

Research Paper



Effect of enabling and reinforcing factors on mother's actions in prevention of COVID-19 in Pematangsiantar city in 2023

Fikriyah Arfina Nainggolan^{1*}, R. Kintoko Rochadi², Namora Lumongga Lubis³

^{1,2,3}Master of Public Health Study Program, Faculty of Public Health, Universitas Sumatera Utara, Indonesia.

Article Info

Article History:

Received: 06 November 2022

Revised: 13 January 2023

Accepted: 21 January 2023

Published: 04 March 2023

Keywords:

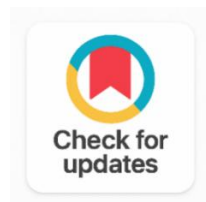
Enabling

Reinforcing

Mother's Actions

Prevention

COVID-19



ABSTRACT

Background: This research analyzes the effect of enabling and reinforcing factors on mother's actions in prevention of coronavirus disease 2019 (COVID-19) in Pematangsiantar City in 2023.

Objective: The purpose of this research is to analyze effect of enabling and reinforcing factors on mother's actions in prevention of coronavirus disease 2019 (COVID-19) in Pematangsiantar City in 2023.

Methods: This type of research is quantitative research with an analytic observational approach. Population in this study are housewives in East Siantar District, Siantar Marimbun District, and North Siantar District. Total population of housewives in the 3 districts is 22,349 people. Sampling technique used in this study is gradual cluster sampling. Sample that will be used in this study is 267 housewives who are considered to represent all housewives in 3 sub-districts in Pematangsiantar City. Data analysis in this study used bivariate analysis using chi-square test.

Results: The results of the study show that enabling factors which consist of information source has a significant effect on mother's actions in prevention of COVID-19 in Pematangsiantar City in 2023. Reinforcing factors which consist of family and influential community leaders support have a significant effect on mother's actions in prevention of COVID-19 in Pematangsiantar City in 2023.

Conclusions: Enabling factors (information source) and reinforcing factors (family and influential community leaders support) have a significant effect on mother's actions in prevention of COVID-19 in Pematangsiantar City in 2023.

Corresponding Author:

Fikriyah Arfina Nainggolan

Master of Public Health Study Program, Faculty of Public Health, Universitas Sumatera Utara, Indonesia.

Email: fikriyah.arfina@gmail.com

Copyright © 2023 The Author(s). This is an open access article distributed under the Creative Commons Attribution License, (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. INTRODUCTION

The outbreak of the coronavirus disease 2019 (COVID-19) has unprecedented consequences and is being felt around the world. This pandemic has greatly affected the entire system of life, not only in the health sector but also the labor market and the economy, including global supply chains, causing widespread business disruptions. In addition, the absence of an inadequate social protection system exacerbates the vulnerability of working families to crises. The World Health Organization reports that limited human-to-human transmission or to close contacts and health workers has been confirmed in China and other countries based on previous cases of MERS and SARS, human-to-human transmission occurs via droplets, contacts and contaminated objects, the transmission of COVID-19 is estimated to be the same. COVID-19 is a disease with a fairly high transmission rate, so it is necessary to carry out comprehensive public health protection efforts [1], [2].

Pematangsiantar City has eight sub-districts with a spread of COVID-19 numbers. Based on data on April 1, 2021, data obtained on the number of suspected cases treated 15 cases, 29 suspected cases of death, 51 confirmed cases of treatment, 937 confirmed cases of recovery, and 30 confirmed deaths [3].

During the COVID-19 pandemic, the government also drew up several regulations and appealed to the public with the aim of increasing prevention of the spread of the virus more widely. However, in some areas there are still people who do not follow these regulations and appeals. For example, starting from not following health protocols such as wearing masks and maintaining distance, holding gatherings, to continuing to travel during large scale social restrictions (PSBB). The government has now issued a new policy on the implementation of restricting community activities (PPKM). Based on existing regulations, PPKM is in accordance with the 2020 Minister of Home Affairs instructions Number 1, PPKM is a limitation of limited community activities based on cities and regencies. There are several points contained in PPKM, namely limiting office activities by implementing work from home by 75 percent and working in an office by 25 percent. Meanwhile, the implementation of teaching and learning activities is carried out in a network or online. And for restaurants eating or drinking on the premises will only be allowed 25 percent [4].

