Analysis of implementation of the COVID-19 vaccination program for midwives in Banyumas regency in 2021

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Abstract
The COVID-19 pandemic has paralyzed the health system, including the puskesmas, so concrete steps are needed for prevention, one of which is through vaccination. The COVID-19 vaccination is a program that is carried out in stages with health workers being the priority target. Banyumas Regency is an area in Jawa Tengah Province that has been affected by COVID-19 with four puskesmas closing their services due to the large number of health workers with COVID-19. Vaccine quotas in Banyumas Regency are often short, thus affecting the implementation of the vaccination program. The implementation model shows that there are four variables that play a role in the success of the program, namely communication, resources, disposition, and bureaucracy. The aim of this research is to analyze the implementation of the COVID-19 vaccination program at the puskesmas in the working area of the Dinas Kesehatan Kabupaten Banyumas. This research is a qualitative research with the main informants were from the four puskesmas with the most affected by COVID-19 and the puskesmas with the highest number of midwives, and with triangulation informants were the vaccination program’s coordinator at the puskesmas, the head of the puskesmas and the vaccination program’s coordinator at the Dinas Kesehatan Kabupaten Banyumas. The results obtained were on the communication factor, the main informant received information from the health office. On the resource factor, the main informants felt that the human resources involved were sufficient, competent, and involved cross-sectoral collaboration, and always complied with SOPs. On the disposition factor, both main and triangulation informants agreed on the COVID-19 vaccination program for midwives despite the obstacles. Meanwhile, due to the bureaucratic factor, the main informant stated that the SOPs was complete and had been implemented accordingly.

Keywords: midwife, COVID-19, implementation, vaccination

Introduction
The COVID-19 pandemic has occurred all over the world including in Indonesia. Indonesia recorded the cumulative number of confirmed cases of COVID-19 as of March 31, 2021, amounting to 1,511,712 people. The COVID-19 pandemic quickly paralyzed the health system where there was a very drastic increase in visits from the public to health care facilities, which led to the collapse of the system, including puskesmas as a primary health care facility. The rate of increase in new cases and the number of deaths due to COVID-19 is increasingly out of control, so that concrete steps are needed for prevention, one of which is through vaccination. Vaccination is considered the most effective effort to overcome the ongoing COVID-19 pandemic. The COVID-19 vaccination is carried out in stages with health workers, the elderly, and public officials being the priority targets.
The COVID-19 vaccination program is implemented with a four-table system (registration, screening, vaccination, observation) which is carried out for two periods of injection/vaccine administration. The target for COVID-19 vaccination in Indonesia is to reach 181,554,465 people, but only 8,954,300 have been realized as of May 15, 2021.[4]

Many factors are allegedly able to influence the successful implementation of a program. Implementation is a stage carried out to achieve certain goals after a legal/policy rule is established through a political process. The implementation model shows that there are four variables that play a role in the success of a program, namely communication, resources, disposition, and bureaucracy.[5,6]

Banyumas Regency is a part of Jawa Tengah Province which is divided into 27 sub-districts and has 39 units of puskesmas. During the COVID-19 pandemic, at least four puskesmas units in Banyumas Regency did not open their services due to the large number of health workers exposed to COVID-19.[7] Banyumas Regency gets a vaccine quota of 3,626 packages for health workers, but this is not comparable to the number of existing health workers, which is 10,389 people, which makes vaccination administration often hampered. Therefore, COVID-19 vaccination for health workers in Banyumas Regency is prioritized for those who interact directly with confirmed patients where midwives fall into that category.[8]

Methods
Observational research with a qualitative approach, where the main informants are all midwives in all puskesmas in Banyumas Regency. Sampling was carried out purposively with the highest number of midwives, with five midwives from each unit. Meanwhile, the triangulation informants in the following study were a vaccination program’s coordinator from a group of puskesmas affected by COVID-19, a head of a puskesmas from a puskesmas group with the highest number of midwives, and a COVID-19 vaccination program’s coordinator at the Dinas Kesehatan Kabupaten Banyumas.

