



Implementation of Covid-19 Health Standard at Elementary School in Yogyakarta

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Abstract

In the era of Covid-19 and the implementation of the new normal, schools have a difficult task because schools not only strive to continuously improve students' academic abilities but must follow the basic principles of always keeping students, teachers and other staffs healthy and safe when they are at school. At the same time they must participate in helping the government in stopping the spread of the Covid-19. This study aims to describe the implementation of ventilation, duration and distance at schools; Educational Information Communication/EIC media; availability of Personal Protective Equipment/PPE; the availability of Covid-19 prevention facilities; and the level of knowledge of school staff and students regarding the prevention and handling of Covid-19 at schools. This study uses a qualitative descriptive research design. From the results of the study, it can be seen that school staff and students have a good level of knowledge regarding the management of prevention and handling of Covid-19 at schools and schools have implemented ventilation standards, duration, distance well too. However, the availability of EIC media, PPE and the availability of Covid-19 prevention facilities in schools are not in accordance with the expected standard.

Introduction

Schools closing globally in response to the Covid-19 pandemic present an unprecedented risk to education, protection and welfare of children (Unesco, Unicef, The World Bank, WFP, & UNHCR, 2020). Before schools reopen face-to-face meetings, schools need to prepare policies, procedures, and planning, the financing needed to improve the quality of education, by focusing on safe activities, including strengthening learning practices at home (Unesco et al., 2020). In addition, schools also need to assess student needs including students with disabilities, especially for continuing education, as well as develop strategies to address needs when face-to-face learning is suspended or when students need to self-isolate as a result of being diagnosed or infected with Covid-19. Several

studies show that children under the age of 18 represent about 8.5% of reported Covid-19 cases, with relatively few deaths compared to other age groups. However, the incidence of critical cases due to this disease in children has also been reported (Unicef, Unesco, & WHO, 2020). Therefore, children and adolescents must understand the basics information about Covid-19, including symptoms, complications, spreading and prevention the spread of the disease. The information provided must be in accordance with the child's age grouping, for example Kindergarten, Elementary School, Junior High School and High School students (Unicef, WHO, & IFRC, 2020).

In the era of Covid-19 and the implementation of the new normal, schools have difficult tasks, among others, they must follow basic principles in order to help keeping

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students, teachers and other staff safer while they are at school and assist the government in stopping the spread of the Covid-19 disease. In addition, schools must also know the latest facts and information regarding Covid-19, including symptoms, complications, spread and prevention of spread; ensure that the operations or activities carried out at the school remain safe; establish procedures if there are students or staff who are sick; promote and share information regarding the latest pandemic situation; adapting school policies to suit current conditions, such as flexible attendance and sick leave policies; monitoring the existence of students, teachers and staff; implementing education or knowledge about disease prevention and control in daily activities and during learning activities; and providing psychosocial/mental health support if needed (Unicef, WHO, et al., 2020).

Starting in 2017, Elementary School X is one of the inclusive elementary schools in Yogyakarta Province, namely the Elementary School which has several children with special needs and this Elementary School is also located in a disaster-prone area, namely in Bantul Regency, Yogyakarta. Elementary School X has a vision to create a generation that is pious, intelligent, noble and cultured. Being cultured here can be interpreted broadly, including having a healthy and safe culture. Meanwhile, the mission of this elementary school is to familiarize students with healthy behavior in everyday life. However, in real conditions, this Elementary School still has very little exposure to information and training either to school staff (principals, teachers, administrative staff and school guards/security/school cleaning personnel), students or representatives of parents/school committees related to safety education for children and prevention of Covid-19 in schools, so the role of teachers is tiny in providing safety education for children in this location. For example, during observations, still found unsafe actions of teachers when interacting and discussing, namely not keeping their distance and lowering or removing their masks. While on the other hand, this elementary school in the last few months has been recorded as being located and surrounded by residents' villages in red, orange

and yellow zones related to cases of Covid-19 cases.

Another problem at Elementary School X related to Covid-19 is the lack of availability of a management system for preventing and handling Covid-19 at schools including SOPs, pocket books, training and other supporting facilities such as the availability of spare thermo guns, backup medical masks at schools, face shields for teachers and staff, soap for hand washing and hand sanitizers at strategic points. To break the Covid-19 transmission line in schools, especially in the face of the plan to reopen face-to-face learning, the purpose of this study is to find out how the description of the application of ventilation, duration, distance in schools; description of the availability of EIC media for Covid-19 prevention in schools; description of the availability of Personal Protective Equipment/PPE; a description of the completeness of Covid-19 prevention facilities in schools related to hand washing, provision of special trash bins and temperature measurement tools; an overview of the level of knowledge of school staff and students regarding the prevention and handling of Covid-19 in schools.

