

Structural Intervention in Increasing Covid-19 Vaccination Achievements in the Elderly Group in Banaran Kulon Village, Bagor District, Nganjuk Regency

Susi Jumiani^{1*}, Ardi Bastian²

Institut Ilmu Kesehatan STRADA Indonesia

*Corresponding author: susi.santana82@gmail.com

ABSTRACT

The Covid-19 virus attacks many vulnerable groups, one of which is the elderly group. The achievement of Covid-19 vaccination in the elderly group is still low. Of the 333 elderly people who have been successfully vaccinated, only 125 have been vaccinated. The purpose of this study was to determine the effect of structural interventions given to the elderly group on increasing Covid-19 vaccination achievements. The method used is a quantitative method with Pre-experimental designs one-group pretest-posttest design. The data used is data from the Bagor Health Center as of December 30, 2021. The sampling technique uses Simple Random Sampling. The total sample of this study was 137 respondents. Based on the results of the mc nemar test, a significance value was obtained, namely, the value of $2_{obs} = 125.008$ and p-value of 0.000 with $\alpha = 0.05$. So there is a difference in willingness to be vaccinated between before the intervention and after the intervention. Structural interventions carried out in the elderly group who have not received the covid-19 vaccination can increase the achievement of the covid-19 vaccination in the elderly group so that it can accelerate the formation of herd immunity in the community.

Keywords: Covid19, Covid-19 Vaccination, Herd Immunity, Structural Intervention

INTRODUCTION

Corona virus disease 2019 which was later called Covid-19 is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-Cov-2). Based on data from the World Health Organization (WHO), Covid-19, which has been endemic since 2019, has infected more than 230 countries in the world with a cumulative total number of cases as of February 5, 2021, as many as 116,874,912 (Ministry of Health of the Republic of Indonesia, 2021).

Vaccination or immunization is a procedure for giving a disease antigen, in the form of a weakened or dead virus or bacteria, it can also be just part of a virus or bacteria. The COVID-19 vaccination aims to reduce the transmission/transmission of COVID-19, reduce morbidity and mortality due to COVID-19, achieve group immunity in the community (herd immunity) and protect the community from COVID-19 in order to remain socially and economically productive. Herd immunity can only be formed if vaccination coverage is high and evenly distributed throughout the region. Prevention efforts through the provision of vaccination programs if assessed from an economic point of view, will be much more cost-effective, when compared to treatment efforts.

In Nganjuk Regency, the Covid-19 vaccination will begin in February 2021, and health workers are the initial target for vaccination recipients. The vaccination reporting system is divided into 3 categories, namely: Teenagers (12 years old to 17 years old)

General public (ages 18 – 58 years), Elderly (age > 59 years), According to the results report as of December 30, 2021 at the Bagor Health Center, the Covid-19 vaccination achievements are as follows: Teenage category 93.19%, namely 4500 people have been vaccinated from the real target of 4,829 people, The category of the general public is 88.41 %, that is, 30,279 people have been vaccinated from the real target of 34,248 people.

Elderly category 58.74%, which is 4,708 people who have been vaccinated from the real target of 8,015 people. (In reporting, the benchmark for the percentage of achievement is vaccine dose 1).

From these data, the Elderly category occupies the lowest percentage of the other categories, namely 3,307 people who have not been vaccinated (41.26%). And of the 22 villages in the Bagor sub-district, Banarankulon Village occupies the lowest position in the Covid-19 vaccination achievement in the elderly category. Of the total number of elderly people who have not been vaccinated in Bagor district (3,307 people) in Banaran Kulon Village, there are 208 elderly people (62.46%) who have not been vaccinated from 333 real targets in Banaran Kulon Village.

METHODS

The subjects in this study were the elderly group in the village of Banaran Kulon, Bagor District, Ngunjuk Regency who had not received the covid-19 vaccination.

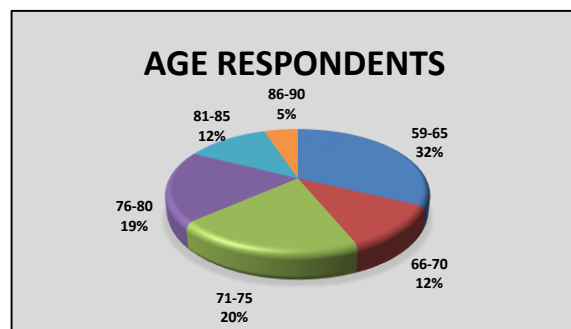
The method used is a quantitative method with Pre-experimental designs one-group pretest-posttest design. The data used is data from the Bagor Health Center as of December 30, 2021. The sampling technique uses Simple Random Sampling.

