



# The relationship between health locus of control and compliance in rural communities

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## ABSTRACT

The purpose of this study is to empirically test the relationship between health locus of control and compliance in rural communities. rural communities who participated in this study. This means the individual's belief that their health is controlled by themselves in relation to the individual's adherence to medical care. The higher the individual's internal control in controlling health, the higher the individual's level of compliance in carrying out medical treatment and vice versa. There is a positive and linear relationship between powerful others HLC and compliance in rural communities who participated in this study. This means an individual's belief that another person (doctor, midwife or family) is in control of their health related to that individual's adherence to medical treatment. The higher their belief that their health is controlled by others, the higher the level of compliance in carrying out medical treatment and vice versa. There is no relationship between HLC chance and compliance in rural communities who participated in this study. Chance, luck, and destiny have nothing to do with individual adherence to medicine. Based on the description of the research data on the internal HLC variables, it was found that the internal HLC average of the research subjects was in the very high category.

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## Introduction

Rural communities have economic activities that are dominated by the agricultural sector (primary). This can be seen from the share of labor in the agricultural sector in rural areas which is still large, reaching 64.6% in 2005(Albariki & Shofwan, 2021). The level of household income in agriculture is low. In 2004, the average income per agricultural household was only Rp. 9.3 million a year, of which 48.6 percent is income from non-agricultural activities such as agricultural product processing industry, non-agricultural processing industry, trade, non-agricultural labor, and others (BPS, 2005). If calculated per month, the average household income is only around 775 thousand rupiah. If we calculate the average number of members of an agricultural household consisting of 4 people per household, this income value is relatively small to be able to live properly.(Wibowo & Alfarisy, 2020).

It is different with small farmers or farm laborers. Nationally, the average daily nominal wage of farm workers always increases from month to month, but in real terms the average daily wage of farm workers tends to decrease. The average daily nominal wage for farm workers increased from Rp. 11,765 in March 2005 to Rp. 15,158 in August 2007, but the real wage fell from Rp. 2,614 to Rp. 2,591. Therefore,

until now the welfare level of the rural population has not improved and rural areas remain pockets of poverty. It is further stated that the number of poor people in Indonesia in March 2007 was 37.17 million people or about 16.58% of the total population of Indonesia. Most (63.51%) of the poor are in rural areas so that the number of poor people in rural areas is 1,(Ridena, 2021; Santoso, 2018).

Furthermore, the education level of people in rural areas is also relatively low when compared to urban communities. The illiteracy population in rural areas is much larger than in urban areas, namely 13.64% compared to 5.75% (Indonesian Health Profile 2000, 2001). In addition, the percentage of the Indonesian population aged 10 years and over who do not have a school diploma is 36.82% in rural communities and 19.88% in urban communities (Indonesian Health Profile 2005, 2007). This doubled ratio makes rural communities always far behind from urban communities.

Likewise with health problems in rural communities. The provision of clean water in rural areas is still not fulfilled. When viewed from the percentage of rural community households in Indonesia in 2000, only 45.28% had their own drinking water facilities and 67.8% had protected water sources and overall only 6.48% of rural communities used piped (Profile Indonesian Health 2000, 2001). Another health problem in rural communities is related to the means of disposal of human waste or defecation. If you look at the comparison of the percentage of Indonesian households that have their own means of defecation at home, it is 51.78% in rural areas and 71.41% in urban areas (Indonesian Health Profile 2005, 2007). The percentage of types of shelter used by households in rural areas in Indonesia in 2000 was 39.66% (goose neck); 11.16% (plengsengan); 36% (convex); and 13%(others) (Indonesian Health Profile 2000, 2001).

In connection with the above, the type of shelter that is not adequate will pollute the surrounding environment and at the same time increase the risk of disease transmission. Many diseases come from an unhealthy environment such as diarrhea, dengue fever, malaria, tuberculosis, smallpox and so on(Rodiah et al., 2018). Lack of knowledge and awareness of rural communities about health, especially healthy living behavior makes farmers vulnerable to various diseases. Individuals who are sick will make various efforts and behaviors to recover in order to be able to carry out their social roles again(Rofiki & Famuji, 2020). There are various possibilities that individuals do to recover. The possibility is that the individual will not do anything (no action) on the condition of his illness, the individual will self-medicate (self-treatment), the individual will seek traditional treatment (traditional remedy) or take medicine that is not based on a doctor's prescription and there are individuals who seek medical help. medical doctor to find out the disease suffered and how to treat it(Abna et al., 2021; Maulana et al., 2019).

