Offline School before the Peak of the Second Wave during COVID-19 Pandemic in Central Java

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Abstract. As the COVID-19 cases among children spike up, one of the preventions is by implementing online school. However, there were schools in Central Java that already hold schools offline. This research aimed to describe the offline school implementation before the peak of the second wave during COVID-19 pandemic in Central Java. Population was parents and student guardians in Central Java. Sample criteria were having a child <18 y.o. who was going to school in Central Java, and not home-schooled. Questionnaire was shared with the Education Office's parents' networks for 2 weeks. 255 respondents agreed to offline school for their children. Offline schools were implemented in kindergarten until senior high school (highest-88.63%). The average of the offline school was 3 days/week and 3 hours/day. Schools require students to wear masks (99.2%), bring their cutlery, hand sanitizer, and worship equipment. Most were using private vehicles (88.63%) to school and back home (86.67%). The offline school before the second peak of COVID-19 was an option for parents. If parents choose offline school for their children, they should pay more attention to every aspect to optimize the prevention for their children. Parents' carelessness can be a contributor to the peak of the second wave in Central Java.

INTRODUCTION

The number of COVID-19 cases in Indonesia is the highest in Southeast Asia [1]. The COVID-19 pandemic in Indonesia has been ongoing since March 2020. As an effort to prevent the transmission of COVID-19, WHO recommends temporarily stopping activities that will potentially cause mass crowds, one of which is learning activities in schools [2], [3].

The COVID-19 pandemic has hampered various activities, including learning. Based on UNESCO data, there are 91% of the world's student population affected by school closures due to the COVID-19 pandemic [4]. To prevent the transmission of COVID-19 but still ensure that all students have equal access to quality education during the pandemic, the government issued a policy that learning activities in schools were prohibited and changed to distance learning activities or online schools [5].

In distance learning, a collaboration between parents and teachers is needed to assist students in their learning activities. In the process, various supporting infrastructure facilities are needed which cannot be fulfilled by all parents of students. In addition, full support from parents is needed to accompany the student learning process because the teacher cannot monitor the overall student learning process at home [6], [7]. Online school activities since March 2020 have received different responses from teachers, parents, and students.

Previous research by Syarifudin on elementary school students showed that various obstacles occurred during online school, including the unavailability of devices that could be used online for each student, limited internet signal, assignments that were considered a burden for students, and parents, the inability of parents to accompany the process.

Student learning, until the learning objectives are not achieved due to the inability of students to capture the material presented. Therefore, in some schools, online school is considered unable to run optimally [8].

In response to various complaints from parents, teachers, and students regarding distance learning, in November 2020 the government issued a Joint Decree of the Minister of Education and Culture, Minister of Religion, Minister of Health, and Minister of Home Affairs Number 04/KB/2020, Number 737 of 2020, Number HK.01.08/Menkes/7093/2020, as well as Number 420-3987 of 2020 concerning Guidelines for the Implementation of Learning in the 2020/2021 Academic Year and the 2020/2021 Academic Year during the 2019 Coronavirus Disease Pandemic. The guidelines state that several areas can start applying for Offline School if it meets the terms and conditions that have been set [9].

Several local governments and schools have followed up on these regulations and conducted offline school trials, one of which is at SMKN Jawa Tengah (Vocational School). However, after the trial, there were 179 out of 223 students who infected COVID-19 [10]. Therefore, the implementation of offline learning trials was again postponed. Various preparations are needed from the school, students, and parents to restart offline learning. In addition, it is also necessary to re-assure that the school has prepared all offline learning needs following the rules, and ensure that teachers and students always comply with health protocols to prevent the transmission of COVID-19.

Based on existing regulations, offline schools adjust local conditions, permission from the regional head, school readiness related to infrastructure, and parental approval. The implementation of offline schooling is not a compulsion or necessity, parents can determine whether to allow their children to attend an offline school or continue to follow the online school. Therefore, this research aimed to describe the offline school implementation before the peak of the second wave during the COVID-19 pandemic in Central Java.

RESEARCH METHOD

This was descriptive research using a cross-sectional approach. The population of this study was parents of schoolage children in Central Java. Samples were filtered through inclusion criteria, such as having a child under 18 years old who was going to formal school in Central Java, not having a home-schooling method, and their child had been had offline schools during this pandemic. Data was taken by sharing the questionnaire through google form to the Education Office's parents' networks for 2 weeks from the last week of June until the first week of July 2021. By the time of the data collection, the COVID-19 vaccination was only allowed for those who were older than 18 years old. Therefore, one of the inclusion criteria of this study was having school children under 18 years old. Parents who were involved in this study were informed and fully consent to be the subject of this study. This research had obtained ethical approval from the Health Research Ethics Committee of Faculty of Public Health Universitas Diponegoro number 184/EA/KEPK-FKM/2021. There were 255 parents who met the inclusion criteria and were involved in this study.

