



Factors Affecting Elderly Doubt in Receiving Vaccines COVID-19 in the New Normal Era in Maccini Village, Makassar District

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Abstract

Currently, Indonesia is in the process of transitioning from a pandemic to an endemic one. One of the steps to break the chain of transmission of COVID-19 is to implement a COVID-19 vaccination program. Vaccination was started in Indonesia on January 13, 2021 by President Joko Widodo, then followed by vaccination of priority groups such as health workers, the elderly and all Indonesian people. There are still many who doubt that vaccines can inhibit COVID-19, one of which is the elderly group. The purpose of the study was to determine the factors that influence the doubts of the elderly in receiving the COVID-19 vaccine in the new normal era in Maccini Village, Makassar District. This research is a descriptive study with a purposive sampling technique, then to obtain research data using an offline questionnaire consisting of 29 questions. Data analysis is descriptive analysis using Ms. excel. The seven factors that influence the elderly's doubts, the highest factor with a value of 71.2% is the past history factor and the lowest factor with a value of 23.5% is geographical barriers and costs. The average of the seven factors is 39.8% and is included in the less category. The elderly in Maccini Village, refused to be vaccinated against COVID-19, even from 95 respondents, none of them were willing to be vaccinated against COVID-19, with the highest reason being that with a score of 62.1%, having comorbidities was prohibited by doctors.

Keywords: Covid-19, Elderly, Doubts, Vaccines

Key Messages:

- Misinformation about vaccines, safety flaws, fear of side effects, fear of wrong/ fake vaccines, government schemes, and other issues all point to vaccine hesitancy. Investigation has further revealed that it appears to be a safety vaccine is an important factor in increasing the desire to receive vaccine. Public willingness to vaccinate is greatly influenced by knowledge of the COVID-19 vaccine.

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1. Introduction

The Corona Virus Disease 2019 (COVID-19) was declared a pandemic in March 2020. This pandemic has spread throughout the world with countless infected individuals and countless infected individuals. Currently, one of the conversations that is currently being discussed is dealing with corona virus contamination through corona virus vaccination (1). Corona virus vaccination may be less protective against disease in older people than in younger adults (2). What's more, the elderly has many co-morbidities, which increase the risk of contracting them

during a pandemic. Elderly is a vulnerable age to the severity of Covid-19 infection and is the main focus for enhancing their immunity (3).

However, the elderly who are willing to be vaccinated are still far from the target, saying that only 2.5 million elderly people nationally have been injected with the Covid-19 vaccine, 13 January 2021 (RI Ministry of Health and WHO, 2020). Misinformation about vaccines, lack of safety, fear of side effects, wrong/fake vaccines, government schemes, and other issues all point to vaccine hesitancy. Further investigations have revealed that it appears that vaccine safety is an important factor in increasing the desire to receive the vaccine (4).

Vaccine hesitancy could stifle demand, so efforts are needed to combat it. Based on the explanation above, it appears that the factors that affect vaccination coverage can be seen from two perspectives, namely the perspective of health service providers and people's attitudes about vaccines (5). This is due to many factors, including misinformation about COVID-19 that has spread throughout the media and refers to individuals who may refuse, delay, or are unsure of some vaccines, which is a major challenge to the success of the vaccination program. The government must take steps to involve social media to provide correct and accurate information to reduce concerns about vaccine-related issues such as safety, effectiveness, manufacturing process, method of administration and side effects of the COVID-19 vaccine (4). The study aims to determine the factors that influence the doubts of the elderly in receiving the COVID-19 vaccine in the new normal era in Maccini Village, Makassar District.

2. Methods

This research is a descriptive type research with a cross-sectional design which aims to determine the factors that influence the elderly's hesitation in receiving the COVID-19 vaccine in the new normal era in Maccini Village, Makassar District. The population in this study were 130 elderly people in Maccini Village, Makassar District. Determining the number of samples in this study used the Isaac & Michael table, where a sample of 95 was obtained with an error rate of 5%. The sampling technique in this study was purposive sampling, namely by selecting subjects with specific criteria determined by the researcher. Data collection was carried out by distributing offline questionnaires to the elderly in Maccini Village, Makassar District who had fulfilled the sample criteria. The questionnaires that were distributed had been tested for validation beforehand to 30 elderly people in other sub-districts consisting of 29 questions. This study used an offline questionnaire with 7 sections on factors that influence doubts about being vaccinated, consisting of 29 questions with a score of yes, a score of 1, and a score of no score of 0. The score obtained is used to determine the category, which is based on the percentage value, namely the category good if the value is > 76% - 100%, enough if the value is 60-75%, and less if the value is <60% (6). Data analysis is descriptive analysis using Ms. excel.

