



SURABAYA INTERNATIONAL HEALTH CONFERENCE

“Empowering Community For Health Status Improvement”

Novotel Samator East Surabaya Hotel, July, 13-14 2019



He Relationship Between The Level Of Knowledge And Attitudes With The Behavior Of Waste Management In Housewives In The Rural Village Of Sidoarjo

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Abstract: Garbage is the result of human activities that have lost their main function and are solid. Waste consists of three types, namely organic, inorganic and B3 waste. In GisikCemandi Sidoarjo Village related to waste management is still bad, as long as entering the village there are many piles of rubbish scattered and no TPS facilities, the education is the average elementary and junior high school. The purpose of this study was to determine the relationship between the level of knowledge and attitudes with the behavior of waste management in housewives in the Gisikcemandi Village in Sidoarjo. The type of research used is observational analytic with cross sectional approach. The population of this study is all housewives in the village of Gisikcemandi Sidoarjo. The research sample was taken by random sampling with a stratified sampling technique with a sample of 182 people. Data analysis used was chi square analysis. The results showed that there was no relationship between the level of knowledge and the behavior of waste management ($p\text{-value } 0.152 > 0.05$) and attitudes related to the behavior of waste management ($p\text{-value } 0.009 < 0.05$) in housewives in the village Gisikcemandi Sidoarjo. The conclusion shows that there is no correlation between the level of knowledge and the behavior of waste management and there is a relationship between attitude and behavior of waste management in the village of Gisikcemandi Sidoarjo. Suggestions that can be given are increasing awareness of housewives related to waste management by following good and correct waste management education.

Keywords: *Knowledge Level, Attitude, Waste Management Behavior.*

1. Preliminary

Waste and processing are now a big problem in Indonesia, the more population growth is the increased volume of waste produced. Waste is the result of human activities that have lost their main function and are in solid form (Suyoto, 2008). Waste consists of three types, namely organic waste, inorganic waste, and B3 waste. The attitude of humans who lack knowledge about responsibility for garbage will result in more depleted natural carrying capacity due to environmental pollution (Wibowo, 2009). Most of the people who throw litter now are still a lot. One reason they did this was a lack of knowledge about handling waste. They also cannot distinguish between organic and inorganic waste which causes the effects of air and soil pollution. Data from the Ministry of Environment (KLH) states that the amount of waste produced in each region of Indonesia is an average waste production of 300 tons per day. The solid waste data in East Java province in 2012 reached 37,687,622 people with the assumption of waste generation amounting to 81,113.40 m³ / day. The population of Sidoarjo Regency in 2014 reached 2,083,934 people, the high population growth can affect the increase in waste volume, making it a problem in handling waste. The amount of waste transported to TPA (Final

Disposal Site) in one day is only 924 m³ / day while the production of waste produced is 4,517 m³ / day (Dedy, 2016). The amount of waste can occur because of several factors including behavior.

Based on preliminary data carried out in GisikCem Village in the city of Sidoarjo. Waste management is still poor, as long as entering the village of Gisikcemandi there are many piles of garbage scattered and there are no TPS facilities (temporary disposal sites). The results of the researchers were 25 respondents by filling out the questionnaire. Housewives, the level of knowledge about low waste management as many as 12 respondents (49.25%), attitudes about bad waste management as many as 13 respondents (50.10%), and behavior about bad waste management as many as 12 respondents (49.35 %). Human behavior that allows an increase in production reaches a stage where waste production is more dominant than the ability to destroy the waste produced. Increasing landfill will cause many problems in various aspects of life both in terms of environment, social and economic (Mulyasari and Sari, 2017). Knowledge is the result of knowing, and this happens after people have sensed a particular object (Notoatmodjo, 2010).¹

Attitude is a person's closed response to a stimulus or a particular object, which has involved the factors of opinion and emotions concerned happy not happy, agree-disagree, all right and some (Fitriana, 2011), The government established a regulation in Law No.18 of 2008 concerning Waste Management in Indonesia consisting of storage, collection, transfer and transportation, processing and final processing. Integrated waste management system through the 3R program (Reduce, Reuse, Recycle).

