

# Learning and Vaccination for Primary School-Age Children during the Covid 19 Pandemic: A Case Study in Padang City

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**Abstract:** This research was conducted to explain that long before the Covid 19 outbreak hit. There has been a deadly plague that has long affected human life at large. Anticipatory actions of the Dutch Colonial government were carried out intensively to inhibit the rate of spread of plagues at that time such as cholera, malaria, and smallpox. The influenza and bubonic plague epidemics of 1918 and 1911 threatened successively and smallpox emerged at the same time, hampering the pace of life in all fields. Moving on from this time, the Covid 19 outbreak has affected all fields including education. So far, when face-to-face began to be done again after a long time online, here a polemic emerged. Vaccination for children aged 6-11 years at primary school age. In field research, there are several obstacles experienced. Based on the results of interviews conducted in this study, most respondents were afraid of vaccines when administered to their elementary school-age children. Fear of risks such as hoaxes circulating on social media. Based on the results of the research conducted, in general, the people of Padang City are not entirely aware of the Covid-19 vaccination policy for elementary school-age children (6-11 years) because for them this is very risky because not all children in their bodies can receive vaccines. The research implementation procedure. This research uses the historical method (heuristics, criticism, interpretation, historiography). The purpose of the historical method is used starting with the collection of sources: first, literature and document studies, and field studies through in-depth interviews with several parents of students, teachers, such as elementary school residents in Padang City. Second, criticizing the sources obtained, Third, analyzing the relationship between the facts found, and finally the fourth is writing the findings. The purpose of this research to be achieved is to be able to explain the implications that the covid 19 outbreak has a lot of impact when it is required to vaccinate as a condition for face-to-face learning to be carried out again.

**Index Terms:** Vaccination, Refusal, Hoax, Learning, Covid 19.

## 1. Introduction

The COVID-19 virus (SARS-CoV-2), first detected in December 2019, quickly spread around the world and claimed the lives of nearly six million people with around 436 million confirmed cases [1]. At the end of 2019, news about the covid outbreak began to fill the news in various media. This outbreak sounds very scary, even severe symptoms can end in death, covid 19 which first appeared in China, eventually spread to various parts of the world, including Indonesia. Various ways have been taken by the government to stop its spread from *locking down*, learning online until finally a discourse emerged on living in a new normal way (side by side with covid). To undergo this, a strong immune system is needed so that the symptoms felt by sufferers are no longer severe and lead to death. The government finally took decisive action to carry out vaccination measures which are considered the most powerful weapon against Covid 19 [2].

Looking further, Indonesia has gone through several deadly epidemics that have panicked the public and the

government. This can be seen from the historical development of plague in Indonesia, including cholera, malaria, and smallpox. After that, it was added to the influenza and bubonic plague epidemics in 1918 and 1911. This discussion will focus on the spread of the 1930 plague in West Sumatra with the spatial boundaries of Padang City and see a comparison with the current Covid 19 outbreak problem. In the early 20th century when the SARS Anthrax's virus began to spread to Indonesia. Shortly thereafter in 1912 the smallpox virus began to infect two decades and then followed by the second decade in 1930. This outbreak made social depression increase; people then began to make changes to habits to adjust to the circumstances of the time [3].

The smallpox epidemic was so dangerous that it became a deadly terror for many regions in the Dutch East Indies. For approximately two decades the community struggled against this plague. This massive outbreak terrorized the entire community, including the people of Padang City, West Sumatra. The smallpox epidemic spread very quickly, causing many difficulties for the community in all aspects of life. To fight against the plague the colonial party then vaccinated the community, unfortunately due to limited and inadequate supplies. The colonial government through the Dutch Health Service made to save vaccines during its limitations. Adults, children needed to be vaccinated by health workers by searching all over the city and collected at one point around the outskirts of the city. Many people died because of this outbreak; the poor health environment was a major factor in the spread of the plague.