Results and Discussion
The factors that influence the implementation of the COVID-19 vaccination program for midwives are as follows:

1. Communication

a. Resources
Two informants stated that they received information directly from the local health office through socialization and training. Meanwhile, the other three informants stated that they received information not from the health office directly, but from the coordinator of the immunization program at the puskesmas, the head of the puskesmas, or from both. However, the three informants explained that the main source of information still came from the health office.

“...information from the primary health center, yes, from the holder of the immunization program. The program holder from the health office immediately has an official letter.” – IU1

“...the first information I got was from the immunization coordinator and the head of the puskesmas who received information from the health office.” – IU4

“...The information I often get is from the head of the puskesmas because he is my boss, so I follow from him.” – IU5

This is in line with the information expressed by all of the triangulation informants that midwives have received comprehensive training from the health office so that the head of the puskesmas is only tasked with providing the latest updates and detailed information. The health office ensured that there was training, both to agency representatives and to the midwife herself. Training and given because the midwife is the implementer as well as the target of vaccination.

“...so for the program, we received socialization from the health office, yes, then we received an invitation for online training and it took about 3 or 4 days from morning to half past 6 (afternoon).” – IT1

“...the first information was from the health office to the head of the puskesmas and then I forwarded it to the health workers.” – IT2

“...before the vaccination was carried out, socialization and training were carried out in various ways, such as the head of the puskesmas and the direct midwife if the midwife worked in a hospital or was an independent midwife.” – IT3

Based on the statements above, it can be concluded that most of the midwives received information about the COVID-19 vaccination program to midwives from internal staffs of puskesmas. However, the information is still sourced from the Dinas Kesehatan Kabupaten Banyumas as the policy maker. This is in accordance with Permenkes No. 10 of 2021 Article 41 wherein the delivery of information is carried out centrally by the competent local government (health office) through various communication strategies.[9] Centralized sources of information can minimize misinterpretation of information that leads to the spread of hoaxes. Dissemination of information through training and socialization methods is also very effective in improving the quality of the human resources involved, through improving attitudes and competencies in a better direction.[10-11]

b. Clarity of Information and Information Points Captured
All main informants stated that the information conveyed was clear, with the midwife being one of the top priority targets for vaccination. The main points captured by the main informants regarding the implementation of the vaccination program in midwives were related to the time, place, and the procedures. The timing of vaccination for midwives is from the end of 2020 to the beginning of 2021 and takes place at their puskesmas.

“...yesterday the implementation was around December 2020, until early 2021, it seems, and took place at the puskesmas.” – IU4

“...(implementation time) until mid-February 2021 after training.” – IU2
The procedure that must be carried out by midwives is the same as the general public where they must register with an ID card or other identity card containing NIK, then a screening/health check is carried out followed by administering vaccines and monitoring (observing) AEFIs.

"...the procedure is the same as the general public, even though we are health workers, there is registration, then we are screened, then we will be vaccinated and at the observation table, then we will get a vaccine certificate." – IU5

"...the identity file can be KTP, BPJS/KIS, the important thing is the NIK." – IU3

Other conditions that must be met are including a telephone number that can be contacted, obtaining permission from a personal doctor if midwives have been suffering from a disease, and if the midwives were survivor, they has to wait for at least three months before being vaccinated.

"...the other condition is that most survivors have to wait 3 months first." – IU1

"...the other requirement is that there must be no comorbidities where we must first check with the doctor for approval." – IU2

"...other conditions must include an active cellphone number, OK?" – IU3

All of these points are in line with the statement by the triangulation informant from the head of the puskesmas that the information points shared are about the vaccination procedure, as well as the time and place of administering the vaccine.

"...the information is from the purpose, indications, contraindications, procedures, when and where, it is at the puskesmas, yes, everything is given because it is to increase the knowledge of the midwife." – IT2

Its points also in line with triangulation informant for the health office that COVID-19 vaccination to midwives was provided during the training, which was held by the health office in collaboration with the Banyumas District Health Training Center.

