

COVID-19 Education and Vaccination in Reducing Students' Anxiety Levels at SMP 2 Silaut

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ABSTRACT

This research is a form of community service that aims to provide education related to Covid 19 and vaccination in reducing students' anxiety levels, as well as to increase students' knowledge about Covid 19 and its vaccinations. This service is carried out on students at Junior High School 2 Silaut. In the implementation of this service, partners who are invited to collaborate are teachers and students of Junior High School 2 Silaut. The problems found were that there were still students exposed to Covid 19. The solution to overcome this problem was to directly observe the implementation of health protocols by students and teachers and provide health education about Covid 19 and its vaccinations. The method used is by making direct observations of students and teachers, providing direct counseling about covid-19, teaching how to wash hands properly and correctly, giving masks and hand sanitizers and socializing symptoms, prevention and vaccination, as well as conducting periodic evaluations through observations by teachers. to students continuously.

Keywords: Covid-19, Vaccination, Anxiety Level

1. INTRODUCTION

The spread of a new type of coronavirus (SARS-Cov-2) at the end of 2019 which was later given the name Covid -19 is of great concern and concern to the world. Covid-19 was first discovered in the Chinese city of Wuhan which later migrated and spread throughout the world[1]. As a result of its fairly massive spread, on March 11, 2020, the World Health Organization (WHO) determined the reading of Covid 19 as a pandemic.

After the stipulation of the Covid-19 pandemic, of course, various countries that have not or have been exposed to Covid-19 must make various efforts to stop it. According to the [2] the director-general of WHO, Set 4 (four) main things that must be done by a country in dealing with the transmission of Covid-19, namely; a) prepare and prepare, b) detect, protect and treat, c) reduce spread, d) innovation and learning[3].

Also revealed that the way Covid-19 spreads is through small droplets of saliva that come out of the

nose or mouth when a person infected with Covid-19 sneezes or coughs[4]. The droplets then land on an object or surface that a healthy person has touched. It can also be spread when inhaled directly by healthy people when they are nearby. That is why it is important to keep a distance of more than one meter from people who are sick[5].

Indonesia as part of the world's habitat and population, of course, cannot be avoided from exposure to Covid-19. The first case in Indonesia was announced directly by President Joko Widodo at the presidential palace on Monday, March 2, 2020[6]. The first case exposed to Covid-19 was a mother (64 years old) and her child (31 years old) from Depok, West Java. Both are suspected of being exposed to Covid-19 due to contact with Japanese citizens who came to Indonesia. As time goes by, the number of cases infected with Covid-19 continues to increase, especially in areas around the capital city of Jakarta.

To avoid transmission and to cut the chain of spread, several countries have implemented lockdown policies such as in Wuhan-China, Italy, and Malaysia. In Indonesia, the government has issued a policy of social distancing or physical distancing (maintaining distance) so that it ends in an appeal to stay at home (stay at home) and more specifically in cities where there are already Covid 19 patients [7]. In Jakarta itself, as the epicenter of the spread of Covid-19 with most cases implementing the Large-Scale Social Restriction (PSBB) policy which was eventually followed by other provinces around Jakarta.

Based on the results of an observational study on January 19, 2021, there were 13 positive cases of Covid-19 at SMP Negeri 2 Silaut. There were 2 positive cases of Covid 19 for the teacher, while 2 positive cases of Covid-19 were obtained, while the students were positive for Covid 10. Because there are still many students who don't pay attention to health protocols such as lack of discipline in wearing masks properly and there are still many who are stubborn not to wear masks and there are still who still like to hang out in cafes. In the current pandemic conditions, awareness is emphasized for students and also teachers to comply with the Covid-19 protocol and reduce the spread of virus transmission. So that students and teachers can prevent and break the chain of transmission of Covid19.

One strategy to prevent and overcome the problem of the spread of Covid-19 in students and teachers is to make schools partners. Partners in this program are all teachers and parents of SMP Negeri 2 Silaut students. Based on a situational analysis of several problems faced by partners, namely: a) Teachers realize that there is still a lack of education about Covid-19 prevention in schools, b) Students still lack understanding about Covid-19 prevention education.

Coronaviruses are a large family of viruses that cause disease in humans and animals. In humans, it usually causes respiratory tract infections, ranging from the common cold to serious diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS)[8]. A new type of coronavirus found in humans since an extraordinary event appeared in Wuhan, China, in December 2019, was later named Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-COV2) and caused Coronavirus Disease-2019 (COVID-19)[9].