2. Research Methods

This type of research is observational analytic with cross-sectional design. The sampling method is simple random sampling with a stratified sampling technique. This research was conducted in the Gisikcemandi Village in Sidoarjo. from February to March 2019. The population in this study was all 660 people. Primary data is obtained by conducting interviews by filling out questionnaires related to waste management. Data analysis used univariate and bivariate data analysis with Chi-Square test.

3. Results

1. Distribution of Frequency of Knowledge Level of Housewives in Gisikcemandi Village in Sidoarjo

No	Tingkat Pengetahuan	Frekuensi (n)	Persentase (%)
1.	Baik	45	24,7
2.	Kurang	137	75,3
Total		182	100

Sumber: Data Primer, 2019

Based on Table 5.4, it can be informed that almost all of the respondents' education levels are lacking (75.3%), while the remaining levels of knowledge are good (24.7%).

Table 2: Distribution of Frequency of Characteristics of Respondents Based on Attitudes in Gisikcemandi Village in Sidoarjo

No.	Sikap	Frekuensi (n)	Persentase (%)
1.	Positif	62	34,1

2. Negatif	120	65,9
Total	182	100

Sumber: Data Primer, 2019

Based on Table 2, it can be informed that most of the respondents' negative attitudes in waste management (65.9%).

2. Table 3: Frequency Distribution of Characteristics of Respondents Based on Behavior in Gisikcemandi Village in Sidoarjo.

No.	Perilaku	Frekuensi (n)	Persentase (%)
1.	Baik	40	22,0
2.	Buruk	142	78,0
Total		182	100

Sumber: Data Primer, 2019

Based on Table 3, it can be informed that almost all the behavior of housewives in waste management is still poor(78%).

3. Table 4: Relationship between Knowledge Level and Waste Management Behavior in Housewives in Gisikcemandi Village in Sidoarjo.

No	Tingkat Pengetahuan	Perilaku				Total N	Total %	p-value	Phi
		Baik		Buruk					
		n	%	n	%				
1	Baik	13	28,9	32	71,1	45	100,0	0,152	0,122
2	Kurang	24	17,5	113	82,4	137	100,0		
Jumlah/Total		37	20,3	145	79,3	182	100,0		

Odds Ratio = 1,913

Sumber : Data Primer, 2019.

4. states that out of 137 respondents the level of knowledge is lacking, most of the respondents also behave badly (82.4%) The results of Chi Square statistical analysis showed that the p-value was 0.152 which means that it was greater than the error degree of 0.05 ($0.152 > 0.05$) so that H0 was accepted and H1 was rejected. This states that there is no relationship between the level of knowledge and the behavior of waste management in housewives..

Table 5: Relationship between Attitudes to Waste Management Behavior in Housewives in Gisikcemandi Village in Sidoarjo..

No	Sikap	Perilaku				Total N	Total (%)	p-value	Phi
		Baik		Buruk					
		N	%	n	%				
1	Positif	21	31,3	46	68,6	67	100,0	0,009	0,209

2	Negatif	16	13,9	99	72,3	115	100,0
Jumlah		37	20,3	145	79,7	182	100,0

Odds Ratio = 2.825

Sumber : Data Primer, 2019.

Can be informed that most respondents have a negative attitude towards waste management by behaving badly (72.3%).

The results of the Chi Square statistical analysis showed that the p-value was 0.009 which means that it was smaller than the error degree of 0.05 ($0.009 < 0.05$) so that H0 was rejected and H1 was accepted. This states that there is a relationship between attitudes and behavior of waste management in housewives in the village Gisikcemandi Sidoarjo. The strength of the relationship between variables can be seen in the Phi correlation value of 0.209 which means there is a low relationship between the attitude variable and the behavior of waste management in housewives in the Gisikcemandi Village in Sidoarjo.

The odds ratio calculated here is the odds of respondents who expressed a negative attitude compared to respondents who expressed a positive attitude towards the behavior of waste management. The odds ratio of 2.825 means that the calculation of Odds Ratio (OR) shows the results of 2.825 which means that housewives who have a negative attitude towards waste management are three times at risk of behaving badly in waste management in the Gisikcemandi village in Sidoarjo compared to housewives who have positive attitude.