"...the training was carried out for 3 days organized by the health training center with the target being that the puskesmas and clinics had 5 personnel, yes, the hospital could have 10 – 20 personnel... the information was all yes, all vaccines were given.” – IT3

Based on the statements above, it can be concluded that all midwives capture information related to the COVID-19 vaccination program clearly and were able to mention it. This is in accordance with Permenkes No. 10 of 2021 Article 41 where the responsibility of local governments in providing information related to vaccination programs is to increase public understanding, attitudes, and behavior through accurate and correct information. Providing information to the human resources involved is very useful to support the sustainability of an immunization program. Providing information on a regular basis through training held by related institutions, has proven to be able to improve the performance of human resources.

\textbf{c. Submission of Information to Other Health Workers}

All main informants stated that the information provided was good/clear enough because apart from information originating from relevant agencies, midwives were also actively seeking additional information on social media.

"...so far it's been pretty clear because you can browse the internet and social media." – IU4

All main informants stated that they did not convey similar information to other health workers because all health workers at the puskesmas had received similar information from the same source.

'...no...yes, because of that, Ms. all health workers at the puskesmas have received socialization at the beginning by the service." – IU1

"...yes, from the same and the exact same source." – IU5

The statement by the main informant was also supported by the triangulation informants, that the provision of information apart from training was also disseminated through social media while still being sourced from the same source, with the latest information has always been notified in the vaccinator group.

"...yes for sure, because we also share with other health workers and cadres, yes." – IT1

"...every month because we have a coordination meeting (coordination meeting) for midwives. But also, for example, for the latest information or changes in regulations, we will immediately inform you through the wa group." – IT2

"...I think we have, because we have carried out directives from the health department. It's the health department of the ministry of health." – IT2

"...we also disseminate information through social media, diskominfo, tv, and radio...oh yes, the latest updates must be conveyed to the vaccinator group." – IT3

Based on the statements above, it can be concluded that all midwives feel that the information about the COVID-19 vaccination program to the midwives is sufficient, clear, and has been informed to all health workers, as well as through various media, so that the midwife does not re-interpret the information to the midwife. other health workers. This is in accordance with Permenkes No. 10 of 2021 Article 41 where the delivery of information is carried out through various strategies which are expected to be able to increase understanding and provide precise, clear, and correct information to the target.

\textbf{2. Resource}

\textbf{a. Human Resources}

All informants stated that the human resources on duty were sufficient and competent, with three of them stating that the
human resources on duty had been vaccinated beforehand. All informants also stated that there was cross-sectoral cooperation as a form of support.

“...Human resources trained by the health office are trusted, competent in their fields, and are sufficient, even more than enough.” – IU5

“...I think the human resources are sufficient and the vaccine is given to midwives who have been vaccinated before.” – IU4

“...of course there will be cross-sectoral cooperation such as Babinsa, Kamtibmas, Koramil, local police. Public figures such as village heads and officials are also always present.” – IU1

All main informants stated that the human resources on duty have been ensured to comply with health protocols and prioritize friendliness in their services.

“...For HR, it is definitely yes and we will continue to carry out health protocols because it is part of the SOP.” – IU5

“...friendly human resources because those who are reported to be unfriendly will be called and reprimanded.” – IU2

Four informants stated that the midwife’s vaccination schedule was on time, because it followed the existing SOPs and there were few targets that had to be vaccinated. All main informants stated that the midwife vaccination process was carried out according to the queue number except for midwives who were pregnant or elderly, and if there were midwives who were unable to attend, rescheduling would be done.

“...the service was very timely due to limited manpower and few targets to be met, so it was fast.” – IU3

“...still according to the queue number except for pregnant women, and the elderly are prioritized for the vaccine first.” – IU4

“... Midwives who are unable to attend we will reschedule and be replaced by midwives who are able to fulfill the quota per day. (30 people)” – IU2

This statement is also in line with what was stated by the triangulation informants, that the requirement for recruiting human resources for proposing the COVID-19 vaccination program is must be a health worker and have attended training. Meanwhile, monitoring and evaluation of activities is carried out by the health office to monitor the suitability of SOPs, compliance with health protocols, and service friendliness.

“...they already understand, yes, at least it's about the service system, which yesterday was really emphasized (in the training).” – IT1

“...the first one must be a health worker, then they must also take part in training from the health office. Then you have to explain to other friends (nakes).” – IT2

This is also in line with the statement by the triangulation informant from the health office, where the number and competence of human resources is sufficient and adequate, and has referred to the provisions contained in the regulation of the minister of health (PMK). Meanwhile, as revealed by the triangulation informant, the head of the puskesmas, monitoring and evaluation of the program is carried out directly by the health office.