Vaccines are antigens in the form of microorganisms that are dead, still alive but attenuated, still intact or parts thereof, which have been processed, in the form of microorganism toxins that have been processed into toxoids, recombinant proteins which when given to a person will cause active specific immunity against certain infectious diseases[10].

Anxiety is a feeling of fear that is not clear and is not supported by the situation. Anxiety is a feeling of restlessness, a feeling of discomfort, which is accompanied by an individual autonomic response as well as a concern caused by the anticipation of danger or threat [11] [12].

2. METHODS

This study is a pre-experimental design study. The design used is "One-shot Case Study". The population in this study were all UKS members, as many as 70 people. The sampling of the research was carried out by saturated sampling, which is a sampling technique when all members of the population are sampled[13]. This is due to the relatively small population[14]. The data were analyzed using SPSS 23. The data collection instrument used a questionnaire, documentation, and observation sheet. The previous questionnaire instrument has been tested for validity, reliability, discriminatory power, and level of difficulty of the questions. The questionnaire was used to find out how teachers and students understand Covid 19 and vaccination in reducing anxiety levels. Furthermore, there is an interview and observation guide to find out how the skills of teachers and students in implementing health protocols are and how much anxiety levels are given to teachers and students about vaccination. Hypothesis testing in this study using t-test [15].

3. RESULT

Implementation of the activity begins with observing the arrival of students and teachers. Observations were made on students and teachers who were present. Furthermore, education is carried out about Covid 19 and its prevention. All students seemed enthusiastic and followed the education from beginning to end.

Based on students' initial knowledge about preventing Covid 19, the following student data was obtained:

Table 1. Students' Initial Knowledge about Covid 19 Education

Knowledge Level	Pretest		Posttest	
	Frequency	Percentage	Frequency	Percentage
Good	15	25	33	35
Enough	20	33.3	10	30
Less	25	41.7	17	13

The level of knowledge is at a good level increased by 10%, the level of knowledge is at a moderate level has changed to good by 3.3% and the level of knowledge is at a less level decreased by 28.7%. The data shows that the purpose of the service activity has been achieved, namely increasing student knowledge.

After the observations were completed, the activity continued with providing education about vaccination. This counseling is more focused on reducing the level of anxiety of students and teachers about vaccination so that teachers will be able to motivate their students and build confidence to vaccinate at the nearest hospital or health posts. This counseling involved 60 students and 20 teachers. The students and teachers looked very enthusiastic and gave a positive response during the counseling. In addition, the students and teachers were also actively asked and answered during the question and answer session.

Table 2. Teacher's level of anxiety about vaccination

Knowledge Level of	Pretest		Posttest	
	Frequency	Percentage	Frequency	Percentage
Good	6	30	12	60
Enough	4	20	3	30
Less	10	50	5	10

Based on the table above, shows that there is an increase in participants' knowledge regarding the material that has been given. Anxiety levels at the good level increased by 30%, the anxiety level at the moderate level changed to good increased by 10% and the anxiety level at the less level changed to 10%. The data shows that the purpose of the service activity has been achieved, namely reducing teacher and student anxiety.

The closing activities in this PKM were masks and hand sanitizers as an initial step to prevent Covid 19. The tools were accepted by the school principal. The school also promised to use the tool as well as possible to protect students and teachers themselves.

The Covid-19 prevention counseling activity carried out at SMP Negeri 2 Silaut was started by observing the use of masks and hand sanitizers. Furthermore, students who do not use masks are given the education to wear cloth masks or medical masks, then appeal to teachers and students to fight Covid-19 by following health protocols by frequently washing hands with soap. Keep your distance and keep the environment clean, and social distance.

Based on the results of interviews conducted with teachers and students at SMP Negeri 2 Silaut, it turns out that 30% of students understand the importance of using masks, as evidenced by the number of students who use masks.

Evaluation of the implementation of counseling was carried out before and after the intervention using observations which showed an increase in the use of masks, namely the subject with the previous 30% increasing to 80%. This extension technique is considered good for increasing the knowledge of teachers and students.

One strategy that can be done is to make teachers a partner in protecting, preventing, and encouraging students to vaccinate. The teacher is one of the parties who are considered capable of approaching and communicating with students. Teachers can also use masks and hand sanitizers that have been provided to prevent the transmission of Covid 19 to students.

4. CONCLUSION

Several things that can be concluded from the implementation of PKM activities regarding Covid 19 education and vaccinations in reducing students' anxiety levels, Health Counseling on Covid 19 education and vaccinations in reducing anxiety levels at SMP Negeri 2 Silaut, namely: a) The counseling that has been carried out has gone quite smoothly and responsive. After the counseling was carried out, it was seen that there was an increase in knowledge about covid 19 and a decrease in anxiety by teachers and students about vaccination, b) The provision of masks and hand sanitizers in schools is one of the means that can help teachers protect against Covid 19 early.

