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Sociodemographic Relationship with the Level of Community Participation on Preventing the Spread of COVID-19

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Keywords

level of community;
participation;
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sociodemographic;

Abstract

Efforts to prevent the spread of COVID-19 are a shared responsibility. Community participation is very much needed in helping the government implement health protocols. Without community participation, the goal of implementing COVID-19 will not be achieved. The purpose of this study was to analyze the sociodemographic relationship with the level of community participation in preventing the spread of COVID-19 in the Work Area of the Biru Health Center, Bone Regency. This study uses an analytical observational design with a Cross-Sectional approach. The sampling technique using the simple random sampling method was carried out randomly with a sample of 397 respondents using the Slovin formula. Research results there is a significant relationship between the level of education and workers with the level of community participation in preventing the spread of COVID-19. Furthermore, there is no significant relationship between gender and age with the level of community participation in preventing the spread of COVID-19. The level of community participation can be categorized as quite good and it is recommended that people continue to carry out physical distancing, self-quarantine, and self-isolation as well as increase understanding and concern in preventing the spread of COVID-19.

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1 Introduction

COVID-19 was first reported in Wuhan, Hubei, China in December 2019, and on March 11, 2020, the World Health Organization declared that COVID-19 has become a worldwide pandemic disease (Andrews et al., 2020). Pandemic COVID-19 is causing fear to the wider community globally. One of the things that cause anxiety and fear in society is its rapid spread. To date, from the World Health Organization WHO data, as of September 21, 2021, there have been 30,949,804 confirmed positive, as many as 959,115 who died and 272,585 new cases found worldwide. While Indonesia recorded 248,852 cases, 180,797 were declared cured and 9,677 died. This explains that the increase in corona cases worldwide continues to increase including in Indonesia (WHO, 2021).

The rapid spread of COVID-19 through person-to-person transmission in a short time causes symptoms such as high fever, cough, tightness, no appetite, and weakness. SARS-CoV-2 infection in humans causes symptoms of acute respiratory distress (Kemenkes RI, 2020). A systematic review and meta-analysis studies from 172 observational studies on COVID-19 preventive behavior explain that maintaining a physical distance of 1 meter or more results in lower transmission of the virus than the distance of <1 meter, using masks and eye protection can reduce the risk of infection. This effort can prevent the transmission of COVID-19 both in health services and in the community (Chu et al., 2020). This study is in line with research conducted by Sinicrope et al. (2021), involving 7786 respondents who explained that there are about 64% are very willing to use masks. The desire to use masks correlates strongly with increased knowledge about COVID-19. In addition, the use of masks is more effective collectively, increasing consistent use of masks, and strengthening COVID-19 prevention behavior. Another study conducted in 196 countries explained that the negligence of wearing masks increases mortality, and countries with cultural norms and government policies that support the use of masks in public places can reduce deaths due to COVID-19 (Leffler et al., 2020).

Efforts to prevent the spread of COVID-19 require community participation measures to actively and consciously comply with health protocols, namely by frequently washing hands, applying cough ethics when coughing or sneezing, maintaining distance, wearing masks when out of the house, if experiencing symptoms of fever and respiratory disorders to immediately seek treatment and convey travel history to health workers (Kokkonen et al., 2001; Knutson, 2013). Avoid close contact with people who have symptoms of respiratory diseases such as coughing and sneezing. Another community participation is to comply with messages conveyed by the government such as Social Distancing (Social Restrictions), Physical Distancing (Physical Restrictions) by maintaining a distance of at least 1.5 meters, self-isolation for people who have recently traveled and people who have direct contact with COVID-19 patients but are declared negative for 14 days. Another effort is to help through donations of funds and energy (volunteering) (Kemenkes, 2020; Mulyadi, 2020).

Efforts related to the importance of community participation in supporting the prevention of the spread of COVID-19, this study was conducted to analyze sociodemographic relationships with the level of community participation in the prevention of the spread of COVID-19 in Biru Health Center Work Area, Bone Regency (Van Aalst et al., 2008; Bodin & Crona, 2008).