Then the cognitive and emotional factors of patients when they receive doctor's recommendations also affect their adherence to medical. For individuals who adhere to a series of treatments, they must be cognitively and emotionally able to understand and remember what they are about to do. In addition, the doctor's instructions they receive are often complex and given at a time when they are not listening carefully to what they are supposed to do. Even when health information is given in written form, some patients do not understand it if it is written at a high reading level(TATWA, 2021). As previously explained, the education level of rural communities is still relatively low, so that these communities experience cognitive difficulties in understanding medical advice given by doctors.(Mawanti, 2020).

The next characteristic is the interaction between patient and practitioner. The quality of the doctor-patient relationship also affects the individual's adherence to medical advice(Alfarizi & Nuryana, 2019). Good communication occurs when the practitioner is more patient-centered than doctor-centered. Other studies have also shown that individuals who have a good relationship with a doctor are more obedient to the medical advice given by the doctor(Aslamiyah et al., 2019). People living in rural areas sometimes prefer to use traditional medicines rather than going to the health center or the nearest hospital for self-examination. In addition to affordable costs, traditional medicines are believed by the community to be more capable of curing diseases quickly. This is where practitioner interaction is needed in providing

health education to rural communities so that they are willing to follow and comply with medical treatment (Baiduri & Purnama, 2021).

The concept of health locus of control (HLC) is derived from the general construct of locus of control (Rotter; Wallston, Wallston, Kaplan & Maides in Wallhagen, Strawbridge, Kaplan, & Cohen, 1994). The locus of control (LOC) construct is derived from the Social Learning Theory proposed by Rotter in 1966, which is a theory related to the concept of nature and the effect of reinforcement. (Annida et al., 2021). *Reinforcement* act to reinforce the expectation (e.g., LOC belief) that a particular behavior or event will be followed by that reinforcer in the future (Lianawati, 2021). Therefore, when individuals perceive reinforcement as a possibility for their behavior to occur, this will increase an expectation more than when reinforcement is not seen as a possibility. (Pramesti, 2019).

## Research methods

### 1. Variable Identification

To be able to test the research hypothesis, the research variables must first be identified. In this study, the research variables used are:

Variable X : Health Locus of Control

Variable Y : Compliance

### 2. Population And Sampling Method

Scientific research is almost always carried out on only a part of the things that are actually going to be studied. So the research was only conducted on the sample not on the population. Research conclusions regarding the sample will be generalized to the population.

The population is a collection or the entire research subject (Azwar, 1999). According to Hadi (2000), the population is limited by a number of subjects or individuals who have at least the same characteristics. The population in this study is a rural community in accordance with the definition of village according to Landis (in Utoyo, 2007), namely a village is an area with a population of less than 2,500 people with the following characteristics:

- a) Have a life that knows each other,
- b) There is a bond of the same feeling about habit, and
- c) The way of doing business (economy) is agrarian and strongly influenced by natural factors, such as climate, topography, and natural resources, while non-agricultural work is part-time.

States that the sample is part of the population that is used to determine the characteristics and controlled characteristics of the population. The number of samples for the try out is 80 people, while the number of samples in the study is 60 people.

In this study, the sampling technique used is incidental sampling which is included in non-random probability sampling. Incidental sampling is the selection of samples on the basis of chance that the respondents are in the same place when the research is in progress. In this technique, not all individuals in the population are given the same opportunity to be selected as sample members, but only and the ease of finding samples that are adapted to certain characteristics.

The weakness of using the sampling technique by means of incidental sampling is that it is not representative in drawing general conclusions (generalizations) unless the researcher assumes or can prove that the population is relatively very homogeneous (Hadi, 2000). The advantages are that it is easy to do and does not require a long time to collect research data (Sukardi, 2004). The characteristics of the sample used in this study, according to the following criteria:

1. Rural people who have visited a doctor or other health services. This is a characteristic of the sample because individuals' experiences with health services influence beliefs about their health control.
3. Age 18 years and over. Ages 18 years and over are early adults who already have maturity in decision-making and responsibility for their lives (Hurlock, 1999).