3. Results

Table 1. Distribution of Characteristics by Age

Characteristics	n	%
Age (Years)		
60-70	60	63.1
71-80	32	33.7
81-90	3	3.2
Sex		
Female	63	66.3
Male	32	33.7
Education		
Elementary School	38	40.0
Junior High School	25	26.3
Senior High School	18	18.9
Bachelor	14	14.7
Total	95	100

Based on table 1, the age of the respondents was 60-70 years, namely 63.1% with a total of 60 respondents, ages 71-80 years, namely 33.7% with a total of 32 respondents, and ages 81-90 years, namely 3.2% with a total

respondents 3 people. The sex of the female respondents was 66.3% with 63 respondents, and 33.7% for males with 32 respondents. The last education of elementary school respondents was 40.0% with 38 respondents, junior high school was 26.3% with 25 respondents, high school was 18.9% with 18 respondents, and bachelor degree was 14.7%. with the number of respondents 14 people.

Table 2. Average Results of Data Analysis Answers to Factors Affecting Doubts Elderly in Maccini Village, Makassar District Against the COVID-19 Vaccine

No	Factors	%	Category
1	Communication and Media Environment	45,5 %	Less
2	Role models/figures who agree or disagree with vaccination	47,0 %	Less
3	Past History	71,2 %	Enough
4	Religion/ Culture/ Gender/ Socioeconomic	23,3 %	Less
5	Influence of Politics/ Policy	38,5 %	Less
6	Geographical Barriers and Cost	23,5 %	Less
7	Pharmaceutical Industry	50,9 %	Less
Averages		39,8 %	Less

Source: Primary data, 2022

Based on table 2, the first factor is the communication and media environment 45.5% are in the less category, the second factor is role models/figures who agree or disagree with vaccination 47.0% are in the less category, the third factor is past history 71.2% is included in sufficient category, the fourth factor of religion/culture/gender/social economy 23.3% is in the less category, the fifth factor is political influence/policy 38.5% is in the less category, the sixth factor is geographical barriers and costs 23.5% is included in the category lacking, and the seventh factor in the pharmaceutical industry is 50.9% in the less category. With a total average of 39.8% and included in the less category. Based on the respondents' answers regarding the desire to be vaccinated, information was obtained that 100% of respondents answered that 95 respondents were not willing to be vaccinated against COVID-19.

Table 3. Distribution of Respondents' Answers Regarding What Is Your Main Reason Not Willing to be vaccinated against COVID-19

No	Answer	n	%
1	Worried about contracting COVID-19	8	8.4
2	It's old, it doesn't go anywhere anymore, it's just at home	16	16.8
3	Fear of dying from COVID-19	5	5.3
4	Worried about the side effects of the COVID-19 vaccine	7	7.4
5	It is forbidden to have co-morbidities with the doctor	59	62.1

Based on table 3, answers were obtained with the first reason being worried about contracting COVID-19 8.4% with a total of 8 respondents, the second being old and not going anywhere else just at home 16.8% with a total of 16 respondents, the third was afraid of dying from COVID -19 5.3% with a total of 5 respondents, the fourth is worried about the side effects of the COVID-19 vaccine 7.4% with a total of 7 respondents, and the fifth has co-morbidities (comorbid) prohibited by a doctor 62.1% with a total of 59 respondents person.

4. Discussion

Based on the research that has been done, the first factor is the communication and media environment. The results obtained by the average respondent's answer were 45.5%, with the less category. The majority of respondents did not believe in the ineffectiveness and unsafe of the COVID-19 vaccine circulating in the community, namely 64.2% (61 respondents). Furthermore, the research results from the news heard/read in electronic media and the public who did not consider getting vaccinated against COVID-19 with 50.5% (48 respondents) and related statements made the consideration of being willing to be vaccinated by 49.5% (47 respondents). Then in this study, in terms of sharing information on social media, most were not active in spreading/sharing information regarding the ineffectiveness of the COVID-19 vaccine with statements of 83.2%

(79 respondents) and those who had disseminated information by 16.8% (16 respondents). This result is supported by survey research which shows that a total of around 65% of respondents do not believe social media is an effective means of spreading information about the safety and effectiveness of the COVID-19 vaccine due to the fact that there are problems from the rapid dissemination of information, because news inaccurate and unclear sources as well as hoaxes about the COVID-19 vaccine (7). Then, the results of research on vaccination recommendations for their families show that the majority of respondents do not recommend 50.5% (48 respondents) because of the controversy surrounding vaccination. The debate regarding the COVID-19 pandemic that spreads through the mass media is still unresolved in society, such as preventing the spread of the COVID-19 virus in Indonesia (8).

