Relationship Between Equipment Availability with Health Services Integrated Elderly Service Post in Indonesia: Cross Sectional Study Indonesia Family Life Survey (IFLS-2014)

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Abstract:- Background: According World Health Organization (WHO), the number of elderly people in the population is experiencing rapid development, especially in Southeast Asian countries. Indonesia as a Southeast Asian country has a significant increase in the number of elderly resulting in an increase in the quality of health which has an impact on increasing life expectancy. Globally, the population aged 65 years or more increased from 6 percent in 1990 to 9 percent in 2019. The elderly population in Indonesia based on the 2018 Riskesdas is projected to be 27.08 million people or 9.99% of the total population in Indonesia. The elderly population and very fast growth also cause various problems, so that the elderly need to get serious attention from all sectors for efforts to improve the welfare of the elderly.

Objective: This study aims to determine the relationship between the availability of equipment and health services at the Integrated Elderly Service Post in Indonesia.

Method: The design of this study is a quantitative study using secondary data from the 2014 Indonesia Family Life Survey-5 (IFLS-5) with a research approach using a cross-sectional survey. The population in this study were Integrated Service Post heads and health cadres spread across 13 East Indonesian Provinces. The number of heads of health facilities is 4,950 respondents. Data analysis in this study used chi-square test analysis with pvalue: <0.05) with Stata software version 12. The independent variable in this study was the availability of equipment (pls_d1-IFLS-5) while the dependent variable was the availability of Integrated Service Post services (pls_b1-IFLS-5).

Result: The results show that statistically using the chisquare test, the p-value = 0.0010 < 0.05 is obtained because the ρ value is less than 0.05, then H1 is accepted and Ho is rejected, which means there is a relationship between equipment availability and Availability of health services Integrated service post for the elderly in Indonesia. Conclusion: The conclusion in this study is that there is a relationship between the availability of equipment and the availability of health services at the Integrated Elderly Service Post in Indonesia. Thus, it is necessary to provide equipment that is safe, sufficient and easy to access, provide support for the elderly by pro-actively providing services to be able to reach as many elderly targets as possible in the work area of the public health center and have an impact on improving the quality of life of the elderly.

Keywords:- Availability, Equipment, Services, Integrated Service Post, Elderly.

I. INTRODUCTION

The large number of elderly people in Indonesia in the future will have both positive and negative impacts. It has a positive impact, if the elderly population is healthy, active and productive. On the other hand, the large number of elderly people becomes a burden if the elderly have health problems which result in increased health service costs, decreased income, increased disability, lack of social support and an environment that is not friendly to the elderly population [1]. Increasing life expectancy is an indicator of improving public health in the area. If the number of elderly people is increasing, the level of public health status in that area will be better. This increase in the elderly population is due to the improvement in health services and the increasing life expectancy of people in Indonesia [1].

The number of elderly people in the world is 703 million people aged 65 years or over in 2019. The number of elderly people is projected to double to 1.5 billion by 2050. Globally, the population aged 65 years or over increased from 6 percent in 1990 to 9 percent in 2019 [2]. The elderly population in Indonesia based on the 2018 Riskesdas is projected to be 27.08 million people or 9.99% of the total population in Indonesia [3]. As the number of elderly people increases, health problems also increase. Hypertension disease as much as 63.5%, diabetes mellitus 5.7%, heart disease 4.5%, stroke 4.4%, kidney disorders 0.8% and the elderly who suffer from cancer as much as 0.4% [3].

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Hypertension is a major problem for the elderly. American Heart Association (AHA) hypertension risk increases with age, and the prevalence of high blood pressure is 26% in people between 20 and 44 compared to 78% among those over 65 years of age [4].

According to WHO in Health in South East-Asia, the proportion of elderly people in the population is growing very rapidly, especially in countries in the Southeast Asian region. Indonesia as one of the countries in the Southeast Asia region, has a history of a significant increase in the number of elderly people along with improving health quality which has an impact on increasing life expectancy by 14 million elderly people from 1971 to 2009 [5]. The large elderly population and very fast growth also cause various problems, so that the elderly need to get serious attention from all sectors for efforts to improve the welfare of the elderly. As for overcoming the health problems of the elderly, it is necessary to develop older groups through primary health care which include promotive, preventive and rehabilitative activities [6].