It is no different from this when the emergence of Covid gave many changes in all aspects of human life. Especially the people of Padang City. Starting from the beginning of its appearance until now all aspects of life have been destroyed. Especially when the *lockdown* was imposed until the PSBB policy or what is called large-scale restrictions began to be carried out because the *Corona* virus outbreak was increasing every day. All activities are stopped transportation, trains, boats, planes all fleets carrying people are stopped, including learning activities must be temporarily closed. In schools, on campuses everything must *stay at home* (at home only). Therefore, initially the policy began on learning through TVRI National television broadcasts for all school children from elementary, junior high, high school to participate in learning activities at home through these broadcasts. While this corona pandemic has not yet shown signs of a situation that has begun to subside, *online* learning from home began to catch up on lessons at school, all done at home. However, not only this, but many other things also appear like a snowball that continues to roll. Limited internet access, quota, and parents' purchasing power to fulfill their children's quota needs are the main obstacles in this online learning.

Although online learning was initially active, after a few weeks problems began to appear, starting from the online learning system itself not being so effective to run. There are many things that have been changed by the Covid 19 outbreak. In addition to anxiety about the dangers of the covid 19 virus, there is also another anxiety. Namely, after all this time online at home, there is also the anxiety of parents who are afraid that their children will miss lessons or may be stupid because they cannot socialize and understand lessons easily as taught by teachers at school. Furthermore, the use of the increasingly long intensity of the device is also not the right thing if too long online is done. Based on the problems previously described, the researcher is encouraged to provide an overview of the government's discourse in implementing face-to-face learning activities that have begun to be discussed again at the beginning of the new school year. When the government provides a policy to allow schools to reopen as usual with several provisions, this is a reasonable policy because parents' anxiety has begun to be answered among the policies issued by the Padang City Education Office in facing the 2021/2022 new school year. Especially for those in Padang City to clean up and prepare themselves by still paying attention to health protocols during the Covid 19 pandemic [4]. There are several mechanisms and conditions that must be considered and this decision. The reopening of the plan to go to school as usual, however, must be with the Covid 19 protocol [5].

As a basic education institution, many things must be prepared as carefully as possible, because if the activities carried out are contrary to health protocols, there will be consequences that will be obtained by each school party. This is not easy during anxiety for a virus that is believed to have a very bad effect. In addition, parents' anxiety for their children to leave their children unattended is certainly not easy either. When it must start with the vaccination requirement for elementary school-age children in the midst of issues and the spread of hoaxes that backfire and cause distrust of some citizens of Padang City. Regarding the attitude of parents, teachers and school communities who are still skeptical about the Covid 19 vaccination. What steps need to be taken by the government regarding this problem. This is very interesting to study because this research is expected to explain the problem of the difficulty of the public receiving education about vaccinations for elementary school-age children. The issue of refusal to vaccinate elementary school-age children is full of polemics. Due to the loss of public trust in hoax news circulating in the community through mass media, which is a very much discussed issue today. The spread of hoaxes about vaccinations for elementary school-age children has caused a lot of concern, because the spread of hoaxes via the internet is quite massive and fast, even faster than true news [6]. A new discourse to restart face-to-face learning and vaccination must be carried out as a stronghold for students in this pandemic situation.

Covid 19 is a deadly and very dangerous outbreak, a vaccine is needed as a form of anticipation to minimize its spread, therefore the government requires a comprehensive vaccine. In this case, even elementary school children must be vaccinated. This consequence is very frightening for parents whose children are still not old enough to receive vaccines, because the body resistance of each child is not the same and even very different. Not only in Indonesia, especially the city of Padang itself, which is experiencing indecision in accepting this vaccination. Let alone elementary school-age children for adults there is still enough consideration to receive this covid 19 vaccine. In the UK itself, if we look at vaccine indecision, it has affected the covid 19 adult vaccination program in many countries. Data on vaccine

hesitancy among child and adolescent populations are largely limited to parental opinions. We investigated the characteristics of vaccine hesitant children and adolescents using results from a large school-based self-report survey on willingness to get a covid 19 vaccination in 9–18-year-old students in the UK [7]. Vaccination is overall safe and effective in protecting against covid 19 disease, which has symptoms in the first few months' post-vaccination, but for adolescents to have a stronger immune system [8]. Furthermore, some of the problems described above are quite troubling for parents when it comes to vaccination as a condition for returning to face-to-face school because of the rampant hoax news circulating in the community.