RESULT AND DISCUSSION

Characteristics

This study was originally planned to be conducted for one month. However, since the COVID-19 vaccination allowed for the 12-18 years age group, the data collection needs to be stopped. The purpose is to minimize the bias on data collected because one of the inclusion criteria was having a child under 18 years old who went to formal school. During the pandemic of COVID-19, the offline school was limited and need permission from parents or student guardians. If the 12-18 years age group had been vaccinated, parents would be more likely to permit their children to go to offline school. And the school would be more likely to conduct offline school as well. Therefore, this study was conducted in two weeks and followed by 255 parents who met the inclusion criteria.

TABLE I. Frequency Distribution of Characteristics		
Characteristics	Frequency	Percentage
Parents' Age	17	10 1001
Early Adulthood (17-40 y.o.)	47	18.43%
Middle Adulthood (41-60 y.o.)	200	78.43%
Late Adulthood (>60 y.o.)	8	3.14%
Parents' Sex		
Male	94	36.86%
Female	161	63.14%
Subject		
Father	94	36.86%
Mother	156	61.18%
Student guardian	5	1.96%
Parents' Education		
Elementary school	52	20.39%
Junior high school	28	10.98%
Senior high school	87	34.12%
Undergraduate degree	72	28.24%
Postgraduate degree	16	6.27%
Parents' Occupation		
Public sector	64	25.10%
Private sector	41	16.08%
Self-employed	74	29.02%
Retired	4	1.57%
Unemployed	72	28.24%
Family income		
< provincial minimum wage	110	43.14%
> provincial minimum wage	145	56.86%
Students' Age		
Preschooler $(2-5 v.o.)$	6	2.35%
School-aged child (6-13 v.o.)	15	5.88%
Adolescent $(14-18 v.o.)$	234	91.76%
Students' Sex		211,070
Male	62	24 31%
Female	193	75 69%
Students' Education	175	10.0970
Preschool & Kindergarten	8	3 14%
Flementary school	9	2 520/2
Junior high school	12	2.5570 4 71%
Senior high school	226	T. / 1 /0 88 630/
Students' School Origin	220	00.0370
Former residency of Denymore	1	0 200/
Former residency of Banyumas	1	0.39%0
Former residency of Paul	لے 197	U./8%0
Former residency of Pekalongan	10/	/ 5.55%0
Former residency of Semarang	5	1.18%
Former residency of Surakarta	61	23.92%
Former residency of Kedu	1	0.39%

Table 1 shows that most of the subjects were in the middle adulthood age group (78.43%) which is 41-60 years old. More than half of the subjects were female (63.14%), therefore most of the subjects were mothers as much as 61.18%. The highest percentage of subjects' education was graduated from senior high school as much as 34.12%. When the educational background is being categorized, there were 65.5% had a lower educational background, and 34.5% had a higher educational background.

As shown in table 1, the highest percentage of subjects' occupation was self-employed as much as 29.02% followed by unemployed as much as 28.24%. The category of self-employed includes entrepreneur, merchant, tailor, and farmer. More than half of the unemployed category were housewives. More than half of the subjects' family income was more than provincial minimum wage as much as 56.86%. The Central Java Province's minimum wage in 2021 was Rp 1,798,979. 12.

This study found that almost all of the subjects' children were adolescents or 14-18 years old (91.76%). Most of the students' sex was female as much as 75.69%. Students were ranging from preschool to senior high school. Most of the students in this study were having senior high school (88.63%). However, there were students from younger ages who followed offline schools such as 3.14% in preschool&kindergarten and 3.53% in elementary school.

One of the inclusion criteria was students going to school in Central Java Province. Therefore, the google form link was spread to six former residency areas in Central Java Province. Subjects were from 15 cities/districts in Central Java Province. Table 1 shows that most of the students' school origin was from the former residency of Pekalongan as much as 73.33%, which consisted of students from Batang, Pekalongan District, Pekalongan City, Pemalang, Tegal District, and Tegal City. Among all cities/districts, the highest percentage of students were from Pemalang as much as 37.25%. If the school origin is divided into cities and districts then the highest percentage was students from districts for as much as 76.08%.

Offline School during the Pandemic of COVID-19

This study found that more than half of students were having 1-3 days of offline school every week as much as 65.49%. The highest percentage was 3 days a week of offline school as much as 36.86%. The highest percentage of offline school duration was \leq 3 hours as much as (56.47%). Schools that conducted offline learning regulate some rules such as requiring students to wear masks (99.2%), to bring their own hand sanitizer (87.06%), face shield (58.82%), cutlery 51.37%, worship equipment (33.73%), disinfectant (12.16%), and spare mask (48.63%).

