



The Relationship Between Parent and Teacher Education at School on the Implementation of the 5M Health Protocol in Early Childhood

Yoga Tri Wijayanti¹

¹ Politeknik Kesehatan Kementerian Kesehatan Tanjungkarang, South Lampung, Lampung 35145, Indonesia
yogatriwijayanti@gmail.com

Abstract. Covid-19 is an acute respiratory infectious disease caused by Coronavirus Strain Severe Acute Respiratory Syndrome Coronavirus 2 that was first identified in late 2019 in the city of Wuhan. The increase in the number of cases was quite rapid and spread to various countries in a short time. The government has established the 5M health protocol to control the Covid-19 epidemic. The purpose of this study was to determine the relationship between parent and teacher education on the implementation of the 5M health protocol in early childhood. The method used in this study was Cross Sectional, using a questionnaire research instrument to measure the behavior of implementing the 5M health protocol. Respondents in this study were early childhood (4-7 years) in several kindergartens in Metro City, Lampung in 2023. The results of this study indicate that there is a relationship between the two independent variables on the application of health protocols in early childhood. Based on the sub-indicators assessed, parent education has a significant relationship with each sub-indicator of the 5M protocols, but the teacher education variable is only related to the sub-indicator of maintaining distance ($p < 0.05$). Conclusion: Education provided by parents and teachers can have a good influence on children, especially in implementing the 5M health protocol. Parents and teachers are expected to provide good education in order to provide positive responses and attitudes in children not only in implementing the 5M health protocol, but also in other healthy child behaviors, both during the covid-19 and post covid-19.

Keywords: Parent Education, Teacher Education, 5M Health Protocols, Early Childhood.

1. Introduction

Coronavirus Disease 2019 or Covid-19 is an acute respiration infectious disease caused by Coronavirus Strain Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-Cov-2) which was first diagnosed in late 2019 in the city of Wuhan, Hubei Province of China [1].

The increase in within the wide variety of cases was quite rapid and spread to various countries in a short time. The range of high quality confirmed cases of Covid-19 in Indonesia as of January 10, 2021 is 828,026 cases with a mortality rate of 24,129 and a cure rate of 681,024 people. Covid-19 cases in Indonesia continue to increase. The Indonesian Ministry of Health reported that the number of cases in Indonesia as of January 9, 2021 was 818,386 cases with a death rate of 23,947 and a cure rate of 673,511 people [2].

Covid-19 has been able to occur at all ages, one of which is in children. Covid-19 cases must also be watched out for in children. According to the chairman of the IDAI board, Covid19 cases in children have also increased by 11-12% in Indonesia, and during the pandemic the number of child deaths has increased by 50% or a thousand child deaths every week [3]. According to [4], children are susceptible to transmission of the Covid-19 virus because children's immune function is immature children also range to upper respiratory system infections, with more diverse symptoms.

The government has established a 5M health protocol to control the Covid-19 epidemic, including using personal protective equipment in the form of masks that cover the nose and mouth up to the chin when leaving the house or interacting with other people whose health conditions are unknown. Regular hand washing, the use of soap under running water, or alcohol based hand sanitizers, keeping a distance of at least 1 meter from other people so that droplets do not get on people who talk, cough, or sneeze. It also increases the body's resistance by avoiding crowds, as well as maintaining a clean and healthy lifestyle and finally reducing mobility [5]. The 5M movement is intensively socialized to the community to support 3M which used to be applied in preventing the transmission and spread of COVID-19 in the community. This movement applies to all groups. Of course, we must be really disciplined in implementing health protocols so that people can get out of various challenges and difficulties during the COVID-19 pandemic. For this reason, all levels of society always remember that COVID-19 can spread and infect a person quickly. Thus, these 5Ms have an important role in preventing the spread of COVID-19, including the pesantren environment with a high risk of virus transmission due to the presence of residents and the implementation of the teaching and learning process. It is reinforced that this virus spreads anyone who is connected in a social network [6].

The role of families, including parents, in dealing with COVID-19 issues can be improved, including disciplining all the behaviors of their members, educating or educating their children to comply with health protocols set by the government, preparing and fulfilling the needs of their members, instilling habits in their members to always practice a lifestyle by exercising regularly and regularly, maintaining the mental health of their families, motivating and strengthening each other socially in an effort to fulfill basic human needs as social creatures [7].