## 2. Research Methodology

In this research, the historical method is used, which includes four stages, namely heuristics, source criticism, synthesis analysis (interpretation), and writing [9]. The first stage is heuristics. Heuristics is the stage of searching and collecting historical sources. The sources used in this research are written sources and oral sources. Written sources include literature studies in journals, history books, etc. The sources include interviews with the community. The sources also include interviews with the community, parents of students, and teachers in Padang City. However, not all events of community life are documented so oral sources are also needed. Oral sources can be obtained through the oral history method. In the oral history method, the information needed is obtained through interviews with historical actors, actors directly involved who represent such as the school community, teachers and parents of students who felt the fear of the outbreak and the consequences of vaccination for elementary school-age children.

Interviews were conducted by interviewing in depth to reveal the reasons for parents' refusal to vaccinate their children. Interviews were also conducted with interviews about the experience of how fear overcame him so hard to keep refusing vaccines, how the response from the community regarding this matter was the closest person to respond to this, husband, parents. a person's life story that comes from the perpetrator or family members (*family-tree interviewing*), so that it can reach two generations in the same family. The second stage is source criticism, which can be divided into external and internal criticism. External criticism is carried out to find the authenticity of the archives and documents that have been obtained. Meanwhile, internal criticism is carried out on the contents of these authentic documents to obtain the validity of the data they contain. External criticism of the interviewed informants was carried out by selecting people who were directly involved with the research theme. Information provided by an informant is *cross-checked* with information provided by other informants, so that the validity of the information provided can be tested [10].

The third stage is data analysis and synthesis. The facts obtained from both written and oral sources are analyzed using procedural and structural analysis. Procedural analysis is used to find how the situation of loss of public trust during hoax issues circulating in mass media both *online* and *offline* during the covid 19 outbreak. It is difficult for parents to give permission for their children to be vaccinated because of the lack of education they get from related parties. The obligation of the school is only to urge and carry out procedures according to the direction of the government. Structural analysis is used to analyze how problems during the covid 19 outbreak against vaccination of elementary school-age children want to accept to be vaccinated while the news in the community makes them afraid, as if they are violently refusing, because of fears of fatal consequences caused by the covid 19 vaccine.

The fourth stage is the report writing stage. The writing takes the form of a comparative outbreak history with the objects of research being parents, teachers, and the community. When the intensity of school starts to be fully carried out, it increases very high and is risky when not vaccinated, however, the risk of vaccines for elementary school-age children is a lot of hoax news that makes parents' distrust of giving permission even more worried. Due to the large number of fatal news due to vaccinations in circulation, the model used is comparative historical model writing in comparison with outbreaks that had appeared long before covid 19 made all residents of Padang City panic, especially in terms of learning elementary school-age children to face-to-face again as usual. It is hoped that the method used can examine more broadly the problems that want to be explained in this study.

## 3. Research Results and Discussion

### 3.1. Learning and Vaccination for Elementary School-Age Children (6-11 Th)

This research was initiated by looking at when learning must begin with vaccination requirements for elementary school-age children during issues and the spread of hoaxes which backfired and caused distrust among some citizens of Padang City. Regarding the attitude of parents, teachers and school communities who are still skeptical about the Covid 19 vaccination. So that there are steps that need to be taken by the government regarding this problem. The problem of the difficulty of the community receiving education about vaccinations for elementary school children. Problems regarding the rejection of vaccination for elementary school children which is full of polemics. Due to the loss of public trust in hoax news circulating in the community through social media, which has become a very much discussed issue today [11]. vaccination is carried out for children aged 6-11 years at elementary school age. There is anxiety. my anxiety is not that high, but there are things that make me feel bad, from the vaccine officer. They explained that this vaccination has a risk, although it is very small, but unfortunately, we cannot demand what if the risk occurs to our