2 Materials and Methods

This study is a study conducted using analytical observational analysis with a Cross-Sectional approach. Samples in this study were taken in the Working Area of Bone Regency Biru Health Center using questionnaires. Sampling techniques in this study were conducted by a simple random sampling method that was done randomly so that the sample in this study amounted to 397 respondents using the Slovin formula.

3 Results and Discussions

Univariate analysis

Table 1
Sociodemographic characteristics of the working area of The Biru Health Center, Bone Regency

Sociodemographic		Frequency	Percentage
Gender	Male	213	53,7
	Female	184	46,3
age	15 - 19 years	73	18,4
	20 - 24 years	78	19,6
	25 – 29 years	40	10,1
	30 – 34 years	120	30,2
	≥ 35 years	86	21,7
Education	Primary School	51	12,8
	Not finished junior high school	118	29,7
	Not finishing high school	31	7,8
	High school finish	72	18,1
	Diploma/ Bachelor	125	31,5
Work	Farmer/Day Laborer	27	6,8
	Student	160	40,3
	Self-employed	62	15,6
	Private Employees	52	13,1
	Civil Servants	96	24,2

Source: Primary data 2021

Gender
Table 1 shows that the male sex is 213 (53.7%) and the female sex is 184 (46.3%). This shows that most of the respondents were male.

Age
Based on Table 1, it was obtained that the majority of respondents aged 30 - 34 years as many as 120 (30.2%), respondents aged ≥ 35 years as many as 86 (21.7%), respondents aged 25 - 29 years as many as 40 (10.1%), respondents aged 20 - 24 years as many as 78 (19.6%), and respondents aged 15 - 19 years as many as 73 (18.1%) of the total number of 397 respondents.

Education
Based on Table 1, it was obtained that the majority of respondents educated diploma/undergraduate as many as 125 (31.5%), respondents ended high school as many as 72 (18.1%), respondents did not finish high school as many as 118 (29.7%), and were the second-highest respondents, lastly elementary-educated respondents as many as 51 (12.8%) with an overall number of 397 respondents.

Work
Based on Table 1, it was obtained that the most respondents were Students / Students as many as 160 (40.3%) respondents, while civil servants as many as 96 (24.2%), self-employed 62 (15.6%), private employees 52 (13.1%) and farmers/workers as many as 27 (6.8%) respondents.

Table 2
Distribution of frequency of community participation in prevention of COVID-19 spread

Variable		Frequency	Percentage
Community Participation Rate	Low	113	28,5
	Enough	150	37,8
	High	134	33,8

Source: Primary data 2021

Table 2 can be explained that the community participation rate is quite 150 people (37.8%), high participation 134 (33.8%), and low participation rate 113 (28.5%).

Analysis Bivariate

Table 3
Analysis of the relationship between sociodemographic and community participation rate in preventing the spread of COVID-19 in the working area of Biru Health Center, Bone Regency

Variable	*Participation Rate*								*P*
	Less		Enough		high		Total		
	F	%	F	%	F	%	F	%	
Gender									
Male	59	14,9%	88	22,2%	66	16,6%	213	53,7%	
Female	54	13,6%	62	15,6%	68	17,1%	184	46,3%	0,265
Total	113	28,5%	150	37,8%	134	33,8%	397	100%	
Age									
15 – 19 Years	22	5,5	29	7,3	22	5,5	73	18,4	
20 – 24 Years	20	5	32	8,1	26	6,5	78	19,6	
25 – 29 Years	13	3,3	13	3,3	14	3,5	40	10,1	0.908
30 – 34 Years	38	9,6	43	10,8	39	9,8	120	30,2	
≥ 35 Years	20	5	33	8,3	33	8,3	86	21,7	
Total	113	28,5	150	37,8	134	33,8	397	100	
Education									
Primary School	17	4,3	21	5,3	13	3,3	51	12,8	
Not finished junior high school	40	10,1	38	9,6	40	10,1	118	29,7	
Not finishing high school	8	2	14	3,5	9	2,3	31	7,8	
High school finish	24	6	34	8,6	14	3,5	72	18,1	
Diploma/ Bachelor	24	6	43	10,8	58	14,6	125	31,5	0,006
Total	113	28,5	150	37,8	134	15,8	397	100	
Profession									
Farmer/Day Laborer	9	2,3	11	2,8	7	1,8	27	6,8	
Student	58	14,6	58	14,6	44	11,1	160	40,3	
Self-employed	15	3,8	20	5	27	6,8	62	15,6	0.041
Private Employees	13	3,3	22	5,5	17	4,3	52	13,1	
Civil Servants	18	4,5	39	9,8	39	9,8	96	24,2	
Total	113	28,5	150	37,8	134	33,8	397	100	