RESULT

A. Analysis of Characteristic Variables

1. Age Characteristics of Respondents

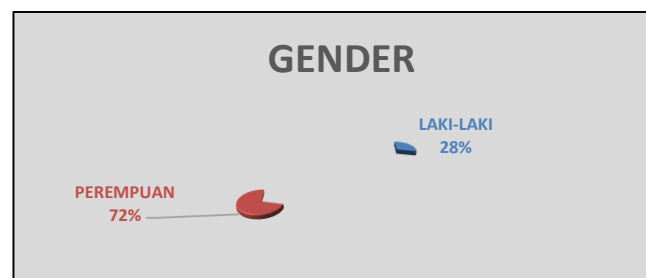
Below are the characteristics of the respondents, namely the Age of Respondents in the village of Banarankulon, Bagor District:



Picture 4.1 Characteristics of respondents based on the age of the respondents in Banarankulon village, Bagor sub-district, Ngunjuk district, which was held on 1 to 15 February 2022 with a total of 137 respondents.

Based on Figure 4.1, it is known that most of the respondents aged 59-65 years were 44 respondents (32%).

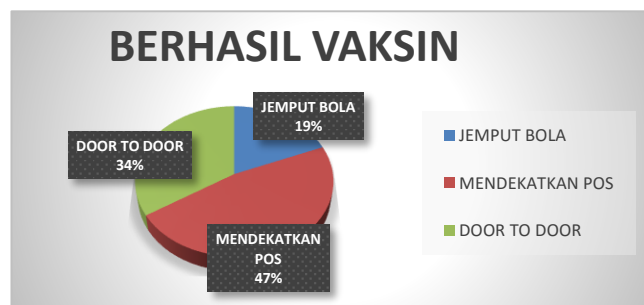
2. Gender Characteristics



Picture 4.2 Characteristics of respondents based on the gender of the respondents in the village of Banaran kulon, Bagor District, Nganjuk Regency, which was held on 1 to 15 February 2022 with a total of 137 respondents.

Based on Figure 4.2, it is known that most of the respondents are female, namely 98 respondents (72%).

3. Characteristics based on Intervention



Picture 4.2 Characteristics of respondents based on the intervention given to respondents in the village of Banarankulon, Bagor District, Nganjuk Regency which was carried out on February 1 to 15, 2022 with a total of 137 respondents.

Based on Figure 4.2, it is known that most of the respondents who were successfully vaccinated, namely the intervention Close to the Vaccination Service Post, of the 113 respondents who were vaccinated, 60 people (47%).

Based on data on the Covid-19 vaccination achievement of the Bagor Health Center in the Elderly group as of December 30, 2021 in Banarankulon village, it was found that 37.54% (125 people) had been vaccinated. This achievement figure can be said to be still low because it is still far from the predetermined target, which is 70% of the elderly have been vaccinated. The implementation of the vaccine has been carried out by the health sector but the interest of the elderly to participate in vaccination is still low.

Based on the identification, the researchers conducted a structural intervention involving 3 pillars, namely the Health Team, TNI/POLRI, and the Village Party. The interventions carried out included: providing vaccination services with pick-up and drop-off interventions, conducting vaccination services by bringing the service post closer to 4 service points, and providing vaccine services with door-to-door interventions. Of the 3 interventions that have been carried out, they can give good results that can increase the achievement of COVID-19 vaccination in the elderly group, namely 75.68% (252 people).

Prior to the intervention, 137 respondents had not been vaccinated. After the intervention, there were 127 who were willing to be vaccinated or in the sense that the vaccination achievement from 0 people became 127 people.

From the results of the study, researchers conducted a test of the results of the study by using the Mc Nemar test. The Mc Nemar test was carried out on 137 respondents and found 127 respondents who experienced changes, namely from not wanting a vaccine to wanting a vaccine, and 10 respondents not being able to get a covid-19 vaccination. As shown in the following table:

Mc NEMAR TEST
Before and after intervention

Before		After	
Don't want the vaccine	Want a Vaccine	Don't want the vaccine	Want a Vaccine
137	0	10	127

Meanwhile, based on the results of the statistical test, it shows that the value of Sig (2-tailed) = 0.000 < significant level = 0.005, then the decision is to reject H0. This means that there are differences before and after the intervention. As shown in the following table:

STATISTIC TEST	
Variable	Before and after
N	137
Exact Sig.(2 tailed)	.000 ^b
a. Mc Nemar Test	
b. Binominal distribution used	

DISCUSSION

By seeing the low achievement of Covid-19 vaccination in Banarankulon village, the researchers conducted research in the form of providing interventions. These interventions include:

A. Pick-up Interventions

Based on the results of research that has been done by researchers on 137 respondents and the results obtained there are 24 respondents who are willing to be vaccinated (19%). Of the 24 respondents, they were divided into several age groups, namely ages 59-60 years, there were 3 respondents (12.5%), Age 61-65 years, there were 5 respondents (20.83%), Age 66-70 years, there were 2 respondents (25 %), aged 71 – 75 years, there were 6 respondents (37.5%). Age 76 - 80 years there are 5 respondents (20.83%), Age 81 - 85 years there are 3 respondents (12.5%). And the respondents consisted of 8 respondents (33.33%) male respondents and 16 female respondents (66.67%).

