

FACTORS ANALYSIS OF COMMUNITY WILLINGNESS TO FOLLOW THE COVID-19 VACCINATION PROGRAM BASED ON THEORY OF HEALTH BELIEF MODEL

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<i>ARTICLE INFORMATION</i>	<i>ABSTRACT</i>
<p><i>*Corresponding Author</i> Ika Setiani Kristy E-mail: sIt_ika@stikespantirapih.ac.id</p> <p>Keywords: Health Belief Model; COVID-19; Vaccination</p>	<p><i>As an effort to control the spread of corona virus with the hope of forming community immunity or heard Indonesia, Indonesia has promoted a COVID-19 vaccination program for the entire community. The Special Region of Yogyakarta Province is one of the provinces that implements vaccination programs intensively for the community with a high level of community willingness to participate in this vaccination program. The willingness to participate in this vaccination program is a form of a person's behavior towards the health problems faced, and this can be seen with the nursing theory, namely the Health Belief Model which assesses a person's perception to make behavioral changes following the vaccination program. The purpose of the study is to analyze the factors in the Health Belief Model nursing theory on people's willingness to participate in the COVID-19 vaccination program. The research method is quantitative with a sample of 92 respondents, the total population of Dusun Sumberan who have been vaccinated against COVID-19 doses 1 and 2. The results show that people's willingness to participate in the COVID-19 vaccination program is influenced by perceptions of the potential severity of COVID-19 disease ($p = 0.73$), and the benefit factor of receiving COVID-19 vaccination ($p = 0.70$). Meanwhile, the factors that do not affect the community's willingness are the susceptibility or ease of contracting COVID-19 ($p = 0.50$), the obstacle factor in participating in the vaccination program ($p = 0.50$), and the motivational factor in participating in the vaccination program ($p = 0.50$). Conclusion: The Health Belief Model is a theory that can be the base to influence people to be willing to participate in the COVID-19 vaccination program. These findings can be used to provide education to the public about the importance of participating in the vaccination program, and reduce the public doubts about COVID-19, therefore vaccine coverage increases and the herd immunity occurs in Indonesia.</i></p>

INTRODUCTION

After being affected by COVID-19, Indonesia has tried to carry out a vaccination program to handle the pandemic. The vaccination program is listed in Presidential Regulation No. 99 of 2020 concerning the Procurement of Vaccines and the COVID-19 Vaccination Process. Referring to the Presidential Regulation, the government takes extraordinary steps and special arrangements. This Presidential Regulation becomes the legal basis for vaccine procurement, including the vaccination program. The government involves various sectors such as the Ministry of Health, the Provincial Health Office, and the District/City Health Office, health workers in Puskesmas, and Public Hospitals, including the Military/Police Hospital (Tim Komunikasi Komite Penanganan Corona Virus Disease 2019 (COVID-19-19) dan Pemulihan Ekonomi Nasional, 2020).

Indonesia has met the vaccination target of up to 60% of the total population as recommended by the World Health Organization (WHO). With the 4th largest population in the world (> 278 million people), the percentage of national complete vaccination coverage has to be increased. As of August 15, 2022, at 18.00, 86 per 100 target population of vaccination have received 1 dose. Vaccination targets are 234,666,020 covering health workers,

the elderly, public officials, vulnerable communities, and the general public. The first dose of vaccination in D.I Yogyakarta Province covered 101.9% or 3,242,663 people, while the second dose reached 94.77% or 3,015,054 people. The booster vaccination or third vaccination in this province has reached 35.99% or reached 1,144,844 people (Kementerian Kesehatan RI, 2022).

The willingness to participate in the COVID-19 Vaccination program is influenced by some factors such as knowledge, attitudes, and perceptions (Susilawati, Silitonga, & Zulfendri, 2021). In the nursing theory, especially the Health Belief Model, this willingness to participate in the vaccination program can also be seen from five aspects covering the potential severity of COVID-19 disease, the benefits of receiving a COVID-19 vaccination, susceptibility or ease of contracting COVID-19, barriers to participating in the vaccination program, and motivation to participate in the vaccination program. Based on the explanation above, this research aims to identify factors influencing people to participate in the COVID-19 vaccine program.

METHOD

This research used a cross-sectional quantitative method. It was conducted in Sumberan Village, Kasihan Sub-district,

Bantul District, Yogyakarta. This research was carried out from September 2021 to January 2022. The determination of the sample used the total sampling technique and obtained 92 respondents. Data were collected by distributing questionnaires in the form of a google form link to the

WhatsApp application group in Sumberan village RT.09 with the coordination of the head of RT.09. Data were processed using the KMO analysis and Bartlett's Test. Factor analysis is considered to be related if the KMO value ranges from 0.6 to 1.0.

