



## **The Religious Perspectives on the Provision of Vaccination on Families: A Qualitative Study in the North Surabaya Area, Indonesia**

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### **Abstract**

Universal Child Vaccination (UCV) is an indicator of achieving successful vaccination. Compliance with the basic vaccination schedule is one factor in achieving UCI. One thing that influences the provision of vaccination in children is religion. The research method uses qualitative studies to explore the perception of vaccination in North area in Surabaya, Indonesia whose refused to give vaccination. Religion is considered as an important determining factor in giving vaccination to children. Vaccination is considered as illicit goods because of prohibited animal derivatives, as well as the human fetus tissue and is considered incompatible with religious law. Therefore we need support from family, people around and local health service to advocate for the importance of vaccination in children's health.



## Introduction

Indonesia has repeatedly entered the category of a country that has slow progress in achieving the Millenium Development Goals (MDGs). Sources of slowness are shown from the still high maternal mortality rate (MMR), lack of knowledge of HIV / AIDS transmission, low fulfillment of clean water and poor sanitation, lack of recognition of community initiatives, the Indonesian government has never encouraged a sense of ownership together with the MDGs to its people, the impression is very strong that achieving the MDGs is identical to the implementation of government programs (1) .

Every year more than 1.4 million children in the world die from various diseases that can be prevented by vaccination. Some infectious diseases that can be prevented with Vaccination (PD3I) include Diphtheria, Tetanus, Hepatitis B, inflammation of the lining of the brain, pneumonia, pertussis, and polio (1).

Coverage of male and female infants immunized DPT-HB3 / DPT-HBHib3 were 519,095 babies (91%), babies who were immunized with pentavalen were 483,236 babies (85.12%), measles were immunized 374,264 babies (65.93%) ) while babies who have been fully immunized basic (IDL) totaled 547,729 babies (96.483%). The target of Complete Basic Vaccination (IDL) of East Java Province 2017 is 91.5%, from 38 Regencies / Cities whose IDL has exceeded 91.5% totaling 30 Regencies (2-3).

For 2017, from 8,503, 7,271 villages have implemented village UCI or 85.5%, an increase compared to the achievements in 2016, namely 7,039 villages / or 82.93% that have UCI. If compared to the realization of 2016 which was 82.9% there was an increase of 1.6%, then the UCI coverage of the village is now approaching the 86% target. In 2016, of the 8,488 villages, there were 7,039 villages or 82.93% which were UCI. When compared with the realization of 2015 of 76.59% there was an increase of 6.34% (3). Meanwhile in North area Surabaya, majority area still refused to get vaccination and it was proved with majority UCI still below 95 percentage while the standart of UCI was 99 percentage in Indonesia.

There are several factors that have impact to low target of vaccination coverage, including false rumors about vaccination , the community believes that vaccination causes children to become sick, disabled or even died, community understanding, especially parents who are still lacking about vaccination, and parents' motivation to provide vaccinations to their children still low. Anti-vaccination Black Campaign is currently 'intensively' occurring in several regions in Indonesia, both through seminars and anti-vaccination talkshows. Apart from general activities, they also make movements through social media such as Twitter, Facebook, mailing lists, or blogs. The kind of halal-haram vaccines, Western & Jewish conspiracies, and vaccine side effects that can cause disability, autism, or even death are the main issues raised by the anti-vaccination group. Therefore this study aims to know the persepectives of religion by giving vaccination to children, especially areas with a majority of the religious population and refused to vaccination.



## Method

This study uses a qualitative study with random sampling with a total of 10 people. Subjects are residents in the North Surabaya region, aged more than 25 years, have religion and accepted to follow study. The study was conducted in the Ampel Kelurahan, Semampir District, Surabaya City. Taking the subjects in this study was conducted using a *purposive sampling method*. Subjects in this study were mothers who refused complete basic vaccination for children who numbered 10 people with inclusion criteria: (1) Mothers who have toddlers, who do not want and / or have not provided complete basic vaccinations to children, based on information from local healthcare or cadres in the North area of Surabaya; (2) Residing in Sidotopo Village; (3) Willing to be interviewed and become (indicated by the availability of a Research Subject signed by a Research Subject); (4) Able to communicate well.

