

A Comparison of *Posyandu*'s Utilization in Rural and Urban Primary Health Centers in Jember, Indonesia

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Abstract

The level of urban and rural people's awareness and knowledge, perception, social characteristics, population density, access to health services, facilities, satisfaction, cost and occupation show that there is no differences between *posyandu*'s utilization in rural and urban primary health centers (PHCs). This study aims to compare the utilization of *posyandu* in rural and urban PHCs in Jember, Indonesia. This study was an observational analytic study with cross sectional approach which was done to 325 participants using accidental technique sampling and it was done for 2 weeks (11th – 22nd July 2016). The variable which was studied was the number of *posyandu*'s utilization in urban and rural primary health centers in Jember. The data was analyzed using independent sample *t*-test. The results show that the average number of *posyandu*'s utilization in rural is 29 people and in urban is 23 people. There is no significant difference between the utilization of *posyandu* in rural and urban primary health care in Jember ($p \geq 0,05$). In a conclusion, there is no significant difference between the utilization of *posyandu* in rural and urban primary health centers in Jember, Indonesia.

Keywords: *posyandu*, utilization, rural primary health centers, urban primary health centers

I. INTRODUCTION

Many factors influence individual's health behavior including the utilization of *posyandu*. These factors are predisposing factors (knowledge, education, employment, age, and etc.), supporting factors (physical environment, the availability of health facilities, and etc.), and driving factors (in form of the attitude and behavior of health workers) (Mubarak, 2011).

Posyandu activities, both in urban and rural areas, will reach the target if people in the community participate actively in its activities. Based on district minimum health service standard, *posyandu* utilization is measured by the number of people who visit this facility. *Posyandu* utilization is categorized as good if the cumulative visits reaches 90% or not good if the cumulative visits less than 90% (Kementerian Kesehatan RI, 2015).

There is no exact size of the population in the urban and rural areas, but an urban has a tendency of having bigger population than rural (Department of Economic and Social Affairs, 2014). A Level of knowledge of people in the urban is higher than in rural (Yuan et al, 2015). Urban areas have more variety of health services than in rural areas. People in urban have more access to other health services such as, private doctors, clinics and private hospital as additions to the health services provided by the government (including the *posyandu*) (Ozawa dan Damian, 2011). People in urban areas have more choices for health care. This may affect the number of people who visit *posyandu* which has no different between urban and rural.

Based on the territory, primary health center (PHC) is categorized as urban, rural, and remote. PHC is categorized as urban if it services an area that has at least 3 of the 4 criteria of urban areas as follows: (1) the activity of more than 50% of the population is in non-agricultural sectors, especially industry, trade and services; (2) the areas have urban facilities such as schools within 2 km, the markets within 2,5 km, hospitals within 5 km, theaters, or hotels; (3) more than 90% of households have electricity; and / or (4) road access and transportation to urban facilities. PHC is categorized as rural if it services an area of at least 3 of the 4 criteria rural areas as follows: (1) the activity of more than 50% of the population in the agricultural sector; (2) have facilities such as schools are more than 2.5 km, the market and the city are more than 2 km, the hospital is more than 5 km, have no facilities such as a cinema or hotel; (3) households with electricity for less than 90%, and (4) the area have a road access and transportation to some public facilities (Permenkes RI, 2014).

II. METHOD

This study is an analytic observational study with cross sectional approach in 12 primary health centers (PHC) (5 urban PHC and 7 rural PHC) in Jember for 2 weeks (11th – 22nd July 2016). In total, 325 patients who visited the *posyandu* (intergrated health post) in rural PHCs (Gumukmas, Ambulu, Jenggawah, Ledokombo, Kencong, Pakusari, Mayang) and in urban PHCs (Rambipuji, Jelbuk, Jember Kidul, Sumbersari, Patrang) as the study population. The research variable is the number of people visited *posyandu* in urban and rural PHCs in Jember, Indonesia. Data is presented in percentages and tables and it is analyzed using independent samples *t-test*.

III. RESULT

In this study, the number of people visited *posyandu* is presented in Table 1 below.

Table 1. *Posyandu* utilization in rural and urban PHCs in Jember, Indonesia.

Rural PHCs	Utilization	Urban PHCs	Utilization
Gumukmas	21	Rambipuji	30
Ambulu	46	Jelbuk	21
Jenggawah	19	Jember Kidul	22
Ledokombo	25	Sumbersari	35
Kencong	26	Patrang	9
Pakusari	31		
Mayang	40		

As presented in table 1, the number of people who visited *posyandu* in urban PHC of Rambipuji is 30 people, Jelbuk is 21 people, Jember Kidul is 22 people, Sumbersari is 35 people and Patrang is 9 people. While, *posyandu* in rural PHCs of Gumukmas is 21 people, Ambulu is 46 people, Jenggawah is 19 people, Ledokombo is 25 people, Kencong is 26 people, Mayang is 31 people, and Pakusari is 40 people. The number of *posyandu* utilization in the community of urban PHCs is slightly higher at 208 people than in rural PHCs with 117 people. The average number of people visited *posyandu* in rural and urban PHCs in Jember can be seen in table 2.