Method

This study uses a qualitative descriptive research design with unit analysis such as (1) the application of ventilation, duration and distance at school; (2) availability of EIC media for Covid-19 prevention at schools; (3) availability of Personal Protective Equipment/PPE; (4) completeness of Covid-19 prevention facilities in schools related to hand washing, provision of special trash bins and temperature measurement tools; (5) the level of knowledge of school staff and (6) the level of knowledge of students related to the prevention and handling of Covid-19 in schools. Data collection in this study was carried out through direct observation, document studies, interviews and filling out questionnaires via Google form to informants. Data were analyzed qualitatively and descriptively through percentages to describe the implementation of health standards in schools. This research was conducted at Elementary School X in Yogyakarta Province, with the key informants

in this study as many as 14 people from school staff consisting of school principals, teachers, school administration staff and school janitors/ staff taken by the total sampling method, plus 5 the students selected by the school with the criteria that these students understand well the Covid-19 prevention efforts carried out in their schools.

Result and Discussion

Elementary School X has a building design with excellent ventilation with an area of more than 20% of the room area with a cross ventilation system. The ventilation system is designed on the right and left sides so that it allows for excellent air movement. On the other hand, the movement of air in the room is assisted mechanically by using a fan with a room door that is large enough and always positioned open, especially during the Covid-19 pandemic, so it can be said that the layout of Elementary School X is very conducive to use during the Covid-19 pandemic. Air quality in classrooms is influenced by ventilation conditions and the accumulation of air pollutants from inside and outside the room. According to SNI 03-6572-2001 concerning Procedures for Designing Ventilation and Air Conditioning Systems in Buildings, natural ventilation can be in the form of permanent openings (at least 5% of the floor area of the room), windows, doors or other suggestions that can be opened. Then according to the Decree of the Minister of Health No. 1429/MENKES/SK/2006 concerning Guidelines for the Implementation of School Environmental Health stipulates the area of ventilation holes to ensure the flow of fresh air in classrooms in the school environment is 20% of the floor area with a minimum class density of 1.75 m² and a ceiling height of at least 3 meters from the floor. In addition, based on Appendix II of Regulation of the Minister of Education and Culture No. 32 of 2011 concerning Standards and Technical Specifications for Rehabilitation of Damaged Classrooms, Construction of New Classrooms and Their Furniture and Construction of Library Rooms and Furniture for Elementary School/SLB stipulates that the opening area is 20% of the total floor area of the building, 6%-10% of the area is ventilation (permanent opening) with the principle of cross ventilation

or one-sided ventilation.

In terms of duration, Elementary School X has also done a good job of limiting the duration, namely limiting the number of face-to-face hours to only 2 hours a day. As for the division of shifts for grades 1, 2 and 6 they enter on Monday, Tuesday and Wednesday from 08.00 to 10.00 West Indonesia Time. Elementary School X does not only limit the duration but also limits the number of students in one class by dividing the number of students in one class into two classes or two groups so that the density of the number of students can be reduced. One large class that contains 21-22 students is only filled with a maximum of 50% of the total number of students. However, for classes with a small number of students, the number of students is not divided, for example class 2 only has 9 students so that in terms of density the number of students is relatively safe in one class because the capacity of students per class in Elementary School X can be used up to 30 students. Therefore, Elementary School X can be said to have not only implemented a duration restriction but also a standard for social distancing in the classroom. In grades 3, 4 and 5, the same pattern is applied, but they go to school on Thursday, Friday and Saturday.

On the standard of distancing, Elementary School X has arranged student seating to maintain a distance between one student and another in Figure 1. The distance from one student to another for the right and left distances between students reaches approximately 2 meters while the distance from one student to other students from the front and back reaches approximately 1 meter. There is no proven treatment or vaccine for Covid-19, the only effective measure available to control the virus and protect public health is to reduce the frequency of close contact between people. Governments around the world have issued unprecedented policies and guidelines to increase social distancing within and across countries. The goal is to save lives by reducing the rate of Covid-19 infections (Thunström, Newbold, Finnoff, Ashworth, & Shogren, 2020).