### 3. Instruments/Measuring Instruments Used

The method used in this study is a data collection method with a scale (Hadi, 2000). The scale method is used because the data to be measured is in the form of psychological constructs or concepts that can be revealed indirectly through behavioral indicators which are translated in the form of statement items (Azwar, 2001). Hadi (2000) states that the scale can be used in research based on the following assumptions, the subject is the person who knows best about himself. The things stated by the subject to the researcher are true and can be trusted. The subject's interpretation of the statements put forward to him is the same as what the researcher intended.

### 4. Data Analysis Method

The data obtained in this study will be analyzed by statistical methods. The consideration of using statistics in this study according to Hadi (2000) is that statistics work with numbers, statistics are objective, statistics are universal, meaning that they can be used in almost all fields of research. The statistical method used is the Pearson Product Moment correlation analysis method using the SPSS version 11.0 computer program. Correlation analysis aims to determine whether the existing sample data provide strong enough evidence that there is a relationship between variables in the sample's original population and if there is a relationship, how strong is the relationship between these variables (Santoso, 2007).

- a. Distribution Normality Test, Distribution normality test was conducted to determine whether the distribution of research data for each variable, namely HLC and Compliance, was normally distributed. The normality test in this study used one sample Kolmogorov-Smirnov. Research data can be said to be normally distributed if the p value > 0.05.
- b. Relationship Linearity Test, Relationship linearity test was conducted to determine whether the HLC variable data (Internal, powerful others, or chance) correlated linearly with Compliance variable data. The linearity test of this relationship was carried out using the regression analysis method. The two variables can be said to be linearly correlated if the p value < 0.05 or the calculated F value is greater than the F tab.

## Results and Discussion

### 1. Research result

#### a. Research Data Categorization

Research data can be categorized based on the hypothetical mean and empirical mean. The hypothetical mean is to see the relative position of the individual based on the ideal score norm of the scale, while based on the empirical mean to see the relative position of the individual based on the norm score of the research subjects. In this study, the researcher focused on categories based on the hypothetical mean because he wanted to see the relative position of individuals based on the ideal score norm of the scale. The description of IHLC research data can be seen in the following table:

Table 1.

IHLC Research Data Description

Variable	Empirical Score				Hypothetical Score			
	Min	Max	mean	SD	Min	Max	mean	SD
HLC internals	14	29	23.77	3,050	5	30	17.5	4,167

Based on the table above, the empirical mean of the IHLC scale is 23.77 with an empirical standard deviation of 3.050 and the hypothetical mean is 17.5 with a hypothetical standard deviation of 4.167. In table 21 it can be seen that the average IHLC of the research subjects lies in the very high category in the categorization of IHLC scores based on the hypothetical mean.

Table 2.

IHLC Categorization Based on Hypothetical Mean

Variable	Value Range	Category	Frequency	Percentage
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IHLC	23.75 < x	Very high	38	63.33%
	19.58 < x 23.75	Tall	18	30%
	15.41 < x 19.58	Currently	2	3.33%
	11.25 < x 15.41	Low	2	3.33%
	x 11.25	Very low	--	--

From the table, it is known that research subjects belonging to the very high Internal HLC category are 63.33%, people belonging to the high Internal HLC category are 30%, people belonging to the current Internal HLC category are 3.33 %, people belonging to low Internal HLC are 3.33%, while there are no people belonging to very low Internal HLC (0%).

