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Agent of Change, Health Education Related to Decision Making and Independence of Families In Health Prevention of COVID-19

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Abstract

Covid-19 has become endemic, and it is crucial for families to be able to maintain health throughout this time. This includes being able to recognize infection signs or a family member's risk of contracting the virus and making the best medical options when a family member contracts Covid-19. When information, especially anything new, comes from someone close to them, individuals typically react quickly to it because they can observe the behavior and effect of the person delivering it. Methods: : This study uses a quasi-experimental design. The study focused on 150 families that served as change agents and gave health education to the families that had received it. Pre- and post-questionnaires on knowledge, community decision-making ability, and family independence will be used

to gauge the effectiveness of the change agent. The nonparametric Wilcoxon test or t-test will be used for this purpose. Results: p value of 0.000 is assigned to the knowledge variable, the family's decision-making capacity, and the family's independence. Conclusions: These findings suggest that the agent of change has an impact on raising awareness, decision-making skills, and family independence in the healthcare.

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Pendahuluan

COVID-19 is an endemic rather than a pandemic, it is critical for families to be able to maintain health during this time. This includes being able to recognize infection symptoms or a family member's risk of contracting the virus and making the best medical decisions when that family member contracts COVID-19. Muhlisin (2012) stated that families are also expected to constantly apply behavior in adopting health protocols, be able to build a healthy home environment free from the risk of illness, and be able to function as change agents (innovators) in their surroundings about health. According to Muhlisin (2012), families are also expected to constantly apply behavior in implementing health protocols, be able to create a healthy home environment free from the risk of illness, and be able to act as change agents (innovators) in their environment regarding health. When information, especially something new, comes from someone close to them, people typically react to it faster because they can observe the behavior and effect of the person delivering it.

If a family can effectively communicate with the community to disseminate the knowledge they have acquired about the nature, risks, and clinical symptoms of Covid-19, they

will be able to fulfill their role as change agents in their environment. People who are competent to lead change processes and who can organize, mobilize, and spread those processes are needed to accomplish this goal. According to several experts (Havelock, 1995; Rogers, 1983; Nasution, 1990; Soekanto, 1992), a change agent is a person who engages in change and influences the implementation of social change in society through social planning or planned innovation.

Empowerment of the community through the involvement of change agents who play the role of actors in organizing the community to combat the Covid-19 pandemic. It is the responsibility of these change agents to persuade individuals to adopt healthier lifestyle choices in order to mitigate the effects of this illness. As a result, the family acts as a change agent by bridging the gap between the community that needs to change and the change source.

The significance of a change agent's role and function in community development has implications for the level of competence that an agent must possess. Knowledge-based behavior will outlast ignorance-based behavior in terms of durability. According to a number of professional opinions on the subject, knowledge and skills serve as the foundation for forming or altering an individual's behavior.

After receiving health education, families' knowledge and decision-making skills regarding members of the family exposed to COVID-19 have improved, according to research by Lindawati et al. results from Tangerang City's Neglasari subdistrict (2022) demonstrate that after receiving health education, families' knowledge and capacity to deal with members who have been exposed to COVID-19 has increased

In order for families who have gained more awareness and skills in coping with the risks posed by Covid to become change agents in the environment and rid society of this virus, researchers would like to carry on with the results of this study. Making the right health decisions when a family member contracts Covid-19, adopting Covid prevention behavior, and being able to recognize infection symptoms or the likelihood of contracting the virus are all important components of the family's ability to stay healthy during the pandemic. Families are supposed to be change agents (innovators) in the health sector in their community and to be able to establish a healthy home environment free from the risk of illness.

In the end, the family will be able to make the right decision if any members of the family have Covid 19 symptoms so that they can be treated promptly, preventing more severe conditions and the virus from spreading from the family to the

wider community. All of these family capabilities will be realized if the family has sufficient knowledge about the nature, dangers, clinical symptoms, and Covid 19 infection.