At Elementary School X, the availability of information communication media for education/EIC media related to efforts to prevent and handle Covid-19 in schools is still

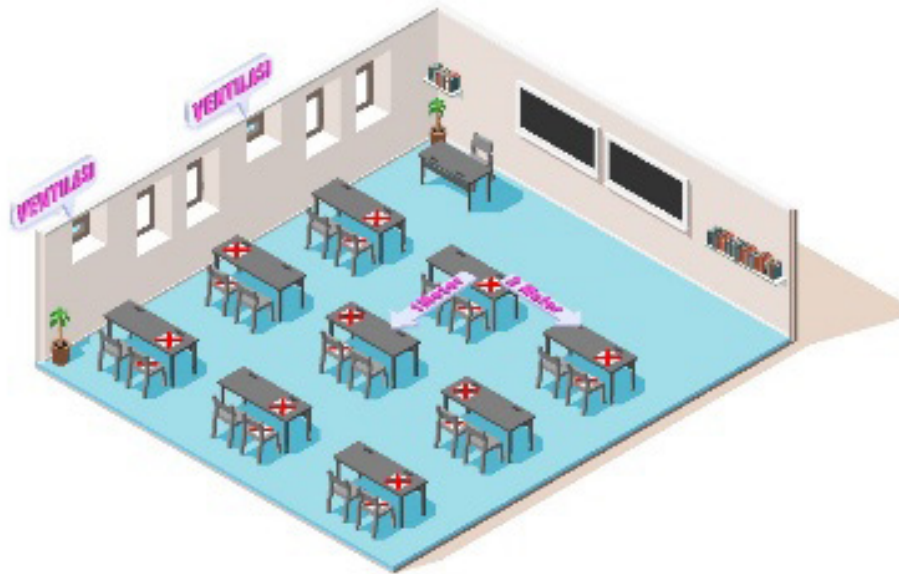


Figure 1. Implementation of Social distancing at school benches in Elementary School X

very minimal. Meanwhile, EIC is extremely important to increase the knowledge of school residents in preventing the emergence of Covid-19 clusters in schools. Therefore, this school still really needs EIC media related to the management of Covid-19 prevention at schools in which informative simple language is easily understood by the target audience, namely Elementary School children and installed in strategic places, easily visible and with an attractive appearance for children. EIC media in schools should cover all aspects of hazards that may threaten the safety and health of children from multi-hazard aspects ranging from infectious diseases, threats of natural disasters, violence against children to all potentials that can cause children to suffer injuries or accidents (Widowati, Istiono, & Sutomo, 2021). In addition, EIC media can also be packaged through educational game media so that children can learn comfortably and fun through the child-friendly media of safety games (Widowati et al., 2018).

Personal Protective Equipment or PPE used by teachers in schools is masks, but in practice there are still teachers who still use masks inappropriately, including masks that are not used to cover the entire nose, mouth

and chin area. It is still found that the use of masks in a drooping position so that they are not able to cover the nose, mouth and chin areas perfectly. During the observation, it was also found that some teachers added their PPE by using a face shield to obtain more optimal protection. But on the other hand, this school does not yet have spare medical mask PPE, so in this aspect of PPE the school still needs the availability of spare medical masks in schools to anticipate if there are students who do not wear masks or dirty masks. The role of wearing masks in children in schools for Covid-19 control must be weighed against the potential hazards, including appropriateness and inconvenience, as well as social and communication issues. Factors to consider also include the age of the group, sociocultural and contextual considerations and the availability of adult supervision and other resources to prevent transmission of Covid-19. The use of masks is increasingly becoming an important part of the national strategy to fight the Covid-19 pandemic. The use of masks is one of the most effective preventive measures to be able to break the chain of transmission carried out by people in the school environment to protect themselves and others from being infected with

the virus, because the use of masks by infected individuals can reduce the risk of transmission, especially because of the high risk of infection of individuals who are infected but asymptomatic (Spitzer, 2020). Therefore, the use of masks has a very positive role and benefit in breaking the chain of spreading Covid-19 in schools (Roy, 2020).