Current new normal activities in the midst of the COVID-19 pandemic are likened to two currencies, that is, on the one hand, people have to leave their homes to improve the economy, but on the other hand, there is a risk of an increase in the number of COVID-19 cases. It's as if the community has no choice, the community has no power, like it or not, the community must be ready in a situation that is currently increasingly suffocating and it is difficult to be ready to do activities in earning income at any risk. However, the government issued a policy in the form of guidelines for healthy behavior to prevent COVID-19. At present there are several references as guidelines that must be followed by the public to carry out new normal activities such as 1) preventing the spread of the virus in public transportation, 2) preventing viruses while on the move in the workplace, 3) maintaining cleanliness around the workplace, 4) after being outside they must apply health program, 5) maintain body immunity, 6) consume safe and immune-boosting food and medicines such as vitamins, 7) buy medicine and food safely, and 8) apply health program to food sellers. During the COVID-19 pandemic, you are expected to always use a mask, face shield, and be required to maintain a distance of at least one meter from other people. It is also advisable not to hold objects around unnecessarily. Strive to always carry hand sanitizer when outside the house and use gloves if needed.

Public health protection aims to prevent transmission on a large scale which can cause a burden on health care facilities. The rate of transmission of COVID-19 in the community is affected by the movement of people, interactions between humans and the gathering of many people, for this reason public health protection must be carried out by all elements in society, including the government, the business world, law enforcement officials and other components of society [1], [2].

The purpose of this research is to analyze effect of enabling and reinforcing factors on mother's actions in prevention of COVID-19 in Pematangsiantar City in 2023.

2. METHODOLOGY

This type of research is quantitative research with an analytic observational approach, namely research that only observes without providing intervention and is analyzed using a hypothesis test [5]. The research design used is a cross-sectional study, namely a research design that measures the independent variable and the dependent variable at the same time [6].

Population in this study are housewives in East Siantar District, Siantar Marimbun District, and North Siantar District. Total population of housewives in the 3 districts is 22,349 people. Sample is the subject under study and is considered to represent the entire existing population [7]. Sampling technique used in this study is gradual cluster sampling. Gradual cluster sampling is a technique by taking small groups in stages, so that in each group a random sampling is carried out with the number according to the proportion [8]. Sample that will be used in this study is 267 housewives who are considered to represent all housewives in 3 sub-districts in Pematangsiantar City.

Data analysis in this study used bivariate analysis using chi-square test. Chi-square test is a statistical hypothesis test used in contingency table analysis when the sample size is large. In simpler terms, this test is mainly used to test whether two categorical variables are independent in influencing the test statistic [9].

3. RESULTS AND DISCUSSION

3.1. General Description

Pematangsiantar City is one of the cities in North Sumatra Province, and is the second largest city after Medan City. Due to the strategic location of Pematangsiantar City, it is crossed by the Trans-Sumatra Highway. Pematangsiantar City, which is only 128 kilometers from Medan City and 52 kilometers from Parapat, is often a transit city for tourists who want to go to Lake Toba. In 2007, Regional Regulations Number 1 to 5 were issued regarding the determination of the number of sub-districts in Pematangsiantar City as many as 8 sub-districts, while the sub-districts are West Siantar District, East Siantar District, North Siantar District, South Siantar District, Siantar Sitalasari District, Siantar District, Siantar Marihat District, Siantar Marimbun District, and Siantar Martoba District [10]. Geographically, the location or location of Pematangsiantar City is at north latitude 2°53'20"-3°01'00" east longitude 99°1'00"-99°6'35" with an area or area of 79,971 square kilometers which is located above sea level 400-500 meters above sea level. The total population in 8 sub-districts based on age group in Pematangsiantar City is 268,254 people. The total population is grouped by gender, namely 132,615 men and 135,639 women [10].