Based on the results of the study, the second factor is role models/figures who agree or disagree with vaccination. The average result of respondents' answers was 47.0% in the less category and the influence of figures who were considered able to support the COVID-19 vaccine with the majority of respondents choosing, 65.3% (62 respondents) said there were no influential figures around them to support the COVID vaccine -19. Most people are not influenced by community leaders such as health workers and the government because there are many conspiracy theories related to political issues and policymakers do not intervene to resolve them. This is consistent with the strategic role of health workers in the COVID-19 vaccination program, namely to build public confidence in disease prevention through vaccination support (7).

The third factor is past history which has an average of 71.2% in the sufficient category so that it can be shown that most have experiences that make them hesitate to be vaccinated and there are experiences of people around them that inspire them to also vaccinate, even though most of the respondents felt that the people around them needed the COVID-19 vaccine. According to the Ministry of Health, as part of disease control efforts, Indonesia has a long history of vaccinations that can always be destroyed. In addition, it is known that vaccination refusals often occur due to misunderstanding of the vaccination information they receive (9).

Results The fourth factor is the influence of religion/culture/gender/socioeconomic having an average of 23.3% in the less category. In giving vaccinations in terms of gender, respondents believed that vaccination was more important for men than for women. There is the same study that shows that there is no relationship between gender and vaccination (10). Then there are serious concerns about the halal nature of vaccines. The results of this study, the majority did not refuse vaccination because they considered the vaccine not halal 84.2% (80 respondents), the Central MUI Fatwa Commission issued a fatwa regarding the halal and sanctity of the Sinovac Life Sciences Co. COVID-19 Ltd vaccine. Until a final decision is made, Muslims will be allowed to use the vaccine as long as it is confirmed to be safe by trusted and competent experts. This decision was stated in the MUI Fatwa No. 02 of 2021 (11).

The fifth factor data on political influence/policy averages 38.5% in the less category. It can be seen that the government can be trusted as a policy maker to provide the best quality and safe vaccines for use with a yield of 52.6% (50 respondents). According to the results of the National Survey that 70% of respondents generally believe/very sure that the government will make the best decisions regarding the vaccination process, and around 56% of respondents believe/strongly believe that the government provides the COVID-19 vaccine safely, and 23% do not believe (12).

In research on the reasons why the elderly do not want to receive the COVID-19 vaccine, based on the results of the study 95 people (100%) respondents were not willing to be vaccinated against COVID-19 for the first reason with 8.4% (8 respondents) worried about being infected with COVID-19. As a preventive measure for COVID-19, family functions are very important. If the family understands and carries out their duties effectively, it will be very useful in conquering and preventing the spread of COVID-19 (13). The second reason is that 16.8% (16 respondents) are old, they don't go anywhere anymore, they just stay at home. But on the other hand, several informants had to be threatened first to comply with the vaccination activities. Maybe the elderly think they are old and have a disease, so they should stay at home and continue taking medication regularly (14). The third reason with 5.3% (5 respondents) is fear of dying from COVID-19. However, several informants stated that they were still worried and afraid of being injected with the vaccine after seeing a neighbor in their neighborhood experience side effects after being vaccinated. It is clear from this statement that socialization is related to the impact of the body's reaction in processing antibodies, and often causes some of these symptoms that have not reached the person who provides the information (14).

The fourth reason with 7.4% (7 respondents) is worried about the side effects of the COVID-19 vaccine. People with congenital diseases are often more reluctant to get vaccinated because they are worried about the side effects they will experience because the body cannot tolerate the pain from the side effects of the vaccine. Therefore, those who have a history of illness are advised to maintain their health (15). The fifth reason with 62.1% (59 respondents) having co-morbidities (comorbid) is forbidden to talk to doctors. The same research also shows that the elderly is at higher risk of contracting COVID-19, and if they catch it, they are more likely to be at risk of dying. The elderly prefer alternative or herbal treatments such as lemongrass water or ginger because they believe these alternative treatments are more effective, and the elderly have expressed their hope that the COVID-19 pandemic will end soon, and not worsen their situation (16).

5. Conclusion

Based on the results of the study, it was shown that of the seven factors that influenced the doubts of the elderly, the highest factor with a value of 71.2% was past history and the lowest factor with a value of 23.5% was geographic and cost barriers. With an average of the seven factors, namely 39.8%, it is included in the less category. The elderly in Maccini Village, Makassar District refused to be vaccinated against COVID-19 even out of 95 respondents who were not willing to be vaccinated against COVID-19 with the highest reason being that with a score of 62.1% having comorbid diseases was prohibited from seeing a doctor.