The scope of the completeness of Covid-19 prevention facilities in schools in the study only related to 3 basic facilities, namely hand washing facilities, the provision of special trash bins and body temperature measuring devices. Elementary School X already has 2 hand washing facilities located in the garden area near the class entrance, but these facilities have not been equipped with soap and pictures of washing hands properly and correctly as a medium for educating children to be able to wash their hands properly. In addition, this Elementary School also does not provide hand sanitizers that can be accessed by all school residents. Therefore, this school still needs liquid soap for washing hands and pictures of guidelines for washing hands properly and correctly at the sinks, as well as providing education regarding how to wash hands properly for all school residents and providing hand sanitizers that can be used by all school residents and installed at strategic points that are far from the sink point for washing hands. Availability of adequate school infrastructure and facilities, high commitment, integrative curriculum, good exposure information, good supervision systems and the empowerment of the optimal role of the school community are highly important to create schools that are resistant to multi-hazard threats including the dangers of Covid-19 (Widowati, Istiono, & Husodo, 2021).

In terms of the availability of trash cans, Elementary School X has 3 types of trash bins, namely red for disposal of residues, green for disposing of leaf waste and yellow for disposing of plastic or non-organic waste. However, this school does not yet have a special trash can, namely an infectious trash can, specifically for disposing of used mask waste, making it easier for the cleaning and handling process. Waste management by providing special disposal sites can prevent the spread of SARS-CoV-2,

especially through contact with contaminated surfaces and objects (Mejjad et al., 2021). Improperly disposed masks can be a potential source of the virus if someone comes into contact with them. Poor and inadequate waste management strategies in developing and less developed countries contribute to a higher threat of spreading Covid-19 in society (Shiferie, 2021).

In the aspect of measuring body temperature, since May 2020 Elementary School X has had a thermo gun facility and carried out the process of measuring temperature on students, teachers and school staff before they entered the school area, however, it is still found that temperature measurement practices are not appropriate. Moreover, still found the lack of knowledge regarding the maximum allowable temperature limit and when the measurement is carried out and how the repetition process must be carried out in the process of measuring body temperature if it is necessary to repeat the steps for measuring the temperature. In addition, this Elementary School does not yet have a spare thermo gun so that if tool malfunction happens, the temperature measurement process can still be carried out properly. Therefore, at Elementary School X, adequate training is still needed regarding the procedures for measuring body temperature as well as procuring a spare thermo gun.

The Covid-19 pandemic has caused schools to be prepared with the conditions for implementing the new normal which refers to the education pattern set due to the face-to-face learning process. Facing this, schools need to implement health protocols to break the chain of transmission of Covid-19, one of which is checking body temperature for someone who will enter the school environment. The role of measuring body temperature in breaking the chain of transmission of Covid-19 in schools is a crucial thing that is done before someone enters the school area. If the body temperature is found to be above normal, the officers will not allow entering the school environment. A person with a body temperature above normal should be referred to a community health center or health center for optimal treatment. Therefore, schools should have strict control in breaking the chain of the spread of Covid-19,

one of which is the implementation of checking body temperature every day (S. Y. Cheng, Wang, Shen, & Chang, 2020). The correlation between high temperature and Covid-19 infection is so strong that several governments have implemented screening protocols that involve checking body temperature at school entrances to reduce the risk of transmitting the virus (Piccinini, Martinelli, & Carbonaro, 2021).

Description of the knowledge level of school staff which includes principals, teachers, school administration staff and guards school/school cleaners related to the prevention and handling of Covid-19 in schools carried out on 14 respondents at Elementary School X is in the “very good” category. The average score of school staff knowledge in this study was 96 out of a total score of 100. The level of knowledge is closely related to the education level of the respondent. The education level of respondents at Elementary School is the majority with an undergraduate education. The higher the education, the easier it will be for a person to receive information so that the knowledge he has will increase. In addition, the higher a person’s level of education will make it easier for him to gain knowledge which will make his insight wider. Therefore, public knowledge about Covid-19 is a very important aspect in efforts to prevent Covid-19 in the community. The public needs to know the cause of Covid-19, the characteristics of the virus, the transmission process, symptoms, efforts to prevent the disease and terms related to Covid-19, especially in Indonesia which has a special term related to Covid-19.