child, so I just bismillah. yes, one of them is the fear of children being vaccinated, because it is related to the child's mentality and psychology will be shaken. Of course, there is, as a mother when the child is sick it will be very worried. News on social media is not all hoaxes. My friend's own child after being vaccinated he had a fever & the hand that had been vaccinated could not be moved. Pros and cons are there [12]. This is what makes not many parents allow their children to vaccinate, yes back again this is a matter of eroding trust in the government. Yes, in Padang itself for vaccination there are still pros and cons, it's just that parents are given the option if they don't vaccinate their children cannot go to school face to face.

Various answers emerged when this experiment was carried out in the community to see the extent to which parents accepted vaccination amid the onslaught of hoaxes circulating. This is especially hard felt by parents of elementary school students whose children are still at an age that is still not strong enough to receive vaccines. vaccination must be a face-to-face requirement at that time [13]. This indicates the public's distrust of the government. This should not have happened but because the public thinks that the government's *track record* is not good in handling the covid 19 outbreak, various negative things have emerged in the public's assessment of the government. including regarding this vaccination, so we as parents must be smart in sorting out the news and finding out more about this vaccination. the thing that strengthens me to vaccinate, yes because this is not only an internal plague of the Indonesian nation but has become a global pandemic, so almost all people in the world are vaccinating it strengthens me to allow my child to be vaccinated [14]. Various answers and responses emerged from the community, especially parents of elementary school students, before there was something that made them calm after the Covid 19 turmoil. Furthermore, the program that immediately became the government's main target in equal distribution of vaccines for as a condition for face-to-face. At the beginning of the learning that has been permitted in accordance with the appeal of the Padang City Health Office No.443/436/DKK/2021 issued on January 10, 2022, regarding increasing the coverage of Covid 19 vaccination to be accelerated with a target of 70% for dose 1 with the points stated in number 2 which elementary school age children are not yet a priority [15]. So, this appeal is the answer to anxiety and fear so far. Fear that those who are face-to-face must not be able to study because they have not been vaccinated, so this feels like a breath of fresh air for parents of students at that time [16].

Only at the beginning of the new school year 2022 was full face-to-face learning opened and allowed, which was previously carried out 50% online and 50% offline. Circular Letter Number: 421.1/082/Dikbud/Dikdas.01/2022 Regarding the Implementation of 100% (One Hundred Percent) Face-to-Face Learning for the Even Semester of the 2021/2022 Academic Year during the Covid-19 Pandemic Following up on the Joint Decree of 4 (four) Ministers dated December 21 concerning Guidelines for Implementing Learning during the Covid-19 Pandemic and directions from the Mayor of Padang, the Education Unit within the Padang City Education and Culture Office continues to carry out Limited Face-to-Face Learning 50% (fifty percent) starting on Monday, January 10, 2022 without any compulsion to vaccinate for elementary school age. So that the achievement of COVID-19 Vaccination is still low in Padang City, which is around 35%, while the target that must be achieved is 70%. Therefore, Padang City is still at Level 4 Restriction of Community Activities (PPKM) until October 04, 2021.

### 3.2. *Vaccination and Hoax in the Community in Padang City*

Before going further, let's remember a few things about Padang City, which is in West Sumatra Province, a province with unique and distinctive local wisdom compared to other regions in Indonesia. In West Sumatra, religious and traditional leaders play an important role in social and community life. Religious and traditional leaders in West Sumatra have an active involvement in efforts to achieve vaccination targets in West Sumatra. In addition to involving community leaders, COVID-19 vaccination education must also get support from various parties, such as professional institutions, organizations, educated people such as students, and NGOs. Increasing the vaccination coverage in West Sumatra requires the involvement of various parties, especially in districts / cities where the realization of vaccination is still low. Some regions have reported difficulties in providing vaccinations due to hoax issues, such as Pesisir Selatan, Agam, and Dharmasraya, Padang, etc [17].