Data collection was carried out by in-depth interviews with research subjects. In-depth interviews were also conducted on the subject of triangulation for validity testing.

## Results and Discussion

### 1. The attitude of the research subjects towards complete basic vaccination

The majority of subjects were female (100%) with ages ranging from 25-35 years. The majority of subjects (80%) expressed resistance to vaccination. This misunderstanding is due to the persistent rumors that the vaccine is forbidden, especially in the mayor religion in that place. The subjects also tend not to process information correctly and tend to only obey the regional belief principles.

*"... yeah like that miss, vaccination should not be allowed, there are some ingredients in it (vaccination) are not allowed to consume (aka pigs), then there is an impact on the child, for example, later getting fever and nausea... (US, 30 years) "*

In fact, only a small portion of vaccines that have touched on trypsin in the process of development or manufacturing such as polio vaccines and meningitis. In the meningitis vaccine, in the process of seeding a particular vaccine seedling 15-20 years ago, when harvesting the vaccine seed it was in contact with the pancreatic pig to release the parent vaccine from the nursery. But then the mother of the vaccine seed was washed and thoroughly cleaned so that the injected vaccine did not contain pig trypsin. On that basis, the Indonesian Ulema Council believes that the vaccine may be used, as long as there is no replacement (4).

Information obtained by research subjects on vaccination is an issue that was spread decades ago by people who were not vaccine experts. For example, Dr. Bernard Greenberg was a biostatistics in 1950, Dr. William Hay is a columnist, and Neil Z. Miller is a psychologist and journalist. Most of the scientists worked in the 1950-1960 era, so the data sum was also very ancient (5).

The subjects also said they would prefer herbal medicines to replace the benefits of vaccination. When asked about the anticipation respondent to attend counselling from community health service or local health care routinely, the majority of respondents chose not to come due to laziness, no time to attend, forgetting, or no transport to go to



community, busy with household job (cooking or cleaning) and there is an environment that did not get along.

*" yeah,. I rare to attend counselling, I must cook first, sweep or cleaning every morning ..."*

(K, 25 years old)

Even though the information obtained from community health service counseling can increase the knowledge of mothers, especially related to vaccination (6).

## 2. Knowledge and Education Level

As many as 70% of mothers have a high school education background, 20% have a middle school and as a college student background as much as 10%. Majority mothers have a good knowledge regarding vaccination but they are still in doubt. They expressed their doubts about the benefits of vaccination based on the experience of the subject and others about children who remain ill despite being immunized.

*"I understand the media which reports that vaccination can reduce disease, but after I saw a neighbor's child who after the vaccination got sick, so I'm not sure to give it to my child ..."* (MD, 35 years).

*"My second child has fever after vaccination, so I am" wedi" (scared), so I don't give this last child ..."* (MS, 32 years old)

Mother's knowledge about vaccination can also be influenced by experience in previous vaccinations besides information can also be from neighbors or relatives who have previously been immunized.

Although mother's knowledge tends to be good, attitude is a person's closed response to a stimulus or object. Notoatmodjo (2003) divides attitudes into four levels, mothers who are given counseling are in the first level of accepting, mothers want and pay attention to the stimulus provided but they do not respond, respect and are responsible so that the counseling given does not really give meaning to changes in mother's attitude (7).

## 3. Religious Perspective

The majority of subjects still think that vaccination is illegal. Indonesian Ulema Council (MUI) has been explained in the regulation, MUI Fatwa No.4 of 2016 Vaccination, that vaccination is permissible ( *permissible* ) as a form of efforts to achieve immunity (immunity) and prevent the occurrence of a specific disease. The trypsin enzyme from swine pancreas is needed in the process of making vaccines to grow the seeds of several vaccines. Until now there has not been found a substitute for the manufacture of trypsin (8). However, majority respondent still stubborn and more believe to false assumption.