“...for HR, it is very sufficient and competent.” – IT3

“...places and centers must refer to PMK, but it's actually more of a flow anyway (tables 1 – 4).” – IT3

“...of course there is the same training as well as monitoring that is carried out every day by the departmental supervisor team for evaluation.” – IT3

Based on the statements above, it can be concluded that all midwives feel that the human resources involved in the COVID-19 vaccination program for midwives are sufficient in quantity, are competent in their fields, and establish/involve cross-sectoral collaboration to improve service quality, and comply with SOPs. available services such as: implementing health protocols, friendly service, and using a queuing system for non-priority groups (elderly and pregnant women).

This is in accordance with Permenkes No. 10 of 2021 Articles 28 and 30 where the human resources on duty must be competent, friendly, and apply the principles of infection prevention and control through the enforcement of health protocols, with the equipment provided. Furthermore, this conclusion is also in accordance with article 33 of the same regulation where in the implementation of the COVID-19 vaccination, local governments have the right to establish cooperation with business entities, both state-owned and private, as well as the Indonesian National Armed Forces/State Police of the Republic of Indonesia and/or other parties if necessary.[9]

Human resources are the main actors and cannot be separated in the implementation of a program, where the program is said to be successful if the set of human resources in it is sufficient in terms of quantity, adequate in terms of quality, responsible according to applicable regulations.[14-15] Vaccination program which has a set of human resources with these characteristics, is expected to run effectively and efficiently where to increase this opportunity cross-sectoral involvement is needed in it.[12]

b. Funding

Four informants stated that they felt comfortable during the vaccination process. Meanwhile, another informant said that the reason for his discomfort was due to the heat, rain, and crowded queues.

“...I feel discomfort because of the many people, the heat, the rain. Maybe that's a problem everywhere.” – IU1

All of the informants compactly stated that the supporting infrastructure for activities such as medical equipment was very sufficient in number because it had been allocated by the
local health office. Other supporting facilities and infrastructure such as emergency systems have been provided and are adequate.

"...for medical supplies there is no shortage because stock and preparation are determined from the beginning." – IU5

"...there is a separate emergency room with good equipment." – IU2

"...for ambulances, they are always present and stand by from start to finish." – IU5

Meanwhile, for supporting facilities for comfort such as WIFI, air conditioning, entertainment, there are four informants who feel these facilities.

"...WIFI already exists and TV already exists. Occasionally also call a magician to support comfort." – IU1

"...in the observation room there is air conditioning and a karaoke room to support comfort." – IU2

In accordance with the information above, the triangulation informant for the program holder and the head of the puskesmas also stated that the funding was obtained directly from the health office for vaccine-related equipment. However, the puskesmas itself also provides an allocation of funds for the procurement of infrastructure to support the COVID-19 vaccination.

"...if so far (vaccination activities) we have used special allocation funds, yes (from the health office), and for the system it is not disbursed every month, yes, but we still make plans every month to get approval faster." – IT1

"...for vaccines and equipment, we have direct health services, but our facilities and infrastructure are from internal health centers." – IT2

This is also in accordance with the statement of the triangulation informant from health office where funding related to vaccination is guaranteed by the health office, with an adequate amount of allocation because it has been allocated well. Even in the procurement of infrastructure related to vaccination, the health office always gets support from various sectors.

"...the budget is sufficient so far. Maybe it's more about the allocation, it's more about transportation of vaccines, procurement of human resources, and procurement of vaccine centers... we also have support from the Communications and Informatics, BPD, and the regent." – IT3

"...so far there has never been a shortage of funding because there has been an allocation of its own and everything is focused on this, yes (vaccination) so it is certain that all funds are diverted here (vaccination)." – IT3

Based on the statements above, it can be concluded that all midwives felt that the place for the COVID-19 vaccination was adequate so that almost all midwives felt comfortable when vaccinating against COVID-19. All midwives also stated that the supporting infrastructure for COVID-19 vaccination, such as medical devices and emergency systems, was sufficient and adequate. However, for supporting facilities for comfort, not all midwives claim to feel this way. This is in accordance with Permenkes No. 10 of 2021 Article 43 which states that funding related to the implementation of vaccinations has been guaranteed in the State Revenue and Expenditure Budget and the Regional Revenue and Expenditure Budget. The completeness of these supporting facilities and infrastructure can affect the success of vaccination activities through the level of satisfaction and performance of the human resources involved in it.