Padang city itself has a community that strongly supports government programs for vaccination programs [18]. When in the field there are several obstacles experienced. Based on the results of interviews conducted, most respondents answered that they were afraid of vaccines when done for their children who were still of elementary school age. Fear of big risks such as hoaxes circulating on social media. Based on the results of the research conducted, in general, the people of Padang City are not entirely aware of the Covid 19 vaccination policy for elementary school-age children (6-11 years) because for them this is very risky because not all children in their bodies can receive vaccines [19]. Although some people know that the information is obtained through the socialization of the Padang City Health Office, Public Health Center, circulars, media posted by the Padang City Government such as banners, and boards with an appeal for Covid 19 vaccination. This was expressed by informants from the public and local community leaders [20].

A lot of anxiety arises from parents of elementary school students when the learning requirements begin, namely by requiring students to vaccinate first in accordance with the Covid 19 vaccine circular for elementary school children (SD), namely Circular Letter NUMBER: 421.1 / 083 /DP/DIKDAS.03/202 from the Ministry of Education and Culture which contains the Implementation of COVID 19 Vaccination for Children aged 6 to 11 years and follows up on the circular of the Head of the Padang City Education and Culture Office Therefore, it is requested that you be able to: among these statements are 1. Inform the Schedule for the Implementation of Vaccination for Children aged 6 to 11

years to the parents of learners which will be held on the Second and Third Sundays of January 2022, 2. Ensure that Learners who will be vaccinated have obtained permission from parents with proof of parental permission or accompanying children during the vaccine, and so on.

This is the content of the circular letter for vaccination. Among the parents of students, there may be some who are worried, such as deep anxiety about this because they have heard many hoaxes, there are children who have been vaccinated whose hands cannot be moved anymore. There are children who have high fever, and some even died like the news circulating on social media. When the day began with the vaccination requirements for elementary school-age children amidst the issues and the spread of hoaxes that backfired and caused distrust among some citizens of Padang City. Regarding the attitude of parents, teachers and school communities who are still skeptical about the Covid 19 vaccination.

Like the many hoaxes news that are in the community. Many parents of elementary school students object to this. When vaccines become a necessity, are there any consequences if they are not fulfilled by parents of elementary school students [21]. Hoax is an untrue news/information that is made as if it is true so that it can be trusted by others. Based on the results of the Indonesian telematics survey (MASTEL), the largest channel for spreading hoaxes comes from social media, then through the internet mass media, etc. This is quite worrying that hoaxes are spread through social media. It is quite alarming that hoaxes in Indonesia spread massively and quickly. Hoaxes cause uproar because people quickly encounter *hoaxes*. Regarding the attitude of people who still doubt the Covid 19 vaccination, especially parents of students at elementary schools in Padang City who completely refuse to have their children vaccinated. Children can only be taught by teachers who have fully vaccinated as well, this is certainly not easy to do to build communication between parents and teachers on vaccination for elementary school-age children is very difficult. From the results of the research survey conducted, many of the parents of elementary school students (respondents) answered that they were anxious if their children had to receive vaccines. So that when it began to circulate that vaccines for elementary school age were a must, fear was obvious in the minds of parents of elementary school students.

### 3.3. Government Programs for Outbreak Management then and now

#### 3.3.1 Testing, Tracing, Treatment (3T) and Vaccination Policy in Handling COVID-19 in West Sumatra

The action of conducting COVID-19 tests (testing), or 3T Efforts, *tracing* close contacts (*tracing*), and follow-up in the form of treatment for COVID-19 patients (*treatment*) carried out in handling COVID-19 in West Sumatra continues to be carried out even though the data shows a decrease in case trends in September 2021. Through the Diagnostic Laboratory Data of the Faculty of Medicine, Andalas University and Baso Veterinary Center, it was found that the number of COVID-19 cases in West Sumatra was around 3,697 people during the period August 22-29, 2021, compared to the previous period when COVID-19 was experiencing a surge in cases, 11,267 cases were found from July 26-August 1, 2021. Including the city of Padang in the rate of Covid 19 vaccination.