Categories	Frequency	Percentage
Days		
1-3	167	65.49%
4-6	88	34.51%
Duration		
\leq 3 hours	144	56.47%
> 3 hours	111	43.53%
School Equipment Must be Brought by Students		
Mask	253	99.22%
Hand sanitizer	222	87.06%
Face shield	150	58.82%
Cutlery	131	51.37%
Worship equipment	86	33.73%
Disinfectant	31	12.16%
Spare mask	124	48.63%
Mode of Transportation to School		
Riding/driving private vehicle	111	43.53%
Using public transportation alone	14	5.49%
Escorted by private vehicle	115	45.10%
Escorted by public transportation	3	1.18%
On foot	6	2.35%
Using shuttle service	6	2.35%
Mode of Transportation from School		
Riding/driving private vehicle	113	44.31%
Using public transportation alone	20	7.84%
Escorted by private vehicle	108	42.35%
Escorted by public transportation	2	0.78%
On foot	8	3.14%
Using shuttle service	4	1.57%
Not stopping by		
To school	255	100.0%
From school	252	98.8%

TABLE 2. Frequency Distribution of Offline School Implementation

Discussion

Since COVID-19 spread in Indonesia, the government established online learning for students. At the beginning of the implementation of this policy, not many problems have arisen. The hope that COVID-19 will end in the next few months also reduces the concerns of parents and students about online schools. However, in mid-2020, parents began to worry about their children's school and their learning output. With the increasing number of COVID-19 cases in Indonesia, hopes for offline schools were getting further and further away from reality.

Various effects began to be felt by both parents and children. Parents find it difficult to accompany their children's learning at home. Especially working parents. The results of this study indicate that 71.76% of the subjects have jobs. Children's online learning is felt to be an additional burden on parents, especially for parents who did Work From Home (WFH). On the one hand, they have to complete their work targets at home, but on the other hand, they have to supervise and accompany their children's learning process at home11. Other research shows that the lack of parental roles in helping and assisting children in learning has an impact on children's psychology so that children are too lazy to do assignments and learn independently12. This causes stress on parents and the possibility of neglecting their work.

During the implementation of online schools, there were many obstacles. The obstacles were limited ownership of gadgets that can be used by online school children, lack of mastery of the technology, additional internet quota costs, reduced communication and socialization between students and teachers, and students getting bored quickly in the

learning process [11]–[14]. Thus, several schools have implemented several learning strategies during the pandemic, such as door-to-door or the teacher visiting each student's house, students coming directly to the school to take some tasks, students attending school on alternate schedules during the pandemic [15]–[17].

When the government implemented the adaptation of new habits (AKB) or the new normal, some schools ventured to start holding offline schools. However, schools still need permission from parents whether to allow their children to go offline to school or not. As happened in Central Java Province. The results of this study showed as many as 255 students had participated in offline learning during the pandemic. The results of this study were obtained at the end of June to early July 2021, right before the peak of the second wave of COVID-19 in Indonesia which occurred from July to August 2021. A total of 88.63% were Senior High Schools but 6.67% were Preschool to Elementary Schools. School-age children are still very vulnerable to COVID-19 transmission. Data shows that 2.9% of COVID-19 sufferers were aged 0-5 years and 10.2% were aged 6-18 years [18]. Therefore, the implementation of offline schools during the COVID-19 pandemic must be carried out with great care and the application of strict health protocols. Such as using masks correctly, ensuring students and teachers always maintain a distance, also ensuring adequate ventilation in the classroom to prevent COVID-19 as a disease that is transmitted through droplets [19]–[26].

The results of this study indicate that almost all schools required their students to wear masks (99.22%) and hand sanitizers (88.06%). In addition, more than half of them were asked to bring their own cutlery (51.37%) and face shield (58.82%). This effort has been quite good in preventing the transmission of COVID-19 to students and teachers in schools [27]–[32]. However, the departure and return of students still need to be a concern. This study found that 9.02% of students used sharing-transportation to go to school, and 10.19% of students used sharing transportation to go home. The sharing transportation such as public transportation (bus and angkot) and shuttle service to go to school. To prioritize the safety and health of teachers and students, schools need to educate students and parents to avoid using public transportation as much as possible because it can increase the transmission of COVID-19 [33], [34].

CONCLUSION

This study concludes that the implementation of offline school before the second peak of COVID-19 in Central Java Province was averagely implemented in 3 days per week and 3 hours per day. Offline school was an option for parents. If parents chose the offline school for their children, they should pay more attention to every aspect, such as what their children need to wear, what to bring, and the safest mode of transportation. In order to optimize the prevention practice for their children's health. The carelessness of parents can be a contributor to the peak of the second wave in Central Java.

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