socio demographic factors, economic factors, and spatial factors. The following is the distribution of respondents based on their predisposing factors.

Based on Table 1, it can be seen that the majority of respondents aged 60-64 years, female sex, have an education level graduated from elementary school, are married. While the economic factors of the majority of respondents are not working and low income. The spatial factors of the majority of respondents are living in rural areas.

Table 1: Distribution of Respondents Based on Predisposing Factors

No.	Predisposing Factors		n	(%)
1	Socio-Demographics Factors			
	Age	60- 64 years	98	49,0
		65- 69 years	65	32,5
		>70 years	37	18,5
	Sex	Men	52	26
		Women	148	74
	Educational Level	Not School	17	8,5
		Elementary School	97	48,5
		Junior High School	25	12,5
		Senior HighSchool	46	23,0
		College	15	7,5
	Marital Status	Not Married	1	0,5
		Divorce	5	2,5
		Death Divorce	69	34,5
		Married	125	62,5
	2	Economic Factors		
Job		Retired	30	15,0
		Entrepreneurship	32	15,0
		Private Companies	11	5,5
		Farm Workers	19	9,5
		Not employed	102	51,0
		Others	6	3,0
Income Level		Low	114	57,0
	High	86	43,0	
3	Spatial Factors	Rural area	105	52,5
		Small Urban area	76	38,0
		Urban area	19	9,5

B. Distribution of respondents based on the Routinity Utilizing Elderly Health Services: Elderly health services consist of two types, namely outside and inside the building. Outside health services in the form of Integrated Services Post for elderly held in each village. Services in the building are health services carried out at the Community Health Centre. Health services carried out at the Integrated Services Post for elderly consist of routine health checks, elderly gymnastics, health socialisation and providing supplementary food. Health services carried out in the Community Health Centre building consist of health checks, elderly gymnastics, counseling, and treatment. The following is the distribution of respondents based on the level of routine utilization of health services for last three months of 2019.

Table 2: Distribution of Respondents Based on the Routine Use of Elderly Health Services for the Last Three Months of 2019

Elderly Health Services	Routinity Level							
	Not utilize		Rarely		Often		Always	
	n	%	n	%	n	%	n	%
Integrated Service Post For Elderly	86	43,0	27	13,5	67	33,5	20	10,0
Community Health Centre	171	86,5	24	12,0	3	1,5	2	1,0

Based on Table 2, it can be seen about the health care coverage of the elderly outside the building, namely the integrated elderly service post, respondents didnot use it for the past three months by 43%. Likewise in the utilization of health services in Community Health Centre, the majority of respondents did not use health services in the Community Health Centre for the past three months, which amounted to 86.5%.

C. The Influence of Individual Predisposing Factors on the Use of Health Services: Influence analysis used to determine the effect of socio-demographic factors consisting of age, sex, education level, marital status, economic factors including employment and income level, and spatial factors for the utilization of health services is multiple linear regression analysis. The test results of the influence of individual predisposing factors on health services can be seen in the following table.

Table 3: Results of the Influence of Individual Predisposing Factors on the Use of Health Services in the Integrated Service Post For Elderly in Sidoarjo District

No	Independen Variables	Dependen Variable	Sig.	Explanation
1	Age	Utilization of Health Services at Integrated Service Post for Elderly	0,029	Significant
2	Sex		0,000	Significant
3	Educational Level		0,796	Not Significant
4	Marital Status		0,452	Not Significant
5	Job		0,147	Not Significant
6	Income Level		0,120	Not Significant
7	Spatial Factors		0.234	Not Significant

Based on Table 3, it can be seen that the predisposing factors that influence the utilization of health services in the integrated service post for elderly age ($p = 0.029$) and the sex of the respondents ($p = 0,000$).

Table 4. Results of the Influence of Individual Predisposing Factors on the Use of Community Health Services in the Sidoarjo District

No	Independen Variables	Dependen Variable	Sig.	Explanation
1	Age	Utilization of Health Services at Community Health Centre	0,670	Not Significant
2	Sex		0,727	Not Significant
3	Educational Level		0,535	Not Significant
4	Marital Status		0,418	Not Significant
5	Job		0,945	Not Significant
6	Income Level		0,901	Not Significant
7	Spatial Factors		0,000	Significant

Based on Table 4, it can be seen that the predisposing factors of the elderly who influence the utilization of health services in the Community Health Centre are the area of residence of the respondents ($p = 0,000$). More people living in rural areas use health services in Community Health Centre.