Table 2. The average of *Posyandu* utilization in rural and urban PHCs in Jember, Indonesia

Utilization	Means ± SD
Rural PHCs	29,71 ± 1
Urban PHCs	23,40 ± 1

The table 2 above shows that the average number of people visited *posyandu* in rural PHCs is 29,71 ± 1, while the average number of people visited *posyandu* in urban PHCs is 23,40 ± 1. Then, the data is analyzed using independent sample *t-test* to see the difference of average number of people visited *posyandu* in rural and urban PHCs. The result can be seen in the Table 3 below.

Table 3. Independent t-test analysis of *Posyandu* utilization in rural and urban PHCs in Jember

Variabel	P-Value
<i>Posyandu</i> utilization rural-urban PHCs	0,304

IV. DISCUSSION

Table 3 presents *p-value* of 0.304 which means there is no significant difference of *posyandu* utilization in rural and urban PHCs in Jember. There is no exact measurement of the population of rural and urban areas, but urban areas are more likely to have higher population density than rural areas. This relates to the growth of migration to the urban areas, while the rural population is relatively stable from year to years (Departmen of Economic and Social Affairs, 2014). Although the population of urban areas are bigger than rural areas, there was no significant difference in terms of *posyandu* utilization in rural and urban PHCs. Nowadays, people in rural areas are more likely to visit *posyandu* because of its location is easy to reach. The location of health services that easier to access is related to the higher utilization of health services (Bell et al, 2013; Lamarche et al, 2010; Wirata 2011).

People in the rural areas feel satisfaction on *posyandu* services because they have opportunity to consult on health matters. A limited number of doctors or health workers in rural areas makes *posyandu* as the best alternative to

check their health condition (Rahardjo and Maharani, 2014). In addition, a fee of health services plays an important factor in health service utilization. Rural communities prefer to visit *posyandu* because it is cheaper. The fee for services becomes one of determining factor of *posyandu* utilization in some rural areas in Indonesia (Sudharma and Kusumaratna, 2016). Social and psychological characteristics of majority in the communities as well as their perception on health facilities will influence on the individuals preference on health facilities (Bell et al, 2013). People living in the rural communities have closer inter-personal relationships, including with the health care providers (Lamarche et al, 2010; McFall, and Yoder, 2012). *Posyandu* is a community-based service that give an important role of lay workers (*cadres*) from community on the health services (Nazri et al, 2016; Sistiarani et al, 2016). Rural communities have positive feeling on community-based services that this service can improve their health status (Martin et al, 2015).

A negative opinion and dissatisfaction with the service quality affects health behavior and utilization of health services (Pambudi, 2012). Previous studies have shown no significant difference on health service utilization in rural and urban areas (Sibley and Weiner, 2011; Lankila et al, 2016). The level of knowledge people in urban area tend to be higher than in rural (Yuan, 2015), so people living in urban areas have more ability to choose the most convenient health facilities for them. Urban areas have variety of health facilities ranging from primary health care (health centers, private doctors, clinics) and advanced health services (public/ private hospitals). This higher diversity of health facilities in the urban may also due to behavior and socio-economic characteristic of people in urban. People living in urban tend to be individualist, high demand on professional services, profit and loss priorities and a relatively high level of education. Moreover, they also demand on fast and on time services despite having to pay on higher cost (Andryana dan Jonyanis, 2015). Therefore, *posyandu* or government PHC is not the main health facility for people in the urban (Ozawa and Damian, 2011; Yikilkan et al, 2013).

In terms of the occupation, people in urban are different from the rural. The main activity of people in rural region is in primary economic sectors such as in agriculture. The economic activities are especially in agriculture, livestock and fisheries. Nonetheless, people living in urban areas work on secondary economic sector such as industrial and tertiary economic sectors such as the field of service (Permenkes RI, 2014; Pateman, 2010). *Posyandu* activities that are held in the morning are less desirable for people in urban because they are busier with their activities and less likely to have free time in the morning (Nazri, 2016). These all are the possible explanation of the fact that there is no significant difference in terms of *posyandu* utilization in rural and urban PHCs even though urban areas have bigger population.

V. CONCLUSION

There was no significant difference on the *posyandu* utilization in rural and urban PHCs in Jember, Indonesia. It is suggested that further research on *posyandu* utilization in broader area including remote areas need to be done to get better knowledge on health services utilization in Jember, Indonesia.

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