The description of the knowledge of the school staff regarding what Covid-19 is and how Covid-19 is transmitted, it can be seen that the respondents’ answers are very good in explaining what Covid-19 is, the description of the respondents’ answers, among others, Covid-19 is a disease caused by the Corona Virus through droplets, close contact and touching contaminated surfaces. However, there were also those who answered that it was due to unsafe behavior because they did not comply with health protocols such as crowding, not wearing masks, not maintaining distance and not washing hands. An overview of

respondents regarding how to break the chain of transmission of Covid-19 at school, in a general context, many respondents said that Covid-19 could be cut off the chain of transmission by complying with health protocols, for example by implementing 3 habits (washing hands, keeping a distance and wearing masks), there are also those who add by spraying disinfectants, not touching each other, exercising regularly and eating nutritious foods. However, in the context of preventing Covid-19, which is more specific, namely in schools, respondents said that the way to break the chain of transmission of Covid-19 in schools is to review the readiness of face-to-face learning by considering the availability of sanitation and hygiene facilities; activation of school health services; apply mask mandatory areas; has a thermo gun for measuring body temperature; make an agreement with the school committee regarding the strategy for implementing health protocols in schools; implementation of shifts during face-to-face learning; arrange the layout of the room; provide good distance signs in classrooms, canteens and prayer rooms; take temperature measurements and if the temperature is above 37.30C or there are symptoms of cough, runny nose, shortness of breath or sore throat, the person concerned is asked to go home. From the respondent’s answers, it can be said that the respondent’s knowledge of how to break the chain of transmission of Covid-19 in schools is in the “very good” category. Outreach activities related to Covid-19 prevention will be able to increase participants’ knowledge. This activity is considered quite effective in educating the community which is marked by an increase in participants’ knowledge from “not good” to most of the participants having “good” knowledge. The strategies used in the delivery of extension materials play a very important role in the success of the process of delivering material in an activity.

In addition, the activation of school health services, one of which is through the activation of the School Health Clinic is a health program that is quite strategic to be carried out, because the School Medical Program is implemented at all school levels, where activities consist of health education, health services and fostering a healthy environment in schools. The

primary targets of the School Medical Program are students, educators, teaching staff and the school community. Efforts to maintain health can be started from the school environment that emphasizes behavior change. Therefore, the School Medical Program is important because it includes health education from an early age. School Medical Program it is expected to be able to provide education and socialization so as to increase the frequency of wearing a mask and face shield (personal protective equipment), washing hands with soap or using hand sanitizer in schools, reducing outdoor activities that involve many people in public places, keep the distance, practice cough etiquette habits (cover your nose and mouth with a tissue or cloth) and avoid borrowing stationery from each other.

An overview of respondents' assessments regarding the Covid-19 prevention and handling efforts has been carried out at Elementary School X. Of the total 14 respondents, 9 respondents (64.3%) gave a "good" assessment of the Covid-19 prevention and handling efforts that have been carried out in schools, while the remaining 5 respondents (35.7%) did not give any assessment. The average score obtained from the nine respondents related to efforts to prevent and handle Covid-19 in schools is in a fairly high range, reaching a score between 80 -100. Most of the respondents answered that the efforts generally that have been made by schools in preventing Covid-19 include implementing health protocols through 3 habits, providing masks, providing sinks, hand washing soap and tissues, installing ventilation with good air circulation, spraying disinfectants in the school environment, conducting temperature measurement before entering the school area, it's just that the implementation is not consistent. On the other hand, schools also regulate work schedules and learning schedules, there are efforts in the form of implementing a scheduled WFO (Work from Office) and WFH (Work from Home) work system, implementing online learning systems, while offline methods are only given during special conditions, for example approaching the Final Semester Assessment exam. Furthermore, the school also limits the duration of teaching and learning hours and divides students into several groups or shifts, the school requires students to bring

their own writing utensils and supplies and is not allowed to borrow stationery. Meanwhile, particularly efforts to handle Covid-19 in schools, namely schools have worked together and always coordinated with the local Public Health Center and the Covid-19 task force. If it is found that school residents have been in close contact with Covid-19 sufferers, they are required to immediately self-isolate.

Promotive efforts are able to increase awareness and discipline of a person or community in implementing the Covid-19 health protocol. Increasing the application of science and technology and improving values in the health sector also contribute to efforts to reduce the spread of the Covid-19 virus outbreak (Yunawati, Jafriati, Karimuna, Dewi, & Pratiwi, 2021). On the other hand, providing education related to the implementation of health protocols in the school environment is very useful because it will provide experience for participants and increase participants' self-awareness in implementing health protocols to protect themselves and others. The provision of education resulted in differences in respondent behavior between before and after the implementation of socialization and education activities. At the initial condition, the respondent had not implemented the health protocol in a coherent manner but after being given education, the respondent was able to understand the steps for health protocol correctly, which was shown by demonstrating the respondent's ability to carry out the stages of the health protocol, starting from wearing masks, checking temperature, wash the hands before entering the classroom, keep the distance when entering the classroom, and wash the hands or use hand sanitizer after leaving the classroom and returning to their respective homes with safe behavior (Yunawati et al., 2021).