Discussion

Based on the results of the study, it is known that the socio-demographic factors that influence the utilization of health services in Integrated Services Post for elderly are age and sex. Respondents who have an older age are increasingly utilizing health services. This is in line with research in the elderly in Malaysia, namely respondents with 65 years of age have higher utilization of out-patient and in-patient rates than other age groups (Institute of Public Health, 2011).⁽⁴⁾ Based on Exavery research (2010) found that the elderly aged 60-69 years are significantly higher in using health services than those aged 50-59 years.⁽⁵⁾ The older the age increases, the more often the elderly use health services. This is because increasing age is followed by a decrease in health and various diseases. The aging process which is followed by a decline in the body and physical condition of the elderly affects the utilization of health services by the elderly.

Based on the results of the study it was found that gender had an effect on the utilization of the elderly

Integrated Services Post for elderly. Elderly women are more likely to take part in Integrated Services Post for elderly activities because of the its activity attract the interest of elderly women such as gymnastics. In line with the study of Yunus, et al (2014) that gender is related to the utilization of health services.⁽⁶⁾ Women are known to have a longer life expectancy than men but are reported to have a greater risk of disease and thus make the use of health services greater than men (Macintrye, et al., 1996).⁽⁷⁾ Women are more proactive in seeking medical help than men. (Bertakis & Azari, 2011).⁽⁸⁾ According to Redondo-Sendino (2006) this is indicated because women use health services more than men to visit medical practitioners and home medical visits, number of medications, and some utilization.⁽⁹⁾ According to Intarti & Khoiriah (2018) there are more elderly women who use the elderly Integrated Services Post for elderly. This is because the elderly women pay more attention to their health condition than men. In addition, elderly women are more diligent in seeking information regarding health problems in their old age.⁽¹⁰⁾

Based on the results of the study, it is known that the predisposing factors that influence the utilization of health services in the Community Health Centre are spatial factors. More people living in rural areas use health services in Community Health Centre. According to Dinatya (2012), the majority of people in rural areas with livelihoods as farmers use services in Community Health Centre because of their strategic location of being on village or village roads.⁽¹¹⁾ Based on Anhar, et al. (2016) research, it was found that there were differences in utilization of health services between rural communities in the working area of the Lepo-Lepo Community Health Centre.⁽¹²⁾ Based on observations it was found that more people in urban areas used health services in clinics, family doctor practices, private midwife practices compared to Community Health Centre. This is caused by clinic opening hours are more flexible and are suitable for treatment at their family doctor.

ConclusionS

Based on the results of the study, the conclusion of this study can be seen that the socio-demographic factors of the respondents in Sidoarjo District are the majority of those aged 60-64 years, female sex, have graduated from elementary school and are married. The economic factor of respondents majority are not working and having low

income. The majority of respondents' spatial factors are living in rural areas. Based on the level of reliability of respondents in utilizing health services in the Integrated Services Post for elderly and Community Health Centre, majority did not use health services during the last three months of 2019.

The predisposing factors of the elderly who influence the utilization of health services in the Integrated Services Post for elderly are age and sex. The predisposing factors for the elderly who influence the utilization of health services in the Community Health Centre are regional factors.

The research recommendation for the Sidoarjo District Health Office and Community Health Centre is to train health workers to disseminate information on the importance of medical examination that can be started from the pre-elderly age. In addition, there is a need for the role of health workers and Integrated Services Post for elderly cadres to persuade elderly women inviting their husbands to be more aware of their health and take medical examinations. Elderly in urban and small urban areas need to get socialization regarding elderly health care programs in health Centres to increase the interest of small urban and urban elderly. Health workers need to innovate preventive health service activities to increase the interest of elderly in utilizing the Community Health Centre compared to only being treated at a family doctor/clinic.

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