Educating families about Covid-19 and its health risks is one way to increase family knowledge. The impact of health education on knowledge acquisition is explained by a number of studies, including one by Eva Dwi Damayanti (2021) [5]. Erni Suprapti and Diana Dyananingsih (2021). (6). A person's high level of knowledge will serve as their foundation when making decisions. The family's capacity for decision-making increases with health education, as evidenced by the findings of a study conducted in 2020 by Desy Ayu Wardani, Siti Mukarrohma, and Indah Maya Sari

Metode Penelitian

The design of this study was quasiexperimental. The study was conducted in one group. The population in this study were families who lived in Neglasari village, Tangerang City, amounting to 4,549 households. The samples involved in the study were samples that met the inclusion criteria, namely: Families who live in the Negalsari village and have a family card, are willing to be respondents, the head of the family is between 25 years - 50 years old, the head of the family has a minimum education of junior high school or equivalent, who have received health education from agents of change , does not have an acute or chronic infectious disease The data collection was carried out in several stages. The initial stage includes managing research permits, coordinating with the field team to distribute questionnaires, preparing research instruments, conducting research sampling, and preparing research questionnaires. The second implementation stage is forming agent of change with includes explaining and filling in the consent form and filling out the questionnaire by the respondent. Then the respondent was given a questionnaire which was a variable about questions about the respondent's knowledge and attitudes about the material of the covid 19 disease, recognizing early symptoms and knowing that they were infected and at risk of being infected with covid 19 as well as the decisions taken by the family regarding this condition. Respondents were given Health Education on COVID-19 disease material with agent of changes, discussion, and brainstorming methods. Meanwhile, to find out if someone has been infected or is at risk of being infected by using a smartphone application. Furthermore, a post-test is carried out to determine changes in the knowledge and abilities of respondents in making decisions. The data were analyzed using

univariate and bivariate analysis. Univariate analysis in this study was used to determine the frequency distribution of respondents' knowledge and ability in decision-making

This study has a quasi-experimental design. Families who acted as change agents and had received health education were the subjects of research The 4,549 households that made up the Neglasari sub-district of Tangerang City were the study's population of families. (2018, BPS) as population.

According to Gay and Diehl (1992), for experimental research the minimum sample size is 15 subjects. In this research, the samples taken were 150 families. The samples involved in the research were samples that met the inclusion criteria, namely:

- Families who live in Neglasari sub-district and have a family card

- Families who have received health education from agents of change

- Willing to be a respondent

- head of family between 25 years – 55 years

- head of family have minimum of junior high school education or equivalent

- Families who do not have acute or chronic infectious diseas

Finding respondents who satisfied the research inclusion criteria was the first step in the data collection process.

1. The formation of change agents via certificate programs and counseling training.

2. Families are gathered in a room where they are asked to sign informed consent after being briefed about their responsibilities as change agents, which include creating a community around at least five families.

3. Informed consent is required to be signed by respondents or their supported families. Next, a questionnaire with variable questions about health maintenance was given to the respondents, and changes in the respondents' knowledge and skills regarding independence in health maintenance were examined.

Both bivariate and univariate analysis were used to examine the data. The frequency distribution of the respondents' knowledge and independent abilities in maintaining their health was determined in this study using univariate analysis. The effect of the agent of change on community independence in health care was determined using bivariate analysis and the T Tets dependent statistical test, which was tested with $\alpha = 5\%$ (0.05). The difference that occurs is meaningful

(significant) if the p-value is less than 0.05.

Hasil Penelitian

1. Univariate Analysis

Table 1 below summarizes the findings of the univariate analysis of demographic variables, including age, gender, employment, and educational attainment.

Variabel	Mean	Std. Deviasi	Minimun	Maksimum
Knowledge:				
- Befor	6,83	2,038	1	10
e	9,51	0,642	8	10
- After				

Table 1. Frequency Distribution of Respondents' Demographic Characteristics.