Table 3 explains that female respondents with a high participation rate of 68 people (17.15%) Statistical test results obtained p-value = 0,265 means >α, it can be concluded that the gender of respondents has no significant relationship with public participation in the prevention of the spread of COVID-19. In the age variable, p-value = 0.908 means >α, so it can be concluded that the age of respondents does not have a significant relationship with community participation in the prevention of the spread of COVID-19.

Respondents with a diploma /undergraduate education level had a high participation rate of 58 people (14.6%). Then, on the results of the variable statistical test of education level with a p-value of 0.006 (α <0.05), it means that the education level of respondents has a significant relationship to community participation in the prevention of the spread of COVID-19. The results of the work variable statistical test obtained a p-value of 0.041 (α <0.05), it can be concluded that the work of respondents has a significant relationship to community participation in the prevention of the spread of COVID-19.

The study showed that there was no gender relationship with public participation in the prevention of the spread of COVID-19. In this study, respondents were dominated by men, but the distribution of proportions was almost the same between the female and male sexes at a high participation rate in the prevention of the spread of COVID-19. This study is not in line with research conducted by Sari et al. (2020), which states that there is a relationship between sex and COVID-19 prevention behavior in South Kalimantan with a study sample of 1,170 respondents. The study explained that women tend to have better knowledge, have a lot of time to discuss and read, are more concerned about the environment and health than the male sex. Another study by Zhong et al. (2020), revealed that the male sex is at 1.37 times higher risk of misbehaving against health protocols, not wearing a mask when traveling to crowded places compared to the female sex. Another Hong Kong study involving 2706 students aged 18 and over on infection control compliance explained that male students as the largest respondents showed low confidence in managing health threats and tended to show lower compliance in measures to prevent the spread of COVID-19 (Tanget al., 2021).

This study explained that there is no relationship of age with community participation in the prevention of the spread of COVID-19. Research explaining the age of 30-34 years is the most and belongs to the category of early adulthood. This study is in line with Niruri et al (2021), research which explains that age is not significantly related to COVID-19 prevention behavior in Surakarta. The study also describes the most age ranges at the early adulthood stages. In the early adult stages, a person has been able to adapt to new patterns of life, developing patterns of behavior, attitudes, and values. At this stage, a person has been able to determine the best behavior, able to cooperate, and sensitive to his environment. A person can participate in complying with government advice regarding physical distancing, self-quarantine, and self-isolation. Community participation is the involvement of citizens related to the management and development of community welfare, efforts to prevent and control disease outbreaks for voluntary common purposes (Gillespie et al., 2016; Marston et al., 2020). In young adulthood, it is expected to have more understanding of physical distancing and work from home that has been imposed by the government.

The level of education is related to community participation in the prevention of the spread of COVID-19 (Sun & Zhai, 2020). This study explains that the level of diploma/undergraduate education is the most amounted to 58 people (14.6%) with a high participation rate. This research is in line with research conducted by Suryaningrum et al. (2021), which explains that the level of education has a significant relationship with COVID-19 prevention efforts. A person with higher education has extensive knowledge and is receptive to new knowledge. Education can increase awareness and a good understanding of the prevention of COVID-19. Education is the development of abilities and behaviors through knowledge. A person who has a higher level of education will have better knowledge (Notoatmodjo, 2018). The level of education affects the ability to participate in the prevention of the spread of COVID-19. Responding and the community is involved in the implementation of government programs such as physical distancing, self-quarantine, self-isolation, and work from home. Respondents were involved in providing handwashing in every house, wearing masks, and keeping a distance of at least 1.5 meters when leaving the house for the safety of the local community (Booth et al., 2004). Another effort made is to make donations in the form of materials to communities affected by COVID-19 and assistance in the form of energy in the distribution of masks and hand sanitizers. Research conducted by Susanto & Kramadibrata (2020), explained that high public participation and proper government policymaking can reduce the spread of the COVID-19 virus in Indonesia.