Table 3.  
IHLC Categorization Based on Empirical Mean

Variable	Value Range	Category	Frequency	Percentage
IHLC	28.34 < x	Very high	1	1.67%
	25.29 < x 28.34	Tall	16	26.66%
	22.24 < x 25.29	Currently	24	40%
	19.19 < x 22.24	Low	15	25%
	x 19.19	Very low	4	6.67

From the table, it is known that research subjects belonging to the very high IHLC category are 1.67%, people belonging to the high IHLC category are 26.66%, people belonging to the current IHLC category are 40%, people belonging to the high IHLC category 25% of people belonging to the low IHLC category, and 6.67% of people belonging to the very low IHLC category. Description of PHLC research data can be seen in the following table:

Table 4.  
PHLC Research Data Description

Variable	Empirical Score				Hypothetical Score			
	Min	Max	mean	SD	Min	Max	mean	SD
<i>Powerful Others</i> HLC	13	36	25.53	4,568	6	36	21	5

Based on the table, the empirical mean of the PHLC scale is 25.53 with an empirical standard deviation of 4.568 and the hypothetical mean is 21 with a hypothetical standard deviation of 5. In table 24 it can be seen that the average PHLC of research subjects lies in the high category in categorizing PHLC scores based on the mean. hypothetical.

Table 5.  
PHLC Categorization Based on Hypothetical Mean

Variable	Value Range	Category	Frequency	Percentage
PHLC	28.5 < x	Very high	17	28.33%
	23.5 < x 28.5	Tall	24	40%
	18.5 < x 23.5	Currently	13	21.67%
	13.5 < x 18.5	Low	5	8.33%
	x 13.5	Very low	1	1.67%

From the table it is known that the research subjects belonging to the very high PHLC category are 17%, the people belonging to the high PHLC category are 24%, the people belonging to the current PHLC category are 21.67%, the people belonging to the high PHLC category. into the low PHLC category there are 8.33%, and people belonging to the very low PHLC category are 1.67%.

Table 6.

PHLC Categorization Based on Empirical Mean

Variable	Value Range	Category	Frequency	Percentage
PHLC	$32.38 < x$	Very high	3	5%
	$27.81 < x \leq 32.38$	Tall	17	28.33%
	$23.24 < x \leq 27.81$	Currently	21	35%
	$18.67 < x \leq 23.24$	Low	13	21.67%
	$x \leq 18.67$	Very low	6	10%

From the table, it is known that the research subjects belonging to the very high PHLC category are 5%, people belonging to the high PHLC category are 28.33%, people belonging to the current PHLC category are 35%, people belonging to the high PHLC category. into the low PHLC category there are 21.67%, and the community belonging to the very low PHLC category is 10%. The description of the CHLC research data can be seen in table 26 below:

Table 7.  
CHLC Research Data Description

Variable	Empirical Score				Hypothetical Score			
	Min	Max	mean	SD	Min	Max	mean	SD
ChanceHLC	6	32	21.78	5.508	6	36	21	5

Based on the table, the empirical mean of the CHLC scale is 21.78 with an empirical standard deviation of 5.508 and the hypothetical mean is 21 with a hypothetical standard deviation of 10. In table 27 it can be seen that the average CHLC of research subjects lies in the medium category in categorizing CHLC scores based on the mean hypothetical.

Table 8.  
CHLC Categorization Based on Hypothetical Mean

Variable	Value Range	Category	Frequency	Percentage
CHLC	$32.38 < x$	Very high	3	5%
	$27.81 < x \leq 32.38$	Tall	17	28.33%
	$23.24 < x \leq 27.81$	Currently	21	35%
	$18.67 < x \leq 23.24$	Low	13	21.67%
	$x \leq 18.67$	Very low	6	10%

From the table, it is known that the research subjects belonging to the very high CHLC category are 5%, people belonging to the high CHLC category are 28.33%, people belonging to the current CHLC category are 35%, people belonging to the high CHLC category into the low CHLC category there are 21.67%, and people belonging to the very low CHLC category are 10%.

Table 9.  
CHLC Categorization Based on Empirical Mean

Variable	Value Range	Category	Frequency	Percentage
CHLC	$30.04 < x$	Very high	1	1.67%
	$24.53 < x \leq 30.04$	Tall	18	30%
	$19.02 < x \leq 24.53$	Currently	24	40%
	$13.51 < x \leq 19.02$	Low	13	21.67%
	$x \leq 13.51$	Very low	4	6.66%

From the table it is known that research subjects belonging to the very high CHLC category are 1.67%, people belonging to the high CHLC category are 30%, people belonging to the current CHLC category are 40%, people belonging to the high CHLC category into the low CHLC category there are