#### 3.3.2 Vaccination Issues in Handling COVID-19 in West Sumatra

The coverage of dose 1 vaccination in West Sumatra Province as shown in Fig 1, until Sunday, September 8, 2021, has only reached 17.9 percent. This figure is equivalent to 789,390 thousand vaccine participants from the set target of 4.41 million people and is the second lowest out of 34 provinces. Meanwhile, for dose 2 vaccination until September 5, 2021, 9.93 percent of the target has been achieved, which is the second lowest out of 34 provinces in Indonesia. Based on data from the Ministry of Health as of October 10, 2021, of the total 4,408,509 (4.4 million) vaccination targets in West Sumatra, only 1,114,877 (1.1 million) people or 25.29 percent have received the first dose of vaccination and 568,327 (568 thousand) people or 12.89 percent have received the second dose. Until now, as of October 31, 2021, the achievement of West Sumatra's vaccination rate is still low [20]. West Sumatra is still in the 9th place in the 10 regions with the lowest vaccine achievement in Indonesia, from the previous second position from the bottom. Source: PPT of the 2021 RECOMEP National Webinar which has been quoted from "COVID-19 Handling Study. Executive Board of Fak. Medicine Unand, th.2021".

Data September 08, 2021, the cause of the low vaccination rate in West Sumatra is dominated by public distrust due to the spread of **hoax** news that has already circulated, causing fear in the community. According to a public health policy observer and Vice Dean 3 of the Faculty of Medicine, Andalas University, Prof. dr. Hardisman, M.HID., Dr. PH. Med, hoaxes are a world problem, not just in West Sumatra. Inevitably, so that one of the factors that support low vaccination uptake is that there are still doubts, concerns, and even fears among the public about the COVID-19 vaccine. This is even worse because it is not balanced with education or socialization about vaccines to the public. In addition, local governments and campus institutions are less aggressive in carrying out vaccinations. The Chairperson of the West Sumatra Indonesian Medical Association (IDI) revealed that the main cause of the low realization of COVID-19 vaccination in West Sumatra is the low public understanding of the urgency of vaccination, so the first effort that must be improved is to raise awareness that vaccines are an effort to protect themselves from potential exposure to the virus.

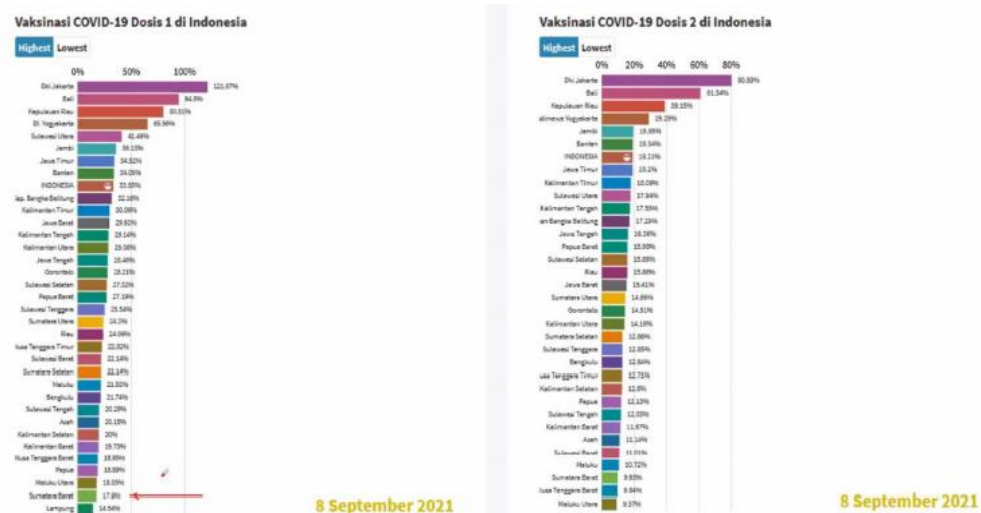


Fig. 1. Vaccination Information.