Respondent Characteristic	n	%
Age (Year)		
25-27	24	16
28-30	15	10
31-33	13	9
34-46	20	13
37-39	6	4
40-42	18	12
43-45	15	10
46-48	7	5
49-51	32	21
Total	150	100
Gender		
Male	21	14
Female	129	86
Total	150	100
Educayion Level		
Junior High	104	69
Senior High	39	26
Bachelor	7	5
Total	150	100
occupation		
Jobless	94	63
Employee	56	37
Total	150	100

Table 1 shows that just 21% of respondents were between the ages of 49 and 51. In terms of gender, 86% of them are female. In terms of education, primary school was completed by the majority of respondents (69%). Based on the occupation category, the majority (63%) are unemployed.

Table 2. Distribution of Knowledge Levels Before and After Educating by Agent of Change

Table 2. shows that the mean score on the pre-test knowledge level is 6.83, with a standard deviation of 2.038. The lowest possible score on the knowledge level is 1, and the highest possible score is 10. In the meantime, the post-test results show that the highest knowledge score was 10 and the lowest was 8, with an average score of 9.51 and a standard deviation value of 0.642

Table 3. Distribution of Family Ability in Decision Making Before and After Educated by Agent of Change

.Variabel	Mean	Std. Deviasi	Minimun	Maksimum
Family Ability in Decision Making:				
- Before	29,69	4,266	20	40
- After	33,78	2,797	26	40

Table 3 shows that the family ability in decision making pre-test average is 29.69, with a standard deviation value of 4.266. The family ability in decision making highest score is 40, and the lowest score is 20. In contrast, the average score in the post-test results is -Average value = 33.78, standard deviation = 2.797, with the lowest possible score of 26 and the highest possible score of 40 for family ability in decision making.

Table 4 . Distribution of Family Independence of Health Before and After Educating by Agent of Change

.Variabel	Mean	Std. Deviasi	Minimun	Maksimum
Family Ability to be Independent:				
Before	10,63	3,239	2	15
After	13,46	1,121	9	15

Table 4 shows that the average pre-test score for family independence is 10.63, with a standard deviation of 3.239. The lowest and highest family independence scores are 2 and 15, respectively. In the meantime, the average score in the post-test results is 13.46. and the family independence score ranges from 9 to 15, with the highest score being 15, and the standard deviation value being 1.121.

2. Bivariate Analysis

The following table displays the results of the Wilcoxon test that were conducted on the knowledge level, family independence, and family ability in decision making variables.

Table 5. Wilcoxon Test Results on Variables

Variabel	Mean		*p value*
	Pre	***Post***	
Knowledge *pre – post test*	6,83	9,51	0,000
Family Ability in Decision Making *pre –post test*	29,69	33,78	0,000
Family Ability to be Independent *pre –post test*	10,63	13,46	0,000

Table 5 shows the researcher received a p value of 0.000 for the family's independence and a p value of 0.000 for the family's capacity for decision-making, the results of the Wilcoxon test on the level of knowledge variable. These findings indicate that the impact of health education about Covid 19 provided by Agent of Change (AoC) increases family knowledge, decision-making skills, and family independence in health care.

Pembahasan

Health education's impact on knowledge

Health education, according to WHO (2012), is a purposefully created learning opportunity intended to raise health literacy, encompassing

information acquisition and life skills development that are beneficial to both individual and community health.

The act of learning influences an individual's perception of a particular thing, and knowledge is the outcome of this process (Notoatmodjo, 2012). Mubarak (2011) asserts that a number of variables, such as age, experience, occupation, and level of education, affect knowledge. Table 5 shows that knowledge distribution averages before and after health education interventions were 6.83 and 9.51, respectively, with a mean difference of 2.68 and a p-value of $0.000 < \alpha = 0.05$.

Table 1 presents the characteristics of the adult age group, or those in the 25–51 year range (100%). Since mental and cognitive development are fully developed at this age, material can be easily absorbed, raising knowledge from 6.83 to 9.51. This indicates that the findings of the first measurement were different. Basic schooling was the most common educational feature among the respondents.