Various efforts that parents can make in preventing the spread of Covid-19 are to familiarize discipline for family members to maintain health protocols and maintain personal hygiene

to stay healthy and avoid transmission of covid-19. In addition, other actions can be taken by setting an example when going outside by always wearing a mask, limiting communication distance, or not contacting directly [8].

Apart from parents, teachers also have the same role in providing education to children. Teachers also have a role in providing explanations / understanding directions to children about the current condition of covid-19, with knowledge and understanding about it and the willingness to take preventive measures against covid-19 such as: getting used to washing hands, wearing masks, and distance so that children not only hear teacher commands but also see the role of their teachers in carrying out health protocols [9].

Based on research conducted by [10] about "The Relationship between Parenting Patterns and Compliance with the Implementation of Health Protocols in School-Age Children in the New Normal Era" shows that there is a strong, positive, and significant relationship between parenting patterns and compliance with implementing health protocols. Other research conducted by [9] about "Factors Related to the Implementation of Health Protocols Against Covid-19 Prevention in Students at MTsN 2 Banda Aceh City in 2022", showed the results of statistical tests on the teacher's role variable obtained a p-value of 0.016 so that (H_a) was accepted, which means that there is a relationship between the role of the teacher and the implementation of health protocols against covid-19 prevention at MTsN 2 Banda Aceh City.

Based on this background, the researcher is interested in conducting research on "The Relationship between Parent and Teacher Education on the Implementation of the 5M Health Protocol in Early Childhood in Metro City Kindergarten".

2. Method

This study was an observational analytic study using a cross-sectional approach. This study was conducted in all kindergartens in Metro City, Lampung which was conducted in 2023.

The population in this study were all kindergarten students in Metro City, Lampung. The sample in this study were kindergarten students who met the inclusion criteria and filled out the google form properly and completely as many as 174 students. The study variables consisted of independent variables, namely [1] parent education and [2] teacher education, while the dependent variable was the implementation of the 5M health protocol.

This study uses a questionnaire of children's healthy behavior which consists of several sub-indicators as an assessment, such as the behavior of wearing a mask, washing hands, staying away from crowds, maintaining distance and reducing mobility. The assessment of this questionnaire consists of a score of 1-5, with the category of very negligent at score 1 to very compliant for score 5.

The bivariate test data analysis technique used to determine the relationship between parent education and teacher education on the implementation of health protocols is using the chi square test, while the multivariate test for those used to determine the most influential variables is using the logistic regression method.

3. Results and Discussion

3.1. Results

Univariate Analysis Respondent Characteristics

Table 1. Frequency Distribution of Respondents Proportion of Research Variables

| Variables | Total (174) | Percentage (%) |
|----------------------------------|--------------------|-----------------------|
| 1. Age | | |
| <5 th | 11 | 6.3% |
| 5-6 years old | 140 | 80.5% |
| >6 th | 23 | 13.2% |
| 2. Parents' Occupation | | |
| Housewife | 83 | 47.7% |
| Self-employed | 41 | 23.6% |
| Laborers and Farmers | 30 | 17.2% |
| Employees | 10 | 5.7% |
| Etc. | 10 | 5.7% |
| 3. Children's School | | |
| Aisyiah Yosomulyo Kindergarten | 17 | 9.8% |
| Quran Kindergarten | 40 | 23% |
| Aisyiah Summersari Kindergarten | 15 | 8.6% |
| PKK 1 Banjar Sari Kindergarten | 15 | 8.6% |
| Pembina Kindergarten | 87 | 50% |
| 4. 5M Health Pro Behavior | | |
| a. Good | 89 | 51.1% |
| b. Good enough | 85 | 48.9% |
| 5. Parent Education | | |
| a. Good | 150 | 86.2% |
| b. Good enough | 24 | 13.8% |
| 6. Teacher Education | | |
| a. Good | 151 | 86.8% |
| b. Good enough | 23 | 13.2% |

The table of characteristics of the research subjects above shows that of the total 174 respondents, most respondents were in the age range of 5-6 years (80.5%). Most of the respondents' parents worked as housewives (47.7%), most of the respondents came from

Pembina kindergarten (50%), most of the children's 5M prokes behavior was well behaved (51.1%), most of the parents' education was in the good category (86.2%) and most of the teachers' education was in the good category (86.8%).