According to respondents, the efforts to prevent and control Covid-19 at Elementary School X have been quite effective, because they judged that school residents had adhered to health protocols well and had never found a positive case of Covid-19 in residents at this school. In addition, the form of compliance with health protocols in schools can be seen from the fulfillment of supporting facilities and

infrastructure, such as the provision of sinks, hand soap, tissues, hand sanitizers and masks. The fulfillment of these supporting facilities is very important to do to break the chain of transmission of Covid-19 because there is a significant relationship between infrastructure and efforts to prevent and control Covid-19. On the other hand, the implementation of online teaching and learning activities is also quite effective to implement, because one of the efforts to suppress the spread of Covid-19 is to apply online learning rules. Online learning can eliminate physical contact and be able to encourage the emergence of social distancing behavior. Social distancing is a good solution to prevent the spread of Covid-19. This action can also reduce the emergence of mass crowds at schools as happened in face-to-face learning (Stein, 2020).

Expectations and suggestions given by respondents to schools in an effort to break the chain of transmission of Covid-19 in schools, among others, are more consistent in implementing health protocols such as wearing masks, maintaining distance, washing hands with soap, taking body temperature measurements, and routinely carrying out disinfection and intensify cooperation and coordination with the Covid-19 task force. In addition, there is a need for a well-documented or recorded health surveillance system, which can also be done through the development of m-health program because m-health has the potential to not only be used as a health surveillance system but can also be developed to conduct an overall assessment of child safety education. This health surveillance is an important aspect as an anticipatory, preventive and preparedness measure to deal with unexpected things such as a suspected Covid-19 case at school, so this document can be used as an initial guideline for the Covid-19 task force in conducting case tracking. Based on the respondents' answers, it can be seen that the level of knowledge of respondents in providing advice to schools is very good, because all respondents know the basic health standards and protocols that must be carried out. Education, isolation, prevention and supervision of the potential for Covid-19 transmission are important steps in monitoring the transmission of the Covid-19 disease, in

addition to implementing social distancing protocols and wearing the masks (V. C. Cheng et al., 2020; Lotfi, Hamblin, & Rezaei, 2020).

The majority of school staff at Elementary School X has understood the Covid-19 prevention procedures that they must do. Respondents answered that students and teachers should not only be able to understand Covid-19 prevention procedures but also must be able to carry out these procedures, one of which is applying the 4 habits (wearing masks, washing hands, maintaining distance and avoiding crowds). The teacher's role in exemplifying the right behavior and implementing the correct Covid-19 prevention procedures for students as well as integrating Covid-19 prevention materials into teaching materials and student assignments is important to support the implementation of preventing Covid-19 spreading in Indonesia. The application of the 4 habits as a factor in reducing the spread of Covid-19, including the importance of personal hygiene (Yousuf et al., 2020). In the view of school staff, the description of good practices that have been carried out by teachers and students in efforts to prevent Covid-19 in schools, among others, teachers and students have implemented health protocols while at school, namely by wearing masks, washing hands, maintaining distance and avoiding crowd; taking body temperature measurements before entering the school area; application of online learning to avoid direct physical contact when at school; regular disinfection; arrangement of the layout in the classroom and the arrangement of learning shifts have also become one of the important efforts that have been made by the school. Based on the answers of the respondents, it can be seen that the knowledge and understanding of school staff regarding the implementation of health protocols is very good. Discipline of teachers and students as well as the role of the government in supervising health procedures is very much needed in an effort to break the chain of the spread of Covid-19.

In general, the average student knowledge related to Covid-19 and its prevention is in the "very good" category as presented in Figure 2. Based on Figure 2, it can be seen that the average result of 5 students at Elementary School X is 754