In this study, families are enlightened about Covid-19 through health education. The information describes the Covid-19 virus, how it spreads, its clinical symptoms, and warning indications of illnesses that could harm the virus. Next, it describes how to stop it, identify if someone is at risk of contracting COVID-19, and outline steps that can be done to try to avoid contracting COVID-19.

The material provided to respondents serves as a fresh source of information that broadens their knowledge even further, as demonstrated in table 2. Following health education, respondents' knowledge increased from 7.00 to 7.92. These findings are consistent with a number of studies that used the Health Education variable to raise respondents' awareness of COVID-19, including those conducted in 2021 by Diana Dyaningsih, Erni Suprapti, and Eva Dwi Damayanti.

According to research done in Hubei, China, measuring KAP revealed that women had higher levels of knowledge and attitudes than men. This research also had an impact on health education by increasing knowledge. Notably, 86% of respondents were women. and more upbeat than males in dealing with the COVID-19 epidemic. Aside from that, health education aimed at enhancing awareness of COVID-19 really promotes a positive outlook and safe health maintenance.

Other studies carried out in Indonesia discovered a noteworthy correlation between South Kalimantan residents' knowledge of COVID-19 prevention and gender. The findings indicate that, in comparison to men, women typically know more about preventing COVID-19. This is a result of the fact that women have

more free time to read or converse with others about how to prevent COVID-19. (Wulandari and others, 2020)

Women are the primary target of societal efforts to avoid COVID-19 since they are supposedly more knowledgeable about health than males are, particularly with relation to COVID-19. This highlights the significance of women in enhancing health care.

2. **Health education's impact on family decision-making**

The knowledge the family has regarding Covid-19, including its nature and characteristics as well as its moderate and severe symptoms, will determine their capacity to make the best options. Health education, in the opinion of Notoatmodjo (2012), can alter an individual's or community's understanding of how to take health-related actions. Table 5 presents the research findings, which indicate that the respondents' capacity to make decisions increased from a mean difference of 4.09 to a value of 33.68. Peak value 40, significance level 0.000 < 0.05.

There are many family health tasks, according to Bailon and Maglaya (1978), cited by Efendi, F., and Makhfudl (2009). These tasks include identifying health problems through knowledge and making decisions regarding health problems that are occurring in the family. Making decisions quickly and accurately is crucial when addressing the Covid 19 disease's malignancy. In the case of this illness, delaying decisions might have catastrophic consequences since it results in a high death toll and has even turned into a pandemic for two years.

Increasing information is the first step towards helping respondents make better decisions. This is because decision-making is based on one's understanding of Covid-19, particularly its symptoms, risks, and necessary treatments. The dependent variable in this study is covid prevention behavior; however, the research findings are identical to those of Agisti Raudlatul Fitri's (2021) study, The Influence of Health Education about Covid-19 for Heads of Families on Covid-19 Prevention Behavior in the Banjar I Community Health Center Work Area. Research by Desy Ayu Wardani, Siti Mukarrohma, and Indah Maya Sari (2020) also demonstrates an increase in decision-making, as seen by the respondents' ability to choose family planning techniques after receiving health education.

According to another studies, women who have received health education are better prepared for childbirth and are more aware of potential problems with pregnancy. Furthermore, ANC visits and hospital deliveries can be increased by women who have received prenatal health education about the value of accessing healthcare facilities and identifying

pregnancy issues. Babula and others, 2023

Respondents' judgments were influenced by their heightened awareness of COVID-19, including its symptoms, risks, and necessary treatment measures. This is also consistent with the health belief model idea, which holds that when someone believes they have a serious illness, they are more likely to adopt a healthier lifestyle. In addition, a range of more than 25 years (100%), which affects respondents' decision-making abilities and maturity when faced with a health issue in the family, supports it. 2012; Notoatmodjo