4. Discussion

1. Knowledge level

The results of this study indicate that the level of knowledge of housewives on waste management, the results showed that of 182 respondents most had a level of lack of knowledge of waste management totaling 137 respondents (75.3%). Education affects the level of one's knowledge. The average education level of respondents in the Gisikcemandi Village in Sidoarjo is junior high and elementary school. The results of the research interviews show that the level of knowledge of housewives in the Gisikcemandi Village in Sidoarjo has a less and good category.. The level of knowledge possessed by the average housewife is lacking, from the results of questions related to waste management which dominantly experience errors answering the item questions about how to dispose of decaying waste such as vegetables, fruits immediately dumped in the river not being composted, not knowing the impact negative for waste management, the conditions for many landfill respondents who answered built a landfill near the house, did not segregate waste before disposal. The level of knowledge of the community regarding waste management is needed to measure how to do waste management, from sorting to waste disposal. Housewives in Gisikcemandi Village regarding knowledge of 3R waste management (reduce, recycle, reuse) are still lacking. Awareness of respondents needs to be improved regarding environmental cleanliness and the role of doing waste management properly and correctly. In Gisikcemandi Village there has been no counseling on waste management so that housewives dispose of garbage in the river and empty land as well as no garbage workers left to pile up.

2. Attitude

The results of this study indicate that the attitude of housewives related to waste management, results showed that of 182 respondents most had negative attitudes (65.9%). The negative attitude of many respondents is shown in the statement item not doing environmental service once a week, respondents assume that it is only a waste of time other than that there are other needs. Respondents were willing to do environmental work if there was a competition between villages in the Sedati District. Waste such as cardboard and bottles are not recycled again, and do not do waste sorting which is easy to rot and not easily rot. The attitude of housewives in

waste management needs to be monitored or affirmed by community leaders or respected people in the community if there is a negative attitude.

3. Behavior

The results of this study indicate that the behavior of housewives on waste management shows that of 182 respondents most of them had bad behavior 142 respondents (78%), the results of the interview showed that the results of the dominant questions had an error answering the item questions about internal behavior the average waste management does not recycle garbage such as cardboard and bottles, the remaining vegetable waste is not made into compost or livestock food immediately throws away in the river, all types of household waste are directly burned themselves in front of the yard which does not have a yard to throw away empty land scattered and during the heavy rainy season frequent flooding due to respondents throwing garbage in the river.

4. Relationship between Knowledge Level and Waste Management Behavior in Housewives in Gisikcemandi Village in Sidoarjo.

The results of this study show that the percentage of respondents who have bad behavior in waste management is more in respondents with less knowledge (62.1%) than respondents who are well-informed (17.5%). While the behavior of housewives in good waste management with less knowledge (13.2%) is greater than good knowledge (7.13%). The results of cross tabulation show that there is no relationship between the level of knowledge and the behavior of waste management in housewives.

Housewives in the Gisikcemandi Village of Sidoarjo know the benefits and objectives of waste management but do not want to do it. Conversely, some do not know the benefits and objectives of waste management, but they want to take action to manage the waste. The behavior of housewives who do not carry out waste management thinks there is no benefit in carrying out waste management, and is supported by no temporary disposal site (TPS)..

5. Room Sanitation

The results of the study found that there was a relationship between attitudes and behavior of waste management in housewives in the Gisikcemandi village in Sidoarjo. The percentage of respondents who have bad behavior in waste management is more on respondents with negative attitudes (72.3%) than respondents who have a positive attitude (68.6%). While the behavior of housewives in good waste management with a positive attitude (31.3%) is greater than those who have a negative attitude (13.9%). This shows that most housewives in the village of Gisikcemandi Sidoarjo are negative and many of them do not carry out waste management. Based on interviews, it was known that the negative attitudes of respondents formed from experiences experienced by themselves or also from the closest person. Like parents, friends, relatives, and neighbors.

5. Kesimpulan

Housewives in the village of Gisikcemandi Sidoarjo, the level of knowledge about waste management is largely lacking, regarding waste management, mostly negative attitudes. regarding waste management almost entirely behavior There is no relationship between knowledge and behavior of waste management in housewives in the Gisikcemandi Village in Sidoarjo. There is a relationship between attitude and behavior of waste management in housewives in the Gisikcemandi village in Sidoarjo.

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