### 3.3.3 Colonial epidemics and countermeasures

The Covid 19 outbreak that hit Indonesia at the end of 2020 provides a reminder that the outbreak is not just happening now. The government's current effort to stop the spread of covid 19 is to vaccinate. COVID-19 vaccination aims to reduce the transmission of COVID-19, reduce morbidity and mortality due to COVID-19, achieve *herd immunity* and protect the community from COVID-19 to remain socially and economically productive. Herd immunity can only be formed if vaccination coverage is high and evenly distributed throughout the region. This effort through prevention by providing a vaccination program, if assessed from an economic perspective, will be much more cost-effective, when compared to ordinary treatment efforts. [22].

Indonesia has gone through several deadly epidemics that have panicked the public and the government. Disease outbreaks have attacked the Dutch East Indies in the 19th century, including cholera, malaria, and smallpox. This was followed by influenza and bubonic plague epidemics in 1918 and 1911. The existence of disease outbreaks in the Dutch East Indies has existed since the 16th century. Moreover, epidemics such as smallpox, leprosy, and syphilis or lion king were the most feared diseases, especially smallpox which caused many deaths in Java in the early 20th century. This was due to the heavy trade traffic that entered the Dutch East Indies at that time. [23]. The smallpox epidemic was so dangerous that it became a deadly terror for many areas in the Dutch East Indies. For approximately two decades the community struggled against this plague. This massive outbreak terrorized the entire community, including the people of Padang City, West Sumatra. Smallpox disease in 1928 spread in Minangkabau to the interior. This plague became a deadly terror for many regions in the Dutch East Indies [24].

The smallpox epidemic spread very quickly, causing many difficulties for the community in all aspects of life. To fight against the outbreak, the colonial government then vaccinated the community, unfortunately due to limited and inadequate supplies. The colonial government through the Dutch Health Service made to save vaccines during its limitations. Adults, children needed to be vaccinated by health workers by searching all over the city and collected at one point around the outskirts of the city. This outbreak made social depression increase; people then began to make changes in habits to adjust to the circumstances at that time.

The Dutch colonial government's efforts to deal with the smallpox outbreak, which caused the loss of many lives, took countermeasures called variolation. Variolation was carried out in the form of the invention of the smallpox vaccine in the late 18th century and in the early 19th century it began. The first variolation experiment was conducted by Dr. J. van der Steege from the Netherlands in 1779 in Batavia, by inoculating 13 people with smallpox. By 1781, Steege had performed 100 variolations on 100 smallpox patients. The refusal of doctors to provide treatment for smallpox outbreaks in remote areas and choose to stay in the city, made the Dutch East Indies short of medical personnel. The Dutch East Indies government decided to create training for respected natives, who were later referred to as smallpox specialist. In addition, the government also built a Javanese Doctor school in Batavia in 1851, whose graduates would become smallpox vaccinators. Efforts made by the colonial government in dealing with smallpox outbreaks by looking for children who were used as active vaccines as a substitute for vaccination. Smallpox disease that occurred during the colonial period, characterized by the presence of small festering bubbles all over the body accompanied by high fever in the Dutch East Indies since the XIV century starting from Ternate and Ambon. Then, towards the end of 1871, the plague reached Bali and killed eighteen thousand people. With this outbreak, the colonial government tried to prevent the wider spread of variola from reaching Batavia, which was the center of government, because it would have a greater impact including economic paralysis. Apart from quarantining and blocking roads to and from the pandemic area, the colonial government also vaccinated uninfected people in the area.