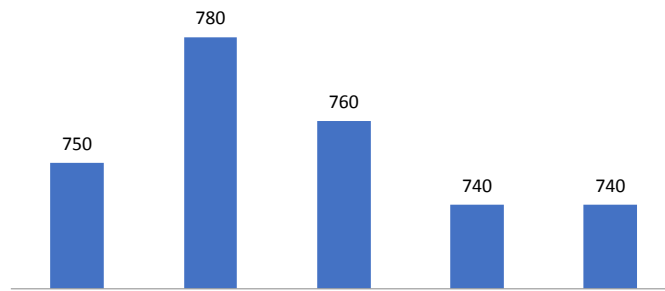


Figure 2. Results of the Score of Students' Knowledge Level

from a maximum score of 800. An overview of student knowledge regarding what Covid-19 is, it appears that almost all respondents (students) understand that Covid-19 is a dangerous and infectious disease caused by the Corona Virus. This can be seen from their answers, most of which said that Covid-19 was an outbreak of an infectious disease caused by the Corona Virus. Based on the respondents' answers, it can be concluded that the respondents have a very good understanding of what Covid-19 is. An overview of student knowledge regarding how Covid-19 is transmitted, it appears that 40% (2 people) have understood that Covid-19 is a disease that is transmitted through droplets that come out when sneezing, coughing or talking. From the students' answers, it was known that there were only 2 people who specifically mentioned that Covid-19 was transmitted from one human to another through splashes of liquid originating from the respiratory tract and mouth, such as droplets that come out when coughing or sneezing, which are referred to as droplets. Other respondents only mentioned the transmission of Covid-19 through the air and direct contact with sufferers. Based on the respondents' answers, it can be concluded that students' understanding of Covid-19 transmission is in the "very good" category. The description of student knowledge regarding what must be done to break the chain of transmission of Covid-19 in schools, it appears that all students understand what must be done to break the chain of transmission of Covid-19. This can be seen from the answers

of the respondents, such as to break the chain of the spread of the Covid-19 virus, what must be done is to comply with health protocols, namely: diligently washing hands with soap, maintaining distance, wearing masks and avoiding crowds. While the description of student knowledge regarding what schools have done for the prevention and handling of Covid-19 in schools, it can be seen that according to respondents, their school have implemented health protocols well in the context of preventing and handling Covid-19. Their schools already have hand washing facilities, apply social distancing standards, have mandatory wearing masks and apply online learning.

The description of student knowledge regarding the assessment of the effectiveness of the efforts that have been made by schools in preventing and handling Covid-19 shows that according to 4 respondents (80%), the efforts to handle Covid-19 carried out by schools have been effective because they are in accordance with the health protocol recommended by the Indonesian Government. While 1 other respondent (20%) believes that the handling efforts carried out by schools have not been fully effective because efforts to prevent Covid-19 in schools have not been followed by the implementation of strict school standards so that students' academic output/ability does not decrease due to the implementation of online learning. The description of students' knowledge regarding what suggestion they give to schools in an effort to break the chain

of transmission of Covid-19 in schools, it appears that respondents already have a good understanding of the implementation of health protocols so that they are able to provide good advice to schools, namely asking schools to more consistent in implementing health protocols in the school environment, such as: taking body temperature measurements on all students and school staff, wearing masks, keeping a distance, frequently washing hands and asking the school to advise sick students not to go to school first.

An overview of student assessments regarding whether according to students all teachers and students have understood the preventive procedures they must do to break the chain of transmission of Covid-19 in schools, it appears that all respondents said that most of the teachers and students in their school environment had implemented and comply with the health protocols that apply in their schools, for example: students and teachers always wear masks when at school and wash their hands frequently. Therefore, it can be concluded that according to students' assessment the implementation of the protocol in the school environment is "good". An overview of students' knowledge regarding the description of good practices that have been carried out by teachers and students in efforts to prevent Covid-19 in schools, respondents explained that the good practices that teachers and students have taken to prevent Covid-19 in schools include: restrictions on the number of students who must come to school, the application of online learning, the application of social distancing, the obligation to wash hands/use hand sanitizers and the obligation to wear masks. Therefore, it can be concluded that the good practices carried out by teachers and students in the effort to prevent Covid-19 in schools "have been very good". To be able to solve the Covid-19 problem, continuous professional education is needed to increase knowledge and change negative attitudes, as well as improve good practice in prevention and handling efforts.