3.2. Characteristics of Respondents

Respondents in this study are all mothers who are in the Pematangsiantar City area, especially those in East Siantar District, Siantar Marimbun District, and North Siantar District. The number of samples in this study are 267 people. With the characteristics of the respondents including knowledge, age, education, employment, and income. The percentage of mothers with less knowledge is 23 people (8.6%) and those with good knowledge are 244 people with a percentage (91.4%). The total age of the mother is grouped into 2, namely age <30 years as many as 49 people (18.4%) and ≥30 years as many as 218 people (81.6%).

The mother's education level is divided into 3, namely low, medium and high, so the number of mothers with low education is 17 people (6.4%), medium is 200 people (74.9%), and high is 50 people (18.7%). Mother's employment is grouped into two, namely mothers who did not work or housewives as many as 135 people (50.6%) and working mothers as many as 132 people (49.4%).

The number of mothers with low monthly income is 23 people (8.6%) and mothers with high monthly income are 244 people (91.4%).

3.3. Bivariate Analysis Using Chi-Square Test

Table 1. Information Source and Mother's Actions in Prevention of COVID-19

Information Source	Mother's Actions in Prevention of COVID-19				Total		P
	Not Enough		Good		F	%	
	F	%	F	%			
Low	13	48.1	14	51.9	27	100	p=0.000
Currently	0	0	23	100	23	100	
Good	0	0	217	100	217	100	

Table 2. Family Support and Mother's Actions in Prevention of COVID-19

Family Support	Mother's Actions in Prevention of COVID-19				Total		P
	Not Enough		Good		F	%	
	F	%	F	%			
Not Enough	3	18.8	13	81.3	16	100	p=0.008
Good	10	4	241	96	251	100	

Table 3. Influential Community Leaders Support and Mother's Actions in Prevention of COVID-19

Influential Community Leaders Support	Mother's Actions in Prevention of COVID-19				Total		P
	Not Enough		Good		F	%	
	F	%	F	%			
Not Enough	6	20.7	23	79.3	29	100	p=0.000
Good	7	2.9	231	97.1	238	100	

The results of the study show that enabling factors which consist of information source has a significant effect on mother's actions in prevention of coronavirus disease 2019 (COVID-19) in Pematangsiantar City in 2023. Reinforcing factors which consist of family and influential community leaders support have a significant effect on mother's actions in prevention of COVID-19 in Pematangsiantar City in 2023.

4. CONCLUSION

The results of the study show that enabling factors which consist of information source has a significant effect on mother's actions in prevention of coronavirus disease 2019 (COVID-19) in Pematangsiantar City in 2023. Reinforcing factors which consist of family and influential community leaders support have a significant effect on mother's actions in prevention of COVID-19 in Pematangsiantar City in 2023. From the results of this study, the suggestions for this research are:

4.1. Department of Health

For the Pematangsiantar City Health Office. Collaborating with relevant agencies such as all Public Health Center in Pematangsiantar City, sub-districts and community leaders to then collaborate regarding the current prevention of COVID-19 even though the situation is not as bad as during the COVID-19 pandemic. This can be used as a program related to COVID-19 both at the time and now, which has started to improve from the pandemic. Then you can monitor the programs that were carried out during the pandemic to prevent COVID-19. Of course, this can be seen directly by the public, because the community is already familiar with ways and behaviors to prevent COVID-19, such as still wearing masks when outside the home and habits that arise, such as washing hands and using hand sanitizer.

4.2. Society

For the people in Pematangsiantar City, especially mothers who are the main pillars in the family in terms of paying attention to the health problems of the whole family. The past pandemic has made

mothers more aware of problems and understand the importance of prevention. Of course, the behavior of the mothers who are in Pematangsiantar City has left an impression and can be applied even during a pandemic so that it is better to avoid various viruses that might return later.

Acknowledgments

The authors have no specific acknowledgments to make for this research.