The completeness of supporting facilities and infrastructure depends on the applicable funding system, wherein the supporting facilities and infrastructure related to vaccination activities should receive a special allocation from the local health office. Permenkes No. 71 of 2016 states that the Health Operational Assistance Fund (BOK) from the Ministry of Health helps local governments implement health services according to standards (SPM). Funding in the health sector is a factor behind the successful realization/implementation of programs at the puskesmas, including immunization.

3. Disposition

All main informants stated that they agreed with the COVID-19 vaccination program despite the complex procedures that had to be carried out. Three informants stated that the reason they agreed was due to self-motivation, while the other two stated that it had become a mandatory program that must be carried out. The obstacles encountered according to the four informants were fatigue.

"...agree and very supportive because it is part of our efforts to fight the pandemic even though we are very tired." – IU4

"...agree but tired and tired. However, because it has become a priority program, we must work sincerely and sincerely." – IU2

All main informants stated that they had carried out activities to support vaccination programs, both small scale such as outreach to the nearest environment or through social media, to large scale involving cadres and village officials.

"...participating in promotions on social media, usually WhatsApp, also traveling around villages." – IU3

"...if I did socialization to my family, neighbors, community and even village level counseling through health cadres, posyandu cadres, and pkk cadres, I have also done it in the past." – IU4

The triangulation informants also agreed with the implementation of the COVID-19 vaccination program because it is one of the responsibilities of health workers even...
though other programs were often neglected because the focus was on the COVID-19 vaccination program. The form of support provided by the health office is to facilitate any deficiencies that occur in COVID-19 vaccination centers. On the other hand, the form of support provided by program’s coordinator and the head of the puskesmas was related to do better in time management.

“...I personally agree because it is our moral responsibility as health workers.” – IT1

“...agree, because this is indeed a program to control the spread of COVID-19, also because our program is ASN, whether we like it or not, we have to do it.” – IT2

“...yes, I am more in a race against time to always update information and changes.” – IT1

“...the first may be to arrange a more flexible schedule so that the midwife does not overwork, and also provides consumption for the midwife.” – IT2

“...in general, I strongly agree, even though all budget and activity focus is on this activity, so that other activities are often neglected.” – IT3

“...yes, apart from responsibilities, it might be like facilitating any deficiencies in the vaccine center.” – IT3

Based on the statements above, it can be concluded that both the main informants and the triangulation informants agreed and supported the COVID-19 vaccination program for midwives despite the various perceived obstacles. This is evidenced by the active promotion of the COVID-19 vaccination program, both small and large scale that has been carried out by all key informants and time management tips to ensure the smooth running of the program carried out by triangulation informants. The disposition factor describes the willingness of the human resources involved in implementing a program and becomes one of the determining factors for the success of the program. The strength of the disposition factor possessed by each human resource depends on the understanding of each of these human resources regarding the ongoing program.[18]

4. Bureaucracy
All informants stated that the SOPs was completely available and had been implemented completely. Vaccination officers are also considered competent in their respective fields.

“...the SOP is complete, of course and (implementation) is appropriate because everything has been regulated according to official policy.” – IU5

“...already competent because there has been socialization from the previous service.” – IU3

All of the main informants stated that they had seen the NIK of other midwives that were not detected, with one informant adding that the slow internet network was also an obstacle. Three informants stated that the NIK problems had to be overcome by the participants (midwives themselves) while the other two stated that the competent competence of the implementing team had made all of them overcome.