Community participation in the context of COVID-19 must consider three interconnected things: having an emergency basis, trying to control problems, and ensuring adequate care and economic protection for families to survive during pandemics. Social justice approaches are also important, especially in the equalization of health services and reducing the occurrence of social inequalities (Bispo Júnior & Morais, 2020). A case study in India on community participation initiatives during COVID-19 explains that the community took the initiative in helping improve the economy and community welfare during the COVID-19 pandemic. There were 83 participants consisting of volunteers, private, and government. Efforts are made in the form of sewing

and producing several PPE, namely 1700 APD kits and 13,000 masks for health workers who worked in hospitals during the COVID-19 pandemic. This initiative uses the principles of community organization with methods of working together in improving the ability of the community during the COVID-19 pandemic (Jagannathan et al., 2021). Another study in India explained that community participation is one of the efforts in suppressing the spread of COVID-19. In the research conducted, it can be explained that there are five community participation efforts carried out, including segregation or segregation, control of sources of transmission, social restrictions, solidarity, and social services (Khongsai et al., 2021).

In this study, the work related to community participation in the prevention of the spread of COVID-19 (Tomar & Gupta, 2020). Students/students are the most with a high participation rate in the prevention of the spread of COVID-19. Students/students are categorized as respondents who do not work. The majority of respondents have a high intensity to get out of the house to make respondents more aware of the importance of participating in preventing the spread of COVID-19. Students are heavily involved as volunteers and actively help communities affected by COVID-19. In addition, respondents were obedient in following the government's advice to always use a mask, wash hands with soap or hand sanitizer, immediately take a shower after arriving home. The results of this study are not in line with research conducted by Pratiwi et al. (2020), which explained that there is no significant relationship between work and adherence behavior to health protocols. Non-working respondents (students) had a higher proportion of compliance levels than working respondents.

Research conducted by Wang (2021), explains that the identity profile of the community is related to community participation. This study explains the behavior of community participation indicated by two things, namely the intention of participation and management of community behavior. Other research conducted in Kab. Minahasa on energy participation conducted by village youths included guarding COVID-19 surveillance posts, acting as a COVID-19 task force tasked with spraying disinfectants in people's homes using complete PPE. Participation of skills and skills in the form of making cloth masks and then distributed to the community. Social participation by jointly complying with health protocols that have been put in place by the government in maintaining the spread of the COVID-19 virus. Participation of the mind by providing ideas or ideas such as creating a farming group in supporting food needs during the pandemic (Wowiling et al., 2022). The results of this study are supported by research conducted by Pranaka (2021), explaining that community involvement in preparedness for COVID-19 requires good cooperation with the government, among others, by providing handwashing and soap, applying physical distancing, using masks, and forming village volunteers. The research also emphasizes the importance of optimizing communication, education, information, and cooperation across sectors or non-governmental organizations. Other research in line with this study explains that a good handling strategy between the government and the community is needed in fighting COVID-19, community compliance in overcoming the COVID-19 outbreak, being positive in handling difficult situations, and the importance of being free from the virus through massive prevention efforts (Mahardika et al, 2020).

4 Conclusion

The level of education and work is related to the level of community participation in preventing the spread of COVID-19. However, gender and age are not related to the level of community participation in preventing the spread of COVID-19. The level of community participation can be categorized quite well and it is recommended that the community continues to carry out physical distancing, self-quarantine, and self-isolation and increase understanding and concern in preventing the spread of COVID-19 in the Bone Regency, Biru Health Center Work Area.

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