RESULTS

Tabel 1. Demography data of respondents

Demography		
	f	%
Male	34	37
Female	58	63
Children (6-11 years)	11	12
Young adult to elderly (18-60 years and above)	81	88

source: primary data, 2022

Tabel 2. Health Belief Model (HBM) Factor (n=92)

Factors	Health Belief Model (HBM)	
	f	%
Perceived severity of COVID-19		p = 0,73
Infected with covid-19		0.679
Child exposed to covid-19		0.699
Parents exposed to covid-19		0.823
Living in a covid-19 environment		0.797
Perceived benefits of receiving COVID-19 Vaccination		p = 0.70
Vaccines protect against COVID-19 infection		0.749
Vaccines protect others who have not received vaccines		0.688
Can live a new normal life		0.696
Perceived susceptibility to contracting COVID-19		p = 0.50
Can spread viruses to others		0,500
Children and parents are vulnerable to COVID-19		0,500
Perceived barriers to participating in the vaccination programs		p = 0.50
Worried about the bad effects of the covid-19 vaccine		0.500
News about the effects of vaccination on social media		0.500
Motivation to participate in the vaccination program,		p = 0.50
Suggestions from friends		0.500
Community leaders (Head of RT, Posyandu cadres, religious leaders)		0.500

The HBM theory explains a person's behavior depends on the person's perception which can be seen from five aspects such as the perceived severity of the disease, the perceived vulnerability to disease, the perceived benefits of the preventive action taken, and the barriers to taking the action. The COVID-19 vaccination organized by the government aims to save millions of lives. The results of this research showed that the HBM factors covered the perceived severity of COVID-19 influence the community to participate in the COVID-19 vaccine program, for

DISCUSSION

The COVID-19 vaccination helps protect people by creating an antibody response in potentially serious COVID-19 or post-COVID-19 conditions. The perceived benefits of receiving a COVID-19 vaccination are reducing the risk of infection, helping the immune system fight the virus if exposed, and reducing the chances of getting the disease. People participating in the COVID-19 vaccine program because of the benefits such as vaccines can protect against COVID-19 infection (0.749%), vaccines protect others who have not received the vaccine (0.688%) and can lead a new normal life (0.696%). Besides, Jakarta Smart City (2021) reported that the COVID-19 vaccine

example, the potential for infected with COVID-19 (0.679%), children exposed to COVID-19 (0.699%), parents exposed to COVID-19 (0.823) and living in a COVID-19 environment (0.797). This result is in line with previous research by the University of Maryland in Widyawati (2021) concerning the perceived severity due to vaccine administration from January to March 2021. A total of 80.8% are willing to receive the COVID-19 vaccine because they want to protect themselves and their families.

provides many benefits such as preventing the spread of COVID-19, helping protect the people around, ending the pandemic as well as protecting future generations. Based on the article of the Government of Canada (2021) vaccination shows other benefits such as being effective in preventing disease severity, hospitalization, and death. This is in line with Shmueli (2021) that the benefits of receiving the vaccine are reducing susceptibility to infection and preventing side effects obtained from COVID-19 infection. Vaccines also work to reduce the risk of death if exposed to COVID-19, especially for people with a history of disease complications.

People with a history of comorbid diseases and the elderly are vulnerable to

transmission of COVID-19. In D.I Yogyakarta Province, 86 per 100 target population of vaccination have received 1 dose, or a total of 234,666,020 people. The results of this research are based on the HBM factor, the perceived susceptibility of COVID-19 influence people to participate in the COVID-19 vaccine program such as spreading the virus to other people (0.500%) and children and parents are susceptible to COVID-19 (0.500%). Plos One Collection Antiviral innate immunity by Mohamed, et al (2021) stated that about 55.9% of people can feel vulnerable to transmitting the virus to others and 30% of respondents feel vulnerable to severe COVID-19 infection which affects the willingness to get the vaccination.

Health Belief Model (HBM) factors, especially barriers to participating in the vaccination program influence people participating in the COVID-19 vaccine program such as worrying about the adverse effects of the COVID-19 vaccine (0.50%) and news about the effect of vaccination on social media or incorrect information about vaccines (0.500%). It is in line with Mubarak et al., (2022) that the most common reason for those who do not want to be vaccinated is their concern about the side effects of the vaccine (72.2%), the assumption that washing hands properly can break the chain of transmission

(40.7%), and presumption of disbelief that vaccines will stop infection (12.9%).

The pandemic has raised awareness of the importance of vaccines and becomes a motivation to receive the vaccine. Health Belief Model (HBM) factors on motivational factors influence people to participate in the COVID-19 vaccine program such as suggestions from friends (0.500%) and community leaders (head of RT, posyandu cadres, religious leaders (0.500%). Hamdani, F., & Fauzia, A. (2021) stated that the involvement of community leaders, such as traditional leaders, youth leaders, and religious leaders act as health agents in socializing and educating the public about the dangers of COVID-19 and participating in the COVID-19 vaccine program. Their involvement is expected to increase public awareness of vaccination. Research by Nuffield Council on Bioethics (2021) revealed that the high rate of transmission of COVID-19 can make people aware of the importance of vaccines to protect themselves, and others and to break the chain of transmission or create new variants.

CONCLUSION

The Health Belief Model can be used to influence people to participate in the COVID-19 vaccination program. This research found two factors influencing

people's willingness to participate in the COVID-19 vaccination program, namely, the perceived severity of COVID-19 and the perceived benefits of receiving COVID-19 vaccination. Meanwhile, the perceived vulnerability to COVID-19, barriers to participating in vaccination programs, and motivation to participate in the COVID-19 vaccination program do not affect people's willingness to participate in the COVID-19 vaccination program. These findings can be used to educate the public about the importance of participating in the vaccination program and reduce public doubts about COVID-19 in order to increase coverage and form herd immunity in Indonesia.

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