B. Interventions Bring Vaccination Service Posts closer

This research was conducted on 113 respondents, respondents in the intervention to bring the service post closer were respondents who were not vaccinated successfully in the pick-up ball intervention. Of the 113 respondents who received the intervention closer to the service post, there were 60 respondents (47%) who were willing and passed the Covid-19 vaccination. Of the 60 respondents, they were divided into several age groups, namely 59-60 years old, there were 2 respondents (3.3%), 61-65 years old there were 14 respondents (23.33%), 66-70 years old there were 6 respondents (10%) , aged 71 – 75 years there were 12 respondents (20%). Age 76 - 80 years there are 15 respondents (25%), age 81 - 85 years there are 9 respondents (15%) and age 86 - 90 years there are 2 respondents (3.33%). And the respondents consisted of 9 respondents (15%), and 51 respondents (85%).

The intervention to bring service posts closer is to open posts at points where many targets have not yet received the vaccine. In the village of Banarankulon, it is scheduled to open a service post at the house of the RW and the head of the hamlet, namely there are 4 service posts, scheduled for 8, 9, 10, 11 February 2022. Prior to the implementation of cadres and RTs,

they distributed invitations for the implementation of vaccines to vaccine targets that had not yet been implemented. received vaccinations and to the target whose time was dose 2 and dose 3. Of the 880 invitations distributed, 113 targets were recorded as respondents. After 4 days of vaccination at 4 service post points, the researchers found 60 respondents who had successfully received vaccinations.

For the community, some of the recipients of access, the vaccination service facilities that are close make it easier for them to access so that they don't have to leave a lot of business because they are wasting their time when they are anti-vaccination services. According to researchers, the intervention of bringing this service post closer is an effective strategy after the target ball pick-up strategy that has been carried out previously, with the hope that the target will feel more comfortable because the vaccine is carried out in their closest environment. And after being evaluated, the elderly are happy with this close post so they don't get tired of long queues. Bringing this service post closer, each post can cover around RT so that the service can be maximized.

C. Door to Door Interventions

From the results of research that has been done by researchers that door to door intervention was carried out on 53 respondents. Respondents in this door to door intervention are respondents who have not been successfully vaccinated from the ball pick-up intervention and the intervention to bring the service post closer. Of the 53 respondents who received door-to-door intervention, 43 respondents (81.1%) passed the Covid-19 vaccination and 10 respondents (18.9%) failed to get the vaccine because they did not pass the Health screening, namely 8 respondents and those who totally rejected that is 2 respondents. Of the 53 respondents divided into several age groups, namely age 59 - 60 years, there are 5 respondents (9.43%), Age 61 - 65 years there are 15 respondents (28.3%), Age 66 - 70 years there are 8 respondents (15.09%), age 71-75 years there are 9 respondents (16.98%), age 76-80 years there are 6 respondents (11.32%), aged 81-85 years there are 6 respondents (11.32%) and age 86 - 90 years there are 4 respondents (7.55%). And the respondents consisted of 21 respondents (39.62%), and 32 respondents (60.38%).

Door to door intervention is a krgistn where officers visit the target from house to house, the priority is the elderly and those who have mobility disorders. This intervention was carried out on February 15, 2022 starting at 08.00 from Banaran hamlet and continued to Padangan hamlet and finished at 13.30. The door-to-door officers consist of health officers, assistant health officers, village officials, heads of RT/RW, health cadres, Babhinkantibmas, and Babhinsa. Officers conduct screening at the patient's home and if they pass the screening and sign the approval on the screening sheet, the vaccination will be given directly at the location. If someone refuses to eat the target or the family signs the refusal statement provided by the officer. Of the 95 targets who were visited at home, there were 53 respondents with the results that 43 respondents were successfully vaccinated, 8 respondents did not pass the health screening because of hypertension, 5 respondents, 2 respondents had a history of epileptic seizures and 2 respondents had a history of asthma. And there are 2 respondents who refuse the covid-19 vaccination because it is forbidden by their child and because they are afraid.