The trend of increasing the elderly population needs special attention, especially to improve their quality of life so that they can maintain their health. elderly human health is directed at maintaining and improving their health and ability to remain productive, and the government assists the implementation of elderly health efforts to improve their quality of life optimally. Therefore, various efforts have been made to create a healthy, happy, efficient and productive old age for the elderly [6]. For this reason, the Government launched health services whose implementation was through the Puskesmas program by involving the participation of the elderly, families, community leaders and social organizations called the Elderly Integrated Service Post or currently known as the Elderly Integrated Development Post [7].

Elderly Integrated Service Post is an activity carried out by and for the community, especially to monitor the health of the elderly in their respective areas, where the elderly live [8]. Elderly health services are an increase in the health status of the elderly to achieve healthy, independent, active, productive and efficient elderly for families and communities. Meanwhile, the specific objectives are to increase the scope and quality of elderly care health services, improve coordination with cross-programs, cross-sectors, professional organizations and other related parties, increase the availability of data and information in the field of elderly health, increase the participation and empowerment of families, communities and the elderly in efforts to improve the health of the elderly, increase the participation of the elderly in efforts to improve family and community health [9] The forms of aged care health services provided at the primary health care are providing good and quality services, giving priority to services to the elderly and providing safe and easily accessible facilities, providing support or guidance to the elderly and providing services pro-actively to be able to reach as many elderly targets as possible in the working area of the public health center [9].

II. **METHOD**

The research design is a quantitative study using secondary data from the 2014 Indonesia Family Life Survey-5 (IFLS-5) with a research approach using a cross-sectional survey. The initial survey (IFLS1) was conducted in 1993, representing about 80 percent of Indonesia's population [10]. Institutional Review Board (IRB) review of IFLS studies through sufficient and appropriate reviews that follow IRB guidelines and have been approved by the RAND Corporation and Indonesian Institutions, particularly the Survey Meter institute for IFLS-5 studies [11]. The population in this study were the heads of integrated service posts and/or integrated service post cadres spread across 13 East Indonesian Provinces. The number of heads of health facilities is 4,950 respondents. Data analysis in this study used univariate analysis and bivariate chi-square test with pvalue: <0.05) with Stata software version 12. The independent variable in this study was the availability of equipment (pls d1-IFLS-5) while the dependent variable was the availability of posynadu services (pls b1-IFLS-5).

III. RESULT

Table. 1 The relationship between the availability of equipment and the availability of health services at the Integrated Elderly
Service Post

Service	Pos

Equipment	Service availability				Tatal			
availability	Avai	ilable	Not av	ailable	– Total		ρ value	
	Ν	%	Ν	%	Ν	%	-	
Available	1.439	55,50	1.154	44,50	2.593	100		
Not available	1.307	55,45	1.050	44,55	2.357	100	0.0010	
Total	2.746	55,47	2.204	44,53	4.950	100		

Sumber: Indonesia Family Life Surfey-2014

Based on table 1 shows that of the 2,593 available equipment there were 1,439 available services (55.50%) and 1,154 unavailable services (44.50) while of the 2,357 unavailable equipment there were 1,307 available services (55.45%) and 1,050 unavailable services (44.50%). The results of the statistical test with the chi-square test obtained a p-value = 0.0010 < 0.05 because the ρ value is smaller than 0.05 then H1 is accepted and Ho is rejected which means there is a relationship between the availability of equipment and the availability of integrated service post services Elderly.

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IV. DISCUSSION

According to law number 36 of 2009 article 138 states that efforts to care for old age must be shown by maintaining a healthy and productive life socially and economically in accordance with human dignity. The government in this case is obliged to provide health facilities for the elderly. One of the efforts provided for monitoring the health of the elderly group is by having an elderly posyandu. Elderly integrated service post is a service facility for the elderly community, with an emphasis on promotive and preventive efforts, and not neglecting curative and rehabilitative efforts. The establishment of an elderly posyandu is to improve the health status of the elderly and the quality of elderly health services in the community [12].