The success of smallpox orderlies and Javanese doctors in stopping smallpox outbreaks that occurred in the IX-XX centuries in the Dutch East Indies provided guidelines for other regions throughout Indonesia including West Sumatra,

especially the city of Padang. The success caused by emotional and social factors then became a model for the colonial government in handling the next outbreak after the failure of the vaccination program. The cessation of smallpox at that time led to an increase in the population of Java at that time. Another effort of the colonial government in dealing with the plague was the provision of medical personnel in the form of the establishment of Djawa doctors, which began to open on January 1, 1851. The proposal of the Head of the Health Service in the Dutch East Indies, Willen Bosch, arose because at that time the government lacked medical personnel to deal with various disease outbreaks while the existing doctors were very expensive. The medical school, which was later changed to STOVIA (School tot Opleiding van Artsen indische), opened in Batavia with 12 students from various places throughout Indonesia.

Efforts to break the chain of plague require strong synergy between the central and local governments, between doctors and the community, and among doctors themselves. In the colonial health bureaucracy, initially indigenous doctors always experienced discrimination and in some cases the relationship with European doctors was not harmonious. However, the occurrence of epidemics requires them to continue to work together. In this case, European doctors are more dominant to become key figures in laboratory research and finding solutions when an outbreak occurs. Doctors continue to be the spearhead of how the pandemic will be handled. The doctor's voice is crucial to be heard and considered by the colonial government when making policies in other sectors. Initially, when various plagues attacked the Dutch East Indies in the XVII-XIX centuries, the dominant European doctors became key figures in the investigation and search for solutions to the policies to be taken by the government. Meanwhile, Djawa doctors and indigenous doctors were more involved in the implementation in the field. This changed in the early 20th century. Djawa and indigenous doctors were also heavily involved in research and became key figures in outbreak prevention [25].

#### 4. Conclusion

It must be recognized that West Sumatra, especially Padang City, has gone through several deadly epidemics that have panicked the community and the government. including cholera, malaria, and smallpox. After that, it was added by the influenza and bubonic plague epidemics in 1918 and 1911 during the Dutch Colonial period and then followed by smallpox which was quite massive and deadly in infecting the community to the interior of West Sumatra. This is evidenced by the policies provided by the government at that time were also inseparable from vaccinating as well as when the covid 19 outbreak hit, it's just that there are several different policies such as the proposal to add medical schools like in Java because the role of health workers is quite needed, and other policies. Regarding the implementation of the minister of health's regulation on the implementation of vaccinations in the context of overcoming the Covid-19 pandemic, it has not run optimally according to existing provisions. Vaccine policies through the media and socialization carried out by local governments, but there are still many people who are afraid to vaccinate. This is inseparable from the problem of rejection of vaccination for elementary school-age children which is full of polemics. Due to the loss of public trust in hoax news circulating in the community through social media, which is a very much discussed issue today.

The number of things that make the lack of awareness and willingness of the community to participate in efforts to prevent Covid-19 transmission. The local government supports the central government's efforts in implementing the Covid-19 vaccination policy by creating the Sumbar Sadar Vaksin program. Guidance and supervision are carried out by the health Office as an effort to *monitor* and evaluate the program. The community response to this policy is quite good and supports the implementation of the Covid-19 vaccination policy in Padang City. The Padang City Government must approach the community so that people understand and understand the purpose of this policy. It is important to establish good communication between the government, health workers, and the community to avoid disinformation. Regarding the attitude of people who are still hesitant about Covid 19 vaccination, especially parents of students at elementary schools in Padang City who completely refuse to have their children vaccinated. Children can only be taught by teachers who have fully vaccinated as well, this is certainly not easy to do to build communication between parents and teachers on vaccination for elementary school children. Although it is a requirement for the face-to-face learning process to be carried out again, over time the problem can be overcome. When looking further, this problem becomes quite significant when there are things that happen when it is necessary to vaccinate. When the learning process resumed, there were many things that disappointed parents. Among them are only allowing learning for those who have been vaccinated, and filling in data or forms as a condition that vaccines must be carried out, but the school does not cover anything that happens when the child has finished the vaccine. It's like being hands off and there is no law to regulate this. Some are forced to fill in because they are afraid that their children will not be able to study at school, so it is a kind of coercion that goes against the conscience of parents of elementary school students.

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