3. **Health education's impact on family autonomy in preserving health**

The mean distribution of independence was 10.63 before health education and 13.46 after the intervention, with a mean difference of 2.83 and a p value of $0.000 < \alpha = 0.05$, as shown in table 5. These findings show that after receiving health education, respondents' independence increased. The study's findings are consistent with research by Liu, Q. (2008), which examined the effects of a health education program on 153 students from three randomly chosen schools. The study compared the effectiveness of lecture and peer education methods in controlling pulmonary tuberculosis (TB) in rural areas. The results indicated significant differences ($p<0.01$) in the students' independence in preventing pulmonary tuberculosis between the lecture and peer education groups. According to Annisa's (2012) research, the respondent's family's level of independence increased following counseling. The study was titled The Effect of Health Education on Family Independence in Caring for Tuberculosis Patients in the Surakarta Community Health Center Work Area.

The shift in family independence in identifying issues is also consistent with Glanz's (2008) Health Believe Model hypothesis, which focuses on family education as a means of promoting health with an eye toward the consequences for health. Families are urged to pay heed to the information provided if they are unaware of ISPA and choose not to take preventive measures against it.

The process of changing knowledge and behavior starts with a growth in knowledge and other influencing variables, both internal and external. This leads to an increase in family independence. The idea advanced by Robert Kwick (1974, cited by Notoatmodjo 2012) that conduct is shaped by interactions between people and their surroundings supports this. Knowledge, intelligence, perception, emotions, motivation, mental health, and so on are examples of internal elements. On the other hand, external factors include the physical and non-

physical aspects of the environment, such as the socioeconomic status, culture, climate, and so forth.

In particular, knowledge is the foundation for independence in health since it allows one to understand the significance of performing household responsibilities in a healthy manner or not at all. Health education is an activity or endeavor to communicate health messages to the community, groups, or individuals. It can help with efforts to improve health. It is intended that by spreading this message, society, organizations, or people will become more knowledgeable about health. Health education will have an intermediate, or medium-term, impact on behavior through changing people's health knowledge. Additionally, as a result of health education, health behavior will affect the rise in public health indicators.

The responsibilities of the family in providing care for members who are ill are explained by Muhlisin, A. (2012). Families have to identify health issues, decide how best to take action, tend to ailing family members, change the surroundings, or make their house feel comfortable. in good health, alluding to public health institutions. Few studies have discovered families with active family responsibilities based on this notion. Why health education is important: The goal of health promotion is to enhance public understanding of the importance of preserving and enhancing one's own, one's family's, and one's community's health (Notoatmodjo, 2012). The degree of education a person has can affect how they view new information. Therefore, it may be concluded that people find it simpler to accept knowledge when they have a higher level of education. McLeod, Clarke, and Latter (1990), cited by Basford and Slevin (2006), assert that they think that treatment engagement and self-care entail more than merely getting clients involved in different activities. They said that a patient's rights concept should be reflected in both self-care and involvement in treatment.

Nurses can better grasp how to mobilize clients' personal resources to improve health and well-being by embracing the concept of self-care. The idea that people require constant rationalization of self-care and self-regulation in order to preserve a state of balance underlies the diagnosis of a reduction in self-care.

According to Orem's theory, people only seek medical attention when they are unable to continue taking care of themselves. Understanding that clients are self-care agents—that is, people who assess and determine whether they are well or, conversely, ill—is crucial to understanding the idea of bettering self-care. The process of obtaining health or well-being by supporting the repair of decreased self-care and putting the

client back in a position of balance is the function or goal of care in the form of a client/nurse.

Simpulan

Health education by the family can have a positive impact on the knowledge, decision-making, and independence of respondents in health care. Health education has a significant effect on respondents' understanding of COVID-19, and it is hoped that health workers can make health education a regular program to enhance the community's ability to make decisions at a faster and more precise level. This will foster community independence in health

Daftar pustaka

Basford, L. dan Slevin, O. (2006) *Teori & Praktik Keperawatan: Pendekatan Integral Pada Asuhan Pasien*. Jakarta: EGC.