Bivariate Analysis

The Relationship between Parent Education and the Implementation of the 5M Health Protocol in Early Childhood

Table 2. Relationship between parental education and the implementation of the 5M health protocol in early childhood in kindergartens in Metro City

| Parent Education | 5M Health Pro Behavior | | | | n | % | *P Value | OR (95%) |
|------------------|------------------------|-------|-------------|-------|-----|-------|------------------------|----------|
| | Good | | Good enough | | | | | |
| | N | % | N | % | | | | |
| Good | 67 | 36.8% | 87 | 50% | 151 | 86.8% | 0.070 (0.016-0.310) | |
| Good enough | 21 | 12.1% | 2 | 1.1% | 23 | 13.2% | | |
| Total | 85 | 48.9% | 89 | 51.1% | 174 | 100 | | |

*Chi Square Test

Table 2 shows that there is a relationship between parental education and the implementation of the 5M health protocol for children in metro city kindergartens ($p < 0.05$), with an OR value of 0.070 and a 95% CI range between 0.016-0.310, which means that good education provided by parents has a 0.070 chance of implementing a good 5M health protocol compared to parents with sufficient education.

The Relationship between Teacher Education and the Implementation of the 5M Health Protocol in Early Childhood

Table 3. Relationship between Teacher Education and Implementation of the 5M Health Protocol in Early Childhood in Metro City Kindergarten

| Teacher Education | 5M Health Pro Behavior | | | | n | % | *P Value | OR (95%) |
|-------------------|------------------------|-------|------------|-------|-----|-------|------------------------|----------|
| | Good | | Cukup Baik | | | | | |
| | N | % | N | % | | | | |
| Good | 67 | 38.5% | 83 | 47.7% | 150 | 86.2% | 0.269 (0.101-0.716) | |
| Good enough | 18 | 10.3% | 6 | 3.4% | 24 | 13.8% | | |
| Total | 85 | 48.8% | 89 | 51.2% | 174 | 100 | | |

*Chi Square Test

Table 3 shows that there is a relationship between teacher education and the implementation of the 5M health protocol for children in metro city kindergartens ($p < 0.05$), with an OR value of 0.269 and a 95% CI range between 0.101-0.716, which means that good education provided by teachers has a 0.269 times chance of implementing a good 5M health protocol compared to teacher education in the sufficient category.

The Relationship between Parent Education and Teacher Education on the Implementation of the 5M Health Protocol in Early Childhood Based on Sub Indicators

Table 4. Relationship between Parent Education and Teacher Education on the Implementation of the 5M Health Protocol in Early Childhood Based on Sub Indicators

| 5M Health Pro Behavior (Sub Indicators) | Variables | |
|---|--------------------------|---------------------------|
| | Parent Education (n=147) | Teacher Education (n=147) |
| Wearing a Mask: | | |
| OR (95% CI) | 0.358 (0.139-0.922) | 0.923 (0.390-2.185) |
| *P Value | *0.028 | *0.856 |
| Handwashing: | | |
| OR (95% CI) | 0.60 (0.008-0.458) | 0.384 (0.136-1.084) |
| *P Value | *0.000 | *0.063 |
| Keeping your distance | | |
| OR (95% CI) | 0.046 (0.006-0.350) | 0.293 (0.104-0.825) |
| *P Value | *0.000 | *0.015 |
| Avoiding Crowds: | | |
| OR (95% CI) | 0.352 (0.140-0.881) | 0.490 (0.204-1.174) |
| *P Value | *0.022 | *0.105 |
| Reduced Mobility: | | |
| OR (95% CI) | 0.308 (0.126-0.756) | 0.509 (0.209-1.238) |
| *P Value | *0.008 | *0.132 |

**Chi Square Test*

Based on table 5, the results of the analysis show that there is a relationship between the parent education variable and each sub-indicator of the 5M health protocol implementation ($p < 0.05$). However, the teacher education variable associated with the 5M health protocol behavior sub-indicator is the sub-indicator of maintaining distance ($p < 0.05$).

Multivariate Analysis

Table 5. Results of Logistic Regression Analysis of Each Independent Variable Against Implementation of the 5M Health Protocol in Early Childhood

| Variables | p value | Exp(B) | 95,0% C.I. for EXP (B) | |
|-------------------|---------|--------|------------------------|-------|
| | | | Lower | Upper |
| Education Parents | 0.002 | 0.088 | 0.019 | 0.402 |

| | | | | |
|-------------------|-------|-------|-------|-------|
| Education Teacher | 0.189 | 0.484 | 0.164 | 1.429 |
|-------------------|-------|-------|-------|-------|

Of the two variables that have a p value <0.05 is parent education, so the variable that has the most influence on early childhood behavior is parent education with a p value of 0.002, Exp (B) value of 0.088 with CI (95%) between 0.019-0.402.