COVID-19 pandemic has forced many children around the world to spend time at home. Parents and caregivers take many responsibilities for educating children (Zhang, 2021). Several new support strategies have

emerged during this pandemic, but there is no measure of their effectiveness yet (Marques de Miranda, da Silva Athanasio, Sena Oliveira, & Simoes-e-Silva, 2020). The paradigm of planning and reducing disaster risk with the All-Hazards Approach (AHA) framework which prioritizes mitigation according to the likelihood and severity in each local context is also something that can be considered (Peleg, Bodas, Hertelendy, & Kirsch, 2021). Not only at the planning level but simulations are also very much needed as part of a preparedness strategy to ensure that simulations are effective in bringing about changes in practice to improve preparedness in this pandemic era (Reddin, Bang, & Miles, 2021). COVID-19 should not be a global public health disaster. Many factors can be related to its spread, including environmental factors, personal factors, obedience factors in wearing masks and special condition factors (Kwok, Yan, Huang, Gao, & Li, 2021). Sanitary measures, cleaning their hands with soap and water, limiting any movement inside and outside the home are deemed important measures to limit the spread of this disease (Madan, Bindal, & Gupta, 2021). However, some groups appear to be more vulnerable to the mental health burden of the COVID-19 pandemic, so mitigation actions should also prioritize them. Schools have an important role to play in prioritizing mitigation actions aimed at saving children not only from cases of COVID-19 but also to help them deal with the mental health burden of this pandemic (Marques de Miranda, da Silva Athanasio, Sena Oliveira, & Simoes-e-Silva, 2020).

COVID-19 has become a pandemic and the perception of risk plays an important role in self-protection and prevention of spread (Chen, Feng, Chen, Lee, & An, 2021). The pandemic has not only significantly reduced student mobility but also shifted the flow of student mobility, especially international students (Mok, Xiong, Ke, & Cheung, 2021). One of the challenges faced by principals and teachers is especially related to distance learning programs (Constantia, Christos, Glykeria, Anastasia, & Aikaterini, 2021). The concept of blended learning, a combination of online and face-to-face learning, has become popular in educational circles (Ashraf, Tsegay,

& Meijia, 2021) including the selection of digital content, which currently still has gaps, is also an important issue that has been addressed in the world for decades (Zhong, Zhu, & Xia, 2021) although people's fears seems to be increasing with misinformation being spread across all types of media, particularly on social media (Superio et al., 2021).

Online teaching has been carried out on a large scale during the novel coronavirus period all over the world (Zou, Huang, Ma, & Qiu, 2021). This is done to prevent the transmission of COVID-19, all educational institutions are closed and it is recommended to switch to online learning (Twinamasiko et al., 2021). Current schools have been able to respond quickly to changing circumstances and continue to provide education to their students without interruption, albeit with a different approach (Ermenc, Kalin, & Mažgon, 2021). Including adjusting the appropriate system/curriculum design will help remove barriers and help Students with Disabilities to be able to access e-learning during the pandemic (Mohammed Ali, 2021). Preparedness through EWS/Early Warning System to help reduce the future wave of COVID-19 is a strategic thing that must be considered (Fearnley & Dixon, 2020). Multi-hazard application system (Dallo & Marti, 2021) and social media can also be used as a way to build a disaster preparedness system in the future (Sakurai & Adu-Gyamfi, 2020).

Conclusion

Elementary School X has implemented ventilation standards, duration and distance well. However, the availability of EIC media for the prevention of Covid-19 is still very minimal at the schools. From the aspect of PPE, it is known that all school residents have used PPE in the form of masks and some have added their PPE by using face shields, but there are still practices in using masks that are not correct, namely not covering the nose, mouth and chin areas perfectly. In addition, the school does not yet have a spare medical mask as anticipation for those who do not wear it when going to school or any kind of barriers. Regarding the completeness of the Covid-19 prevention facilities in schools, the

school already has a hand washing place even though when the observation was carried out the sink was not equipped with liquid soap for washing hands and was not equipped with pictures of instructions on how to wash hands properly for Elementary School students. In addition, the school also has not provided a special trash can for disposing of used masks and the school has not carried out special procedures for handling used mask waste in schools. Regarding temperature measurement, before school residents enter the school area, all school residents have their body temperature measured, but the school does not yet have a backup temperature measurement tool to anticipate if the existing tools cannot be used, in addition to understanding the procedure for measuring temperature is also not fully understood by the officers at that school. For the level of knowledge of staff and students, it can be seen that school staff and students have a good level of knowledge regarding the management of Covid-19 prevention and handling in schools.

The suggestion given in this study is that schools still need written SOP related to the management of prevention and handling of Covid-19 and need a pocket book to guide school residents in good daily behavior to ensure consistency in the implementation of good practices related to Covid-19 prevention at school. Ideally, the pocket book given should contain at least two major aspects, namely the aspect of school safety during the opening of schools during the Covid-19 pandemic and aspects of Occupational Safety and Health (OSH) as a workplace during the Covid-19 pandemic.

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