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REFERENCES

- [1] S. M. P. Lestari, H. Rusmini, Y. Nurmalasari, and M. P. Puspitasari, "Penyuluhan Pencegahan Penularan Covid-19 Dan Pembagian Masker Di Kecamatan Pedurungan Kota Semarang," *J. Kreat. Pengabd. Kpd. Masy.*, vol. 4, no. 3, pp. 487-493, 2021.
- [2] WHO, "Global Health Estimates 2015: Deaths by Cause, Age, Sex, by Country and by Region, 2000-2015," *Glob. Heal. Estim. Tech. Pap.*, 2017, doi: 10.1016/j.mpm.2016.06.006.
- [3] G. R. Shinde, A. B. Kalamkar, P. N. Mahalle, N. Dey, J. Chaki, and A. E. Hassanien, "Forecasting models for coronavirus disease (COVID-19): a survey of the state-of-the-art," *SN Comput. Sci.*, vol. 1, no. 4, pp. 1-15, 2020.
- [4] W. H. Organization, "Getting your workplace ready for COVID-19: how COVID-19 spreads, 19 March 2020," World Health Organization, 2020.

- [5] V. L. D. Pasaribu, A. Dwiyatni, C. Sabina, M. Ridwan, D. D. Gunawan, and B. C. Noviani, "Evaluasi Penerapan 3M Dimasa Pandemic Covid 19," *J. Abdimas Tri Dharma Manaj.*, vol. 2, no. 2, pp. 54–60, 2021.
- [6] W. W. Ary, "Apakah pengumuman resmi kasus pertama Covid-19 oleh Presiden Joko Widodo memiliki kandungan informasi? Event study pada saham-saham LQ-45," *Entrep. Bisnis Manaj. Akunt.*, vol. 2, no. 1, pp. 27–39, 2021.
- [7] M. Christin, D. Hidayat, and A. Rachmiatie, "Construction of Social Reality for Physical Distancing During the COVID-19 Pandemic," *J. Komun.*, vol. 13, no. 1, 2021.
- [8] M. Muqorobin and N. A. R. Rais, "Analisis Peran Teknologi Sistem Informasi dalam Pembelajaran Kuliah Dimasa Pandemi Virus Corona," in *Prosiding Seminar Nasional & Call for Paper STIE AAS*, 2020, pp. 157–168.
- [9] F. N. Suryaningrum, N. Nurjazuli, and M. Rahardjo, "Hubungan Pengetahuan dan Persepsi Masyarakat dengan Upaya Pencegahan Covid-19 di Kelurahan Sronдол Wetan, Semarang," *J. Kesehat. Masy.*, vol. 9, no. 2, pp. 257–263, 2021.
- [10] R. Santoso, A. Anggriani, and A. Suryaman, "Penyimpanan dan Distribusi Sediaan Vaksin di Dinas Kesehatan Kabupaten Garut," *IKRA-ITH Hum. J. Sos. dan Hum.*, vol. 4, no. 2, pp. 66–72, 2020.
- [11] W. E. Restiati, S. Sulistiowati, and Y. Oktavia, "Pemberian Asuhan Keperawatan Pada Ny. T dengan Kanker Payudara Lobular Invasif di Ruang Teratai di Rsud Prof. Dr. Margono Soekarjo Purwokerto," *J. Nurs. Heal.*, vol. 2, no. 2, pp. 95–103, 2017.
- [12] B. P. Agustiarasari *et al.*, "Pentingnya Pengenalan Vaksin Di Masa Pandemi Covid-19 Desa Ibul Kecamatan Simpang Teritip," *J. Abdimas Bina Bangsa*, vol. 2, no. 1, pp. 100–104, 2021.
- [13] I. Etikan and O. Babtpe, "A basic approach in sampling methodology and sample size calculation," *Med Life Clin*, vol. 1, no. 2, p. 1006, 2019.
- [14] J. Bouttell, P. Craig, J. Lewsey, M. Robinson, and F. Popham, "Synthetic control methodology as a tool for evaluating population-level health interventions," *J Epidemiol Community Heal.*, vol. 72, no. 8, pp. 673–678, 2018.
- [15] M. Xu, D. Fralick, J. Z. Zheng, B. Wang, X. M. Tu, and C. Feng, "The differences and similarities between two-sample t-test and paired t-test," *Shanghai Arch. psychiatry*, vol. 29, no. 3, p. 184, 2017.