3.2. Discussion

The results of this study indicate that there is a relationship between parental education and the implementation of the 5M health protocol for children in metro city kindergartens ($p<0.05$), with an OR value of 0.070 and a 95% CI range between 0.016-0.310, which means that good education provided by parents has a 0.070 times chance of implementing a good 5M health protocol compared to parents with sufficient education. This study is in line with research conducted [11] which showed that the role of parents and hand washing behavior in school-age children in the positive category was 81.7% and 59.8%. There is a relationship between the role of parents and hand washing behavior in school-age children during the covid-19 pandemic. The relationship between parental roles and hand washing behavior in school-age children has a PS value of 0.000 and a correlation coefficient of 0.512.

Other results in this study indicate that there is a relationship between teacher education and the implementation of the 5M health protocol for children in metro city kindergartens ($p<0.05$), with an OR value of 0.269 and a 95% CI range between 0.101-0.716, which means that good education provided by teachers has a 0.269 times chance of implementing a good 5M health protocol compared to teacher education in the sufficient category. The results of this study are similar to the results of research conducted by [12] which shows that there is a significant relationship between the role of the teacher and compliance with the implementation of covid-19 health ($p<0.05$). Based on the research conducted, it is important to increase knowledge in shaping attitudes and behaviors in individuals or communities [13]. This is also supported by research [14] The results of this study showed that there were 22 teachers at Jodipan Elementary School who overall had a high level of knowledge about health protocols and had good and sufficient attitudes regarding 3M health protocols at school. Therefore, teachers' knowledge and attitudes can provide encouragement in educating, supervising and controlling health protocols for students at school.

In this study, the results of the analysis also showed a relationship between the parent education variable and each sub-indicator of the 5M health protocol implementation ($p<0.05$). However, the teacher education variable associated with the 5M health protocol behavior subindicator is the sub-indicator of maintaining distance ($p<0.05$). In addition, the results showed that parent education is the most influential variable on early childhood

behavior is parent education with a p value of 0.002, Exp (B) value of 0.088 with CI (95%) between 0.019-0.402.

This is because parents are role models in implementing health protocols [15]. Parents are the first people to nurture, raise, guide and educate and have a great influence on children's growth and development [16]. One of the roles that parents can play during COVID-19 is to remind their family members to lead a healthy and clean lifestyle to avoid various diseases by undergoing health protocols. The role of parents at home is educative by providing all forms of learning, both verbal and nonverbal, so that children are optimized and their needs are fulfilled so that the child becomes an independent, competent and disciplined child. The actions that can be taken by parents at home by making a learning schedule, supervising, familiarizing with clean living so that children develop awareness to take good actions in accordance with the applicable rules [8].

The role of parents in the implementation of health protocols is as follows; parents give advice to children, parents as motivators for their children, parents provide good examples to children, parents play a role in establishing a harmonious relationship with their children, provide supervision in terms of mental, physical and sociological preparation of children, and parents instill habits to carry out new habit patterns, especially in implementing 5M health protocols such as washing hands, wearing masks, maintaining distance, staying away from crowds, and reducing mobility [5]. In addition, parents are the first educators for children from various aspects, because parents are the determinants of a child's compliance. Parents' behavior will become a role model for children's daily lives, therefore parents are required to behave well for children. A consistent and loving way of educating parents will make it easier to shape the character of an obedient child. A child who has obeyed eating will be accustomed to good behavior, one of which is the behavior of implementing the 5M health protocol properly [11].

According to the researcher's assumption, parent education has a better influence than teacher education, because parents are the closest to children and spend the most time at home with children. In addition, parents are role models for children, so that the behavior that parents do at home or that parents teach at home, allows children to participate and obey following the things that parents do, including things in implementing healthy behaviors such as implementing the 5M health protocol.

This study has limitations, namely using a cross-sectional method in which these respondents were only studied in one limited time and only to prove the conditions that occurred at the time the research was carried out, this allows changes that may have occurred and will occur when the research is no longer observed.

4. Conclusion

Education provided by parents at home and teachers at school can have a good influence on children, especially in implementing the 5M health protocol. Children who are given good education have more opportunities to have good behavior in implementing the 5M health protocol. This certainly has a positive impact and attitude on children. Therefore, parents and teachers are expected to provide good education to provide positive responses and attitudes in children not only in implementing the 5M health protocol, but also in other healthy child behaviors, both during the covid-19 pandemic and post covid-19 pandemic.

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