21.67%, and people belonging to the very low CHLC category are 6.66%. The description of compliance research data can be seen in the following table:

Table 10.  
Compliance Research Data Description

Variable	Empirical Score				Hypothetical Score			
	Min	Max	mean	SD	Min	Max	mean	SD
<i>Compliance</i>	35	59	47.58	5,222	17	68	42.5	8.5

Based on the table above, the empirical mean of the compliance scale is 47.58 with an empirical standard deviation of 5.222 and the hypothetical mean is 42.5 with a hypothetical standard deviation of 8.5. In table 30 it can be seen that the average compliance of research subjects lies in the high category in the categorization of compliance scores based on the hypothetical mean.

Table 11.  
Compliance Categorization Based on Hypothetical Mean

Variable	Value Range	Category	Frequency	Percentage
<i>Compliance</i>	55.25 < x	Very high	5	8.33%
	46.75 < x 55.25	Tall	30	50%
	38.25 < x 46.75	Currently	22	36.67%
	29.75 < x 38.25	Low	3	5%
	x 29.75	Very low	--	-- %

From table 3, it is known that research subjects belonging to the very high category are 5%, research subjects belonging to the high compliance category are 50%, research subjects belonging to the current compliance category are 36.67%, research subjects 5% of the subjects belonging to the low compliance category, and none of the research subjects belonging to the very low compliance category (0%).

Table 12.  
Compliance Categorization Based on Empirical Mean

Variable	Value Range	Category	Frequency	Percentage
<i>Compliance</i>	55.41 < x	Very high	5	8.33%
	50.19 < x 55.41	Tall	12	20%
	44.97 < x 50.19	Currently	29	48.33%
	39.74 < x 44.97	Low	10	16.67%
	x 39.74	Very low	4	6.67%

From the table it is known that research subjects belonging to the very high compliance category are 8.33%, research subjects belonging to the high compliance category are 20%, research subjects belonging to the current compliance category are 48.33% , research subjects belonging to the category of low compliance are 16.67%, and research subjects belonging to the category of very low compliance are 6.67%.

**2. Discussion**

The belief that health is determined by chance, destiny and luck is associated with medical non-adherence in some populations. Snyder (2006) found that destiny-dependent health beliefs were inversely related to health status and also inversely related to knowledge of health problems. If a person believes that their health is caused by fate, then they become disobedient to treatment because they think they do not need the treatment.

In addition, several psychosocial factors such as locus of control, personality, social network, socialization, level of growth and individual development can also help explain understanding of individual non-adherence to medical treatment (Nyatanga in Armstrong, 2007). Individual non-adherence to medical treatment can also be related to health locus of control. Therefore, health services

(such as doctors or midwives) need to understand the psychosocial reasons for non-compliance through individual health belief orientations (internal, powerful others or chance) to prevent deviations from medical treatment.

The subjects in this study are rural people who have a relatively low level of economy because most of the people make a living as farmers and their knowledge of health is also low. However, most of the subjects have a very high internal control in terms of health. This can be seen from the results of the study, which was 63.33% of the subjects had a very high internal HLC. This statement is of course contrary to previous researchers who have revealed that individuals with low socioeconomic status (low income and education level) tend to have high external scores, while individuals with high socioeconomic status tend to have high internal scores (Kuwahara, Nishino, Ohkubo, Tsuji, Hisamichi & Hosokawa 2004). This difference is caused by a different person's experience of the disease will determine the control of individual health. It was found that the experience or history of illness affects beliefs, negative experiences such as low control, resulting in the development of high external control beliefs (chance & powerful others) and low internal control beliefs (Wallston & Wallston in Iskandarsyah, 2006). People in this area rarely suffer from chronic diseases and rarely interact with health services. The researcher learned this information from several local residents and the midwife at the puskesmas. Thus, the internal control of the community in controlling their health is higher.