Funding Information

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Author Contributions Statement

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Fikriyah Arfina Nainggolan	✓	✓	✓	✓		✓		✓	✓	✓	✓			
R. Kintoko Rochadi		✓	✓	✓	✓			✓	✓	✓	✓		✓	
Namora Lumongga Lubis	✓	✓	✓		✓	✓	✓			✓	✓	✓		

C : Conceptualization

M : Methodology

So : Software

Va : Validation

Fo : Formal analysis

I : Investigation

R : Resources

D : Data Curation

O : Writing - Original Draft

E : Writing - Review & Editing

Vi : Visualization

Su : Supervision

P : Project administration

Fu : Funding acquisition

Conflict of Interest Statement

The authors declare that there are no conflicts of interest regarding the publication of this paper.

Informed Consent

All participants were informed about the purpose of the study, and their voluntary consent was obtained prior to data collection.

Ethical Approval

Not Applicable.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.



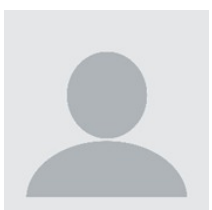
REFERENCES

- [1] Pedoman Kesiapsiagaan Menghadapi Coronavirus Disease (COVID-19). Kementerian Kesehatan Republik Indonesia, 2020.
- [2] Pedoman Pencegahan dan Pengendalian Coronavirus Disease (COVID-19). Kementerian Kesehatan Republik Indonesia, 2020.
- [3] 'Info COVID-19 Pematangsiantar', 2020. Retrieved from <http://corona.pematangsiantar.go.id/>
- [4] N. Kementerian Dalam, Pedoman Umum Menghadapi Pandemi COVID-19 bagi Pemerintah Daerah: Pencegahan, Pengendalian, Diagnosis, dan Manajemen. Kementerian Dalam Negeri Republik Indonesia, 2020.
- [5] Metode Penelitian Kuantitatif Kualitatif dan R & D. Bandung: Alfabeta, 2013.
- [6] A. Surachman, 'Panduan Gaya Penulisan Sitiran Karya Ilmiah', Ansori, vol. 2, 2016. Accessed From http://lib.ugm.ac.id/data/panduan_sitiran.pdf.
- [7] Metodologi Penelitian Kualitatif Analisis Data. Jakarta: Rajawali, 2011.

- [8] A. N. H. Hardani, H. Andriani, R. A. Fardani, J. Ustiawaty, E. F. Utami, and R. R. Istiqomah, *Metode Penelitian Kualitatif & Kuantitatif*. 2020.
- [9] E. Martha and S. Kresno, *Metodologi Penelitian Kualitatif untuk Bidang Kesehatan*. Depok: Rajawali Pers, 2017.
- [10] 'Jumlah Rumah Tangga Menurut Kecamatan', *Jumlah Rumah Tangga Menurut Kecamatan*, 2018.

How to Cite: Fikriyah Arfina Nainggolan, R. Kintoko Rochadi, Namora Lumongga Lubis. (2023). Effect of enabling and reinforcing factors on mother's actions in prevention of COVID-19 in Pematangsiantar city in 2023. *Journal Healthcare Treatment Development (JHTD)*, 3(1), 51–56. <https://doi.org/10.55529/jhtd.32.1.6>

BIOGRAPHIES OF AUTHORS

	<p>Fikriyah Arfina Nainggolan, is a Master of Public Health student at the Faculty of Public Health, Universitas Sumatera Utara (USU), Indonesia. Her academic work focuses on community health issues, including health behavior and maternal and child health. She completed her undergraduate studies at USU and has been involved in research addressing public health challenges in North Sumatra. Email: fikriyah.arfina@gmail.com</p>
	<p>R. Kintoko Rochadi, is a faculty member and researcher at the Faculty of Public Health, Universitas Sumatera Utara. His research spans a broad range of public health topics, including HIV/AIDS risk factors, tuberculosis prevention, COVID-19 community prevention, and occupational health and safety. He is an active contributor to community service initiatives and academic publications in Indonesia.</p>
	<p>Namora Lumongga Lubis, is a lecturer and researcher at the Faculty of Public Health, Universitas Sumatera Utara. Her research interests include women's health, cancer prevention-particularly breast and cervical cancer-and health promotion interventions. She has authored numerous national and international publications and is recognized for her contributions to public health science in Indonesia.</p>