The results of the study show that this door to door strategy is indeed very effective in increasing interest in vaccines from targets that previously they were reluctant to vaccinate for various reasons. The community believes that being visited at home to get services is very helpful, especially for those who have difficulty mobilizing but still hope to get vaccination services. This strategy is very effective when applied in a program that requires all targets to be covered in the program.

Researchers can prove that the 3 structural interventions that were carried out were able to change the achievement of covid-19 vaccination in the elderly group, namely from the pre-intervention figure of 37.54% to 75.68% after the intervention. This achievement figure has

met the target that must be achieved. So that the conditions for the formation of herd immunity can be achieved.

CONCLUSION

Identification was carried out, there were 137 elderly people in Banarankulon village who were not willing to be vaccinated against Covid-19 for various reasons or in other words the achievement of vaccination in respondents was still 0. And from 137 respondents before structural intervention was carried out.

After the structural intervention was carried out, there was an extraordinary change in the achievement of the covid-19 vaccination in the elderly group in the village of Banarankulon. Of the interventions carried out, namely: The ball pick-up intervention got 24 respondents (17.52%) who passed the covid-19 vaccine from 137 respondents. The intervention to bring the vaccine service post closer to 4 points of the service post got 60 respondents (43.80%) who passed the covid-19 vaccine from 137 respondents.

The door-to-door intervention for vaccination services found 53 respondents (31.39%) passed the covid-19 vaccine from 137 respondents. After the study, there were differences in the achievements of the covid-19 vaccine in the elderly group before and after structural intervention. Namely, out of 137 elderly people who initially did not want the vaccine, 127 elderly people had been successfully vaccinated against COVID-19. Thus, the structural intervention that has been carried out by researchers is able to change the achievement of covid-19 vaccination in the elderly group in Banarankulon village, namely from the vaccine achievement rate before the intervention of 37.54% to 75.68% after the intervention.

REFERENCES

- Ali Faried. 2011. Teori dan Konsep Administrasi. Jakarta: Rajawali Pers.
- Epiphania Agnes. D.B (2018) Gambaran Tingkat Kecemasan Pada Lansia Dengan Hipertensi Di Puskesmas Nita Kabupaten Sikka Ntt
- Fridalni, N., & Minropa, A. (2020). Faktor Yang Berhubungan Dengan Tingkat Kecemasan Lansia Pada Masa Pandemi Covid 19. 12(4), 10.
- Ibrahim, Amin. (2013). Pokok-Pokok Administrasi Publik dan Implementasinya. Bandung: PT Refika Aditama.
- Intervensi untuk Meningkatkan Cakupan Imunisasi Anak di Populasi yang Sulit Dijangkau
Jurnal Ilmiah Mappadising Volume 3 Nomor 1 Maret 2021 ISSN: 2686-3324
<https://covid19.go.id> Komite Penanganan Covid 19 Dan Pemulihan Ekonomi Nasional diupdate terakhir 29-04-2021
- Link Jurnal: <http://ijphs.iaescore.com/index.php/IJPHS/article/view/20875/13392>
- Marselus Yollan Lokabora, Noora Fithriana . (2018). Inovasi Jemput Bola Administrasi Kependudukan "Jebol Anduk" dalam Meningkatkan Kualitas Pelayanan Publik. JISIP : Jurnal Ilmu Sosial dan Ilmu Politik , 64-69.
- Peraturan menteri kesehatan republik indonesia nomor 18 tahun 2021 tentang perubahan atas peraturan menteri kesehatan nomor 10 tahun 2021 tentang pelaksanaan vaksinasi dalam rangka penanggulangan pandemi corona virus disease 2019 (covid-19)
- Ratminto , Dan Atik Septi Winarsih . 2012 . Manajemen Pelayanan. Yogyakarta: Pustaka Pelajar
- Strauss, Anselm & Juliet Corbin, (2003). Dasar-dasar Penelitian Kualitatif. Yogyakarta: PustakaPelajar.

- Sugiyono. (2009). Metode Penelitian Kuantitatif dan Kualitatif. Bandung: CV.Alfabeta.
- Hardiansyah. (2011). Kualitas Pelayanan Publik : Konsep, Dimensi, Indikator dan Implementasinya. Yogyakarta: Penerbit Gava Media.
- Suparlan, Parsudi. (1994). Metode Penelitian Kualitatif. Jakarta: Program Kajian Wilayah Amerika. Depok: Universitas Indonesia
- World Health Organization. Naming the corona virus disease (COVID-19) and the virus that causes it. 2020.
- Yuliana, Y. (2020). Corona virus diseases(Covid-19): Sebuah tinjauan literatur. Wellness And Healthy Magazine, 2(1),187±192