The results of additional research stated that there were no internal differences in HLC, powerful others HLC, chance HLC, and HLC compliance in terms of age, education level and type of work. These results are inconsistent with research which states that a person becomes more internally oriented with age and reaches a peak in middle adulthood (Milgram; Ryckman & Malikiosi in Schultz & Schultz, 1994). In addition, it was also found that locus of control becomes more external from adulthood to old age, namely there is an increase in belief that chance and powerful others affect life (Sarafino in Iskandarsyah, 2006). This is different due to the unbalanced number of research subjects and the uneven distribution of sampling in terms of age, education level, and type of work. While the difference in HLC and compliance in terms of gender cannot be measured because the number of subjects is not balanced where the number of women is much less than the number of men in this study. Furthermore, the results of additional research regarding the relationship between HLC and compliance aspects showed that internal HLC was significantly correlated with aspects of compliance, namely aspects of attitude toward patient involvement ( $r = 0.409$  and  $p = 0.001$ ), aspects of treatment beliefs ( $r = 0.416$  and  $p = 0.001$ ), and aspects of intentions to adhere ( $r = 0.470$  and  $p = 0.000$ ), while in the aspect of pain beliefs ( $r = 0.013$  and  $p = 0.921$ ) and aspects of attitude toward information ( $r = -0.48$  and  $p = 0.717$ ) were not significantly related. Rural communities who participated in this study rarely suffered from chronic diseases, that's why people's pain beliefs had no effect on internal HLC, because maladaptive pain beliefs could be in the form of individual beliefs that their illness was constant and permanent, individuals also blamed their illness and believed that their illness was a confusing and complicated problem (Williams & Thorn in Tavoli, Montazeri, Roshan, Tavoli & Melyani, 2008).

In powerful others HLC there is also a significant correlation with compliance aspects, namely aspects of attitude toward patient involvement ( $r = 0.525$  and  $p = 0.000$ ), aspects of treatment beliefs ( $r = 0.533$  and  $p = 0.000$ ), and aspects of intentions to adhere ( $r = 0.440$  and  $p = 0.000$ ), while the aspects of pain beliefs ( $r = 0.096$  and  $p = 0.467$ ) and aspects of attitude toward information ( $r = 0.060$  and  $p = 0.649$ ) were not significantly related. The attitude toward information aspect relates to the delivery of information from doctors to patients regarding disease diagnosis and treatment (Pendleton in Jackson, 2004). Powerful others HLC is not related to the compliance aspect, it can be caused because people rarely get sick and rarely go to the puskesmas so that they also rarely get information from doctors or midwives at the puskesmas. This causes this aspect to be unrelated to their belief that other people control their health. Furthermore, on the chance of HLC there is no significant relationship with all aspects of compliance). These results are consistent with the results of previous studies that have been described previously.

### Conclusion

Based on the results of data analysis obtained in this study, it can be concluded several things, namely: There is a positive and linear relationship between internal HLC and compliance in rural communities who participated in this study. This means the individual's belief that their health is controlled by themselves in relation to the individual's adherence to medical care. The higher the individual's internal control in controlling health, the higher the individual's level of compliance in carrying out medical treatment and vice versa. There is a positive and linear relationship between powerful others HLC and compliance in rural communities who participated in this study. This means the individual's belief that other people (doctors, midwife or family) who control their health in relation to the individual's compliance with medical care. The higher their belief that their health is controlled by others, the higher the level of compliance in carrying out medical treatment and vice versa. There is no relationship between HLC chance and compliance in rural communities who participated in this study.

Based on the description of research data on powerful others HLC variables, it was found that the average powerful others HLC research subjects were in the high category. Based on the description of research data on the compliance variable, it was found that the average compliance of research subjects lies in the high category. This means that rural communities who participated in this study had a high level of compliance in undergoing medical treatment. There was no difference in the chance of HLC in terms of age, education level, and type of work. There is no difference in HLC compliance in terms of age, education level, and type of work. Internal HLC is significantly correlated with aspects of compliance, namely aspects of attitude toward patient involvement, aspects of treatment beliefs and aspects of intentions to adhere, while the aspects of pain beliefs and aspects of attitude toward information are not significantly related. This means, individuals' beliefs that their health is under their own control are related to the attitudes of individuals involved in treatment, beliefs about the efficacy of treatment, and attitudes that show willingness to take medical advice, but are not related to individual beliefs about the disease suffered and the delivery of information by patients. doctor or midwife.