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References

1. Malik AA, McFadden SM, Elharake J, Omer SB. Determinants of COVID-19 vaccine acceptance in the US. *eClinicalMedicine* [Internet]. 2020 Sep 1 [cited 2023 Apr 10];26. Available from: [https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370\(20\)30239-X/fulltext](https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(20)30239-X/fulltext)
2. Biasio LR, Bonaccorsi G, Lorini C, Pecorelli S. Assessing COVID-19 vaccine literacy: a preliminary online survey. *Hum Vaccin Immunother*. 2021 May 4;17(5):1304–12.
3. Banerjee D. The impact of Covid-19 pandemic on elderly mental health. *Int J Geriatr Psychiatry*. 2020 Dec;35(12):1466–7.
4. Kumari A, Ranjan P, Chopra S, Kaur D, Kaur T, Kalanidhi KB, et al. What Indians Think of the COVID-19 vaccine: A qualitative study comprising focus group discussions and thematic analysis. *Diabetes Metab Syndr*. 2021;15(3):679–82.
5. Saida S, Zulfadhli M, Jurais M. Analisis Faktor-Faktor Yang Mempengaruhi Vaccine hesitancy (Keragu-Raguan Vaksin) Pada Mahasiswa Di Era Pandemi Covid-19. *Preventif: Jurnal Kesehatan Masyarakat*. 2022 Mar 29;13(1):144–54.
6. Arikunto. *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta; 2010.
7. World Health Organization, Fund (UNICEF) UNC. The role of community health workers in COVID-19 vaccination: implementation support guide, 26 April 2021 [Internet]. World Health Organization; 2021 [cited 2023 Apr 10]. Report No.: WHO/2019-nCoV/NDVP/CHWs_role/2021.1. Available from: <https://apps.who.int/iris/handle/10665/340986>
8. Rachman FF, Pramana S. Analisis Sentimen Pro dan Kontra Masyarakat Indonesia tentang Vaksin COVID-19 pada Media Sosial Twitter. *Indonesian of Health Information Management Journal (INOHIM)*. 2020 Dec 30;8(2):100–9.
9. Sulistyani P, Shaluhiyah Z, Cahyo K. Gambaran Penolakan Masyarakat Terhadap Imunisasi Dasar Lengkap Bagi Balita (Studi Di Kelurahan Sendangmulyo, Kecamatan Tembalang, Kota Semarang). *Jurnal Kesehatan Masyarakat*. 2017 Oct 1;5(5):1081–91.
10. Heriansyah E, Udiyono A, Martini M, Saraswati LD. Faktor-Faktor yang Berhubungan dengan Ketepatan Waktu Vaksinasi Meningitis pada Jamaah Umrah (Studi di Kota Bengkulu). *Jurnal Epidemiologi Kesehatan Komunitas*.

2020 Aug 30;5(2):119–26.

11. Siddik IR. Kehalalan Vaksin Covid-19 Produksi Sinovac dalam Fatwa MUI dan Implementasi Vaksinasinya Pada Tenaga Kesehatan di Puskesmas Tanjung Morawa, Deli Serdang (Perspektif Qawaidh Fiqhiyyah). *Al-Mashlahah Jurnal Hukum Islam dan Pranata Sosial*. 2021 May 1;9(01):59–83.
12. Saiful Mujani. Kepercayaan Publik Nasional pada Vaksin dan Vaksinasi Covid-19 [Internet]. SaifulMujani. 2020 [cited 2023 Apr 10]. Available from: <https://saifulmujani.com/kepercayaan-publik-nasional-pada-vaksin-dan-vaksinasi-covid-19/>
13. Febriyanti -, Dr. Asti Melani Astari, Dr. Heni Dwi Windarwati. Studi Fenomenologi Pengalaman Psikologis Lansia Dengan Komorbid Di Masa Pandemi Covid-19 [Internet] [Magister]. Universitas Brawijaya; 2021 [cited 2023 Apr 10]. Available from: <http://repository.ub.ac.id/id/eprint/187767/>
14. Sumarni R, Sutantri S. The perception and participation of the elderly in the COVID-19 vaccination program: Literature review. *International journal of health sciences*. 2022 Apr 5;259–66.
15. Wang J, Jing R, Lai X, Zhang H, Lyu Y, Knoll MD, et al. Acceptance of COVID-19 Vaccination during the COVID-19 Pandemic in China. *Vaccines*. 2020 Sep;8(3):482.
16. Petretto DR, Pili R. Ageing and COVID-19: What is the Role for Elderly People? *Geriatrics (Basel)*. 2020 Apr 26;5(2):25.