*" ... The vaccine has a pig content, you know yourself that pig ingredient is forbidden/forbidden in our religion. ... "* (Sulai, 34 years old)



The *Qur'ān* and the Islamic tradition forbid the use of certain food - *haram* (pig flesh). Other animals are *halal* - depending on how they die. This problem is reflected in medicine regarding the use of gelatin in medical products. If gelatin is derived from *halal* animals it is permissible to use it. If someone finds him or herself in a situation where there is no alternative *halal*, the person is not guilty of using no-*halal* options based on the "law of necessity." The vaccines are important for medical purposes, not for diet, therefore *unlawful* ingredients could be permitted. According to Islamic tradition, vaccination serves to protect life, respect for the principle of preventing harm ( *izalat aldharar* ), and public interest ( *maslahat al ummah* ). Vaccination protects others, which is why the law of necessity should be considered. It has a purpose in prevention, therefore its components cannot be judged as a diet (9).

Wombwell et al evaluated different religions and the reasons that vaccines may violate their religious tenets. The explanation most commonly offered for why specific vaccinations oppose religious tenets involve components of the vaccines. <sup>2</sup>The animal-derived gelatin used in producing some vaccines as well as the human fetus tissue used in the rubella component poses the largest concerns especially as Buddhist or Catholic (10).

So basically there is a misunderstanding of perspective in society, especially in the context of religion. The religion of Islam has permitted vaccination to be used because of the positive effect, especially on health, is greater than the negative effect. Islam has allowed primarily the intention of vaccination to prevent disease. However, unfortunately, this misunderstanding continues to be believed in the community so vaccination is considered as something bad. Another thing that can contribute besides religion is the knowledge and attitudes of mothers in vaccination.

#### 4. A prohibition from the community environment to provide basic vaccination to children

Environment also give impact to mother's decision in vaccination. There are only 5 research subjects who were banned by their husbands. Research conducted by Ritonga also found similar studies that mothers who did not provide vaccinations due to a prohibition from the family, especially from the husband because the child was too small to be immunized so that there was no informational support for maternal compliance with basic vaccination in children. (11)

*" My husband forbids me to give vaccination, so, if that's the command my husband I will do it." (N, 26 years old)*

### Conclusion

Vaccination refusal among the parents of the pediatric population is emerging globally, regardless of religious or political background or geographical location. The number of vaccination refusals based on the religious exemption is increasing. The question is whether religious freedom is a threat to public health, in this case to the vaccination system, especially in Indonesia.

The majority of religions respect life as a basic value and therefore oppose the use of vaccines derived from aborted human fetuses (Catholicism) or any form of life (Buddhism) or *haram* meaning in Islam. But if these vaccines serve to protect many more lives they are permitted however this perceptive still not accepted in North area of Surabaya. We should not consider vaccination as opposed to theological base and



values. The religion is not in contradiction with vaccination and public health. It is only individual parents or religious leaders and their questionable interpretation of religious practices that are opposed to vaccination, no religion as such but also another to contribute is environment, lack of maternal knowledge, and perspective. In order to protect vaccination from the questionable religious interpretation, we should bring it closer to the public the basic theological perspective.

Majority society of the 21<sup>st</sup> century, just as many societies and cultures in the history of human civilization, use religion as an excuse for wars, discrimination, and now for vaccination refusal. The question is whether the public is aware of the teachings of their religion on these issues. One of the first steps in resolving the situation should be the appropriate communication from the local health service to give out the advocate the essence of theological perspective regarding vaccination benefit especially to religious leader. The further research was needed especially analyze about religion impact adding with other factors to vaccination with better research design.

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