Control, C. of D. (2020) *The COVID-19 Pandemic: Preparing for Second (and Third) Waves, Centre of Disease Control*. Tersedia pada: https://www.aaoms.org/docs/COVID19/Preparing_for_Second_and_Third_Waves.pdf (Diakses: 17 April 2021).

Damayanti, E.D. (2021) "Pengaruh Pendidikan Kesehatan tentang Corona Virus terhadap Tingkat Pengetahuan Masyarakat," *Jurnal Kesehatan STIKES Bethesda Yakkum Yogyakarta*, 10.

Dayaningsih, Diana dan Suprapti (2021) "Efektivitas Pendidikan Kesehatan Terhadap Peningkatan Pengetahuan Keluarga Tentang Covid 19," *Jurnal Kesehatan UMC*, 10(1).

Efendi dan Makhfudhil (2009) *Keperawatan Kesehatan Komunitas: Teori dan Praktik dalam Keperawatan*. Jakarta: Salemba.

Faruca, K. dan Rosyiatul, A. (2014) *Asuhan Keperawatan Keluarga Dengan Pasien TBC di Puskesmas Tambakrejo Surabaya*. Universitas Muhammadiyah Surabaya.

Kassim, A.B., Newton, S.K. dan Dormechele, W. (2023) "Effects of a community-level intervention on maternal health care utilization in a resource-poor setting of Northern Ghana," *BMC Public Health*, 23(1491).

Mubarak dan Wahid (2011) *Promosi Kesehatan untuk Kebidanan*. Jakarta: Salemba Medika.

Muhlisin (2012) *Keperawatan Keluarga*. Yogyakarta: Gosyen Publishing.

Nasdian, F.T. (2014) *Pengembangan Masyarakat*. Jakarta: Pustaka Obor Indonesia.

Nasution (1990) *Prinsip-Prinsip Komunikasi untuk Penyuluhan*. Universitas Indonesia.

Notoatmodjo, S. (2012) *Pendidikan dan Perilaku Kesehatan*. Jakarta: Rineka Cipta.

Oktawati (2018) "Hubungan Fungsi Keluarga dengan Kualitas Hidup Pasien Penyakit Kronis Degeneratif

di Fasilitas Kesehatan Tingkat Pertama," *Jurnal Sains dan Kesehatan* [Preprint].

RI, K.K. (2020) *Pedoman Pencegahan dan Pengendalian Corona Virus Disease (Covid-19)*. Jakarta: Kementerian Kesehatan RI.

Rogers dan M, E. (1995) *Diffusionm of Innovation =, Fourth Edition*. New York: Collier Macmillan Publishing.

Wardhani, D.A., Mukarohma, S. dan Mayasai, I. (2020) "Pengaruh Pendidikan Kesehatan dengan Media Audio Visual terhadap Pengambilan Keputusan Intuitif metode Kontrasepsi Jangka Panjang," *Jurnal Medika Karya Ilmiah*, 5(1).

WHO (2012) *Health Education: Theoritical Concept, Effective Strategis and Core Competencies*. Cairo: WHO Library Cataloging.

WHO (2020) *Update on Coronavirus Disease in Indonesia, WHO Indonesia*. Tersedia pada: https://www.who.int/indonesia/news/novel-coronavirus (Diakses: 17 April 2021).

Wulandari, A. (2020) "Hubungan Karakteristik Individu Dengan Pengetahuan Tentang Pencegahan Coronavirus Disease 2019 Pada Masyarakat Di Kalimantan Selatan," *Jurnal Kesehatan Masyarakat Indonesia*, 15(1).

Zhong, B.-L. (2020) "Knowledge, attitudes, and practices towards COVID-19 among Chinese residents during the rapid rise period of ther COVID-19 outbreak: a quick online cross-sectional survey," *International Journal of Biological Sciences*, 16(10), hal. 1745–1752.