### References

- Abna, IM, Rahayu, ST, Rizkyana, M., Fauziyah, D., Rohmah, IT, & Sholihat, S. (2021). Public education about the importance of implementing health protocols and maintaining body immunity in the context of preventing the corona virus disease (covid-19) in Pesing Koneng Village, North Kedoya, West Jakarta. *E-Charity: Journal of Community Service*, 1(2), 165–172.
- Albariki, MA, & Shofwan, M. (2021). STUDY OF THE LOCAL ECONOMY OF COMMUNITIES IN DISASTER PROBLEMS AREA, BUMIAJI VILLAGE, BUMIAJI DISTRICT, BATU CITY. *TIME: UNIPA Journal of Engineering*, 19(01), 44–49.
- Alfarizi, M., & Nuryana, A. (2019). Effective Communication of Health Interprofessionals as an Effort to Improve Hospital Service Quality. *ETTISAL: Journal of Communication*, 4(2), 151–168.
- Annida, R., Sugiati, T., & Rahmawati, R. (2021). Interaction Analysis of Affective Commitment on Locus Of Control and Work Environment on Employee Performance Study on Employees at Bandarmasih PDAM Banjarmasin City. *JWM (Journal of Management Insights)*, 6(3), 253–284.
- Aslamiyah, S., Nurhidayat, S., & Isro'in, L. (2019). The Relationship between Compliance Control and Quality of Life in Patients with Coronary Heart Disease (CHD) at the Cardiology Clinic at RSUD DR. Harjono Ponorogo. *1st Proceedings of the National Seminar on the Faculty of Health Sciences*, 223–233.
- Baiduri, A., & Purnama, A. (2021). Increasing the Resilience and Awareness of the Sukamulya Village Community in Spiritual and Economic Aspects in the Pandemic Period. *PROCEEDINGS UIN SUNAN GUNUNG DJATI BANDUNG*, 1(39).
- Lianawati, N. (2021). Relationship of Health Locus of Control (HLC) to Quality of Life of Tuberculosis Patients in Magelang City. Thesis, University of Muhammadiyah Magelang.
- Maulana, I., Suryani, S., Sriati, A., Sutini, T., Widianti, E., Rafiah, I., Hidayati, NO, Hernawati, T., Yosep, I., & Hendrawati, H. (2019). Mental Health Counseling to Increase Public Knowledge about Mental Health Problems in the Surrounding Environment. *Media Karya Kesehatan*, 2(2).

- Mawanti, DAA (2020). Factors Affecting Compliance with Treatment of Hypertensive Patients of Productive Age in Karangsono Village, West District, Magetan Regency. STIKES BHAKTI HUSADA MULIA MADIUN.
- Pramesti, AD (2019). The Relationship between Health Locus of Control and Compliance with Medication in Type 2 Diabetes Mellitus in Semarang City.
- Ridena, S. (2021). POVERTY AND THE ENVIRONMENT: PERSPECTIVES OF POVERTY IN URBAN AND RURAL AREAS. *Sukowati Journal of Research and Development: Research and Development Media*, 5(1), 39–48.
- Rodiah, S., Budiono, A., & Rohman, AS (2018). Model of information dissemination of rural public health communication in West Bandung Regency. *Journal of Communication Studies*, 6(2), 175–190.
- Rofiki, I., & Famuji, SRR (2020). Counseling and Health Check-up Activities to Familiarize PHBS for Kemantren Village Residents. *Dinamisia: Journal of Community Service*, 4(4), 628–634.
- Santoso, D. (2018). *The transient poor: the neglected problem of poverty*. Indonesian Torch Library Foundation.
- TATWA, IDAB (2021). THE RELATIONSHIP OF NURSE'S MOTIVATION AND ATTITUDE WITH COMPLIANCE IN THE IMPLEMENTATION OF SURGICAL SAFETY CHECKLIST IN THE OPERATING ROOM OF RSUD PROF. DR. SOEKANDAR MOJOKERTO. PPNI HEALTHY DEVELOPMENT STICKS.
- Wibowo, AA, & Alfarisy, MF (2020). Analysis of Village Economic Potential and Development Prospects. *Journal of Economics, Business, And Accounting*, 22(2), 204–216.