With the increasing number of elderly people, attention from all parties is needed in anticipating various problems related to population aging. Population aging brings various implications both from social, economic, legal, political, and especially health aspects. Health problems are one of the main problems of the elderly population, because they are related to human physical decline that occurs naturally and involve meeting the necessities of life [13]

The implementation of integrated service post activities is one of the efforts of the community's approach to primary health services, the higher the community gets health services, the higher the health status in the community. One of the successes in the implementation of Posyandu is to improve or increase the degree of health in the community, for the smooth implementation of activities at the Integrated Elderly Service Post, supporting facilities and infrastructure are needed [14].

The more available the equipment (infrastructure) to support services, the more available the posyandu services for the elderly. This is proven by the data showing that of the total availability of 2,593 equipment, 55.50% of the Posyandu services are available for the elderly compared to 44.50% which are not available. However, the unavailability of equipment does not reduce the role of Posyandu in improving services. It can be seen that of the 2,357 unavailability of equipment, the percentage of Posyandu services reached 55.45% compared to 44.55% where Posyandu services for the elderly were not available. This means that the implementation of Posyandu activities does not only depend on the availability of complete Posyandu equipment, but Posyandu activities can be carried out without having to need supporting equipment such as heart exercises, counseling on clean and healthy lifestyle and hygiene, picnics and so on..

Statistical test results also show that there is a relationship between the availability of equipment and the availability of Posyandu services for the elderly. In this study the types of elderly Posyandu services included: measuring weight, measuring blood pressure, checking heart rate, examining eyes, ears, treating minor ailments, osteoporosis testing, providing supplementary food, providing iron supplementation, providing vitamins, lanisa gymnastics, meeting between seniors (arisan, recitation), coordinating activities for the elderly such as picnics, counseling on healthy clean living behaviors such as diet and hygiene, checking HB, checking cholesterol levels and checking blood sugar. In addition, the focus of equipment for the elderly Posyandu includes: scales, height gauges, blood pressure gauges, eye examination kits, osteoporosis test kits, demonstration tools, tools for elderly exercise, paracetamol, iron pills and vitamins.

Facilities and infrastructure greatly affect the visit of the elderly in visiting the Posyandu. The more complete the facilities and infrastructure provided, the more interested the elderly are in making visits and there is a significant relationship between complete health facilities and utilization of health services. In the view of researchers, the inhibiting factor in terms of the availability of facilities and infrastructure is the limited number of equipment provided. Where in one posyandu it was stated that for blood check examinations, the elderly were charged with buying their own equipment. Where when the elderly Posyandu takes place, sometimes the number of elderly people is large, so sometimes there is a shortage of blood test equipment. Therefore, the elderly have the initiative to buy laboratory equipment independently. The availability of facilities and infrastructure is one of the factors that play a role in health behavior, with the availability of this equipment it will enable the elderly to come to the elderly integrated service post. These results indicate that there is a tendency among the elderly to have a positive attitude towards the use of the elderly integrated service post. In accordance with this study, it can be concluded that facilities and infrastructure tend to influence the utilization of elderly service posts [1]. There is a relationship between the availability of facilities and the implementation of integrated service posts in the working area of the community health center in Banjarbaru City (p value = 0.000 < 0.05) [15]. The availability of facilities is a support for the success of a process of efforts made in providing elderly health services and also helps work organizations in providing services.

V. CONCLUSION

The conclusion in this study is that there is a relationship between the availability of equipment and the availability of health services at integrated service posts for the elderly in Indonesia. Therefore, there needs to be attention from the Government through the provision of health equipment supporting health services that are safe and easy to access, providing support for the elderly through proactive services to be able to reach as many elderly targets as possible in the working area of the public health center so there is an increase in the quality of life of the elderly. For community health centers, in order to improve services for the elderly through the elderly program and increase the role and function of health cadres because it is very important to improve the health status of the community, especially the elderly.

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