“...often encountering slow internet network problems and unregistered NIK.” – IU3

“...there was once a NIK that was not suitable, but entry officers could handle it because of their competent competence.” – IU5

“...we recommend going to the village first and then going to the sub-district to update the data.” – IU4

The program’s coordinator and the head of the puskesmas also stated that the SOPs was completely available at the puskesmas and its implementation was also appropriate. The triangulation informant from the head of the puskesmas also revealed that they have established cross-sectoral collaboration to overcome various obstacles that arise during the implementation of vaccination.

“...at that time it was a package, so there was a decree and SOP for implementation in the field, right.” – IT1

“...In general, yes, because we hold on to the SOP while working, and also this SOP is for the safety of our health workers and targets.” – IT1

“...everything is in accordance with the SOP starting from the cold chain, recording, reporting, accountability are also complete.” – IT2

“...their authority is to carry out screening and provide therapy, then for the vaccinator team, our authority is to carry out safety injections to the target.” – IT1

“...maybe I have the authority to provide health insurance for midwives, then also to establish cross-sectoral collaboration, or to village officials to increase vaccination coverage.” – IT2

This is different from the statements from the main informant and the triangulation informant of the head of the puskesmas. The triangulation informant from the health office stated that they still found implementation in the field that was not in accordance with the SOPs, so that the health office had the authority to advocate and formulate regulations to overcome these problems.

“...the results of the money prove several things that are still not in accordance with the SOP.” – IT3

“...the technical field is still found some that are not suitable even though they have been trained, for example; vaccines are lined up outside the cooler, needles are closed again after use which risk being reused if they are not focused.”– IT3

“...the authority is how we advocate and formulate regulations at the district level.” – IT3

Based on the statements above, it can be concluded that all midwives stated that the SOPs was completely available and had been carried out properly by competent officers, although there were often problems when registering targets into the system. However, the Dinas Kesehatan Kabupaten
Banyumas denied this where things were still found that were not in accordance with the SOPs through active monitoring and evaluation carried out. Because of this, the Banyumas District Health Office formulated related regulations and advocated at the district level to minimize these problems. This is in accordance with Permenkes No. 10 of 2021 Articles 34 and 44 where the provision of standard operating procedures is one part of the implementation of the vaccination program and is the responsibility of the regional government, which is carried out regularly and continuously by guidance and supervision by the respective regional health offices in accordance with their duties, functions and authority.\(^9\) Bureaucracy becomes an important thing in achieving success in an implementation, where the incompleteness of one or more of the elements in it can affect the effectiveness and efficiency of the implementation of the program.\(^{15}\)

**Conclusions**

On the communication factor, most of the main informants received information from the internal staffs of puskesmas, but the information still came from the Dinas Kesehatan Kabupaten Banyumas. The main informants are also able to capture information clearly by being able to clearly state information points. On the resource factor, the main informants felt that the human resources involved were sufficient in quantity, competence, and by establishing/involving cross-sectoral collaboration to improve service quality, and always comply with the available SOPs. The main informants also felt that the implementation site and supporting infrastructure for the COVID-19 vaccination were adequate. However, for supporting facilities for comfort, not all informants felt it.

On the disposition factor, both of main and triangulation informants agreed and supported the COVID-19 vaccination program for midwives regardless of the perceived obstacles. This is evidenced by the active promotion of programs that have been carried out by all key informants and time management tips to ensure the smooth running of the program carried out by triangulated informants. On the bureaucratic factor, the main informant stated that the SOPs was fully available and had been implemented appropriately by competent officers, although there were often problems when registering targets into the system. However, the Dinas Kesehatan Kabupaten Banyumas denied this by finding several things that were not in accordance with the SOPs through active monitoring and evaluation.

**Recommendations**

For puskesmas, they should make special fund allocations outside of the allocated funds to support the smoothness and convenience of the COVID-19 vaccination program. It should also be able to make an active plan for monitoring and evaluating the COVID-19 vaccination program so that monitoring and evaluation does not take place in one direction (through the Dinas Kesehatan Kabupaten Banyumas’s point of view).

Meanwhile, the health office should be able to make protocols/stipulations regarding the active monitoring and evaluation of the COVID-19 vaccination program, to be carried out independently by puskesmas and other COVID-19 vaccination service centers, so as to minimize bias in the assessment. It should also provide a deterrent effect for individuals who violate/do not carry out their activities according to the applicable SOPs.

**References**


