

CORRELATION OF KNOWLEDGE LEVEL AND ATTITUDE FOOD PRODUCTS LABELING WITH READING COMPLIANCE OF FOOD PRODUCTS LABELING AMONG MOTHERS IN TAJEM SUB-DISTRICT MAGUWOHARJO

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Abstract

In Indonesia, food labeling issue only received little attention and only 6,7% of consumers are paying attention to food labeling standards. There are several factors which affect the reading compliance of food products labeling such as knowledge, attitude, age, occupation, gender, education, and information exposure. Labeling of food is a primary means of communication between producers and consumers. The aim of the research to know the correlation between the knowledge of food products labeling with reading compliance of food products labeling among mothers in Tajem Sub-District Maguwoharjo. This research was an *observational analytic* research with *cross sectional* study design. This research was conducted in May 2017. The population in this study was mothers in Tajem Sub-District Maguwoharjo with a population of 360 households. The sampling technique used was *Cluster Sampling* and analysis technique used was *Rank Spearman*. The level of knowledge of mothers with good category were as many as 41 people (52,6%), mother's attitude which supports were as many as 44 people (56,4%) and compliance mothers read food product labels were as many as 48 people (61,5%). The results of the analysis showed *p-value* = 0.000 of knowledge level's and attitude with. Correlation of knowledge level and attitude food products labeling with reading compliance of food products labeling among mothers.

Keywords: knowledge of mothers, attitude of mothers, compliance on food products labelling

1. INTRODUCTION

Food label is any information about food in the form of an image, writing a combination of both or other forms included in the food, inserted into affixed to, or part of the food packaging [1]. Nutritional value information in English known as Nutrition Panel or Nutrition Fact is an example of information that must be included if the food label contains certain information [2].

The Indonesian Food and Drug Administration oversees the label of circulating food products against 2,730 labels of food products, with the results of 417 (15.27%) labels of food products that do not meet the requirements. When compared to 2013 there was a decrease in labels which did not meet the provisions of 10.28% [3]. The results of the 2007 BPKN activities in Indonesia label problems still lacked attention, BPKN found 6.7% of consumers who pay attention to the completeness of food labels [4].

Research conducted by Zahara and Triyanti on the level of respondents' compliance in reading nutritional information labels among FKM UI students is still relatively low. Only around 39.1% of obedient students read nutritional information labels, and only 38.9% obediently read the composition label [5]. Whereas the research conducted by Darajat, Bahar and Jufri towards housewives in Mandong Wet Market Kendari City found that the majority of mothers' nutrition knowledge of 53 respondents had sufficient knowledge and there were 40 respondents (75.5%) with compliance with reading information labels obediently and 13 respondents (24.5%) with adherence to reading information labels were not compliant and from 14 respondents who had insufficient

nutrition knowledge there were 4 respondents (28.6%) with obedient reading label compliance and 10 respondents (16.0%) with reading obedience label is not compliant [6].

There are several factors that influence the compliance of reading food product labels, including knowledge, attitude, age, work, level of education. Knowledge and attitude are very important domains in shaping one's actions, or closed responses to a stimulus or object.

Preliminary studies conducted by researchers on Sunday 19 November 2016 for mothers in the hamlet of Tajem in Maguwoharjo Village were distributed questionnaires to 30 mothers, and from the results of a preliminary study showed that 30 mothers did not read food product labels. From these explanations the researchers wanted to know the level of knowledge of food product labels and the attitude of mothers with adherence to reading food product labels.

2. METHODS

This study was an observational analytic study with a Cross Sectional design. The study was conducted in May 2017. The population in this study were all mothers in the Tajem Village of Maguwoharjo Village with 360 families. The sampling technique used was cluster sampling and the samples obtained were 78 mothers. Data analysis techniques using Rank Spearman.

The researcher used a questionnaire on the level of food product label knowledge, maternal attitudes and adherence to reading food product labels that had been expertly tested with two expert lecturers, namely in the field of public health science and nutrition science, with 81.25% test results.

Univariate analysis in this study was to explain or describe the level of knowledge of reading food product labels and the attitude of mothers with adherence to reading food product labels. Bivariate analysis in this study was used to determine the variables that are related or correlated, in this study is to know the level of knowledge of food product labels and the attitude of mothers with adherence to reading food product labels. From the results of the statistical test, the p-value of 0,000 5 0,05 means that there is a Correlation between the level of knowledge of reading food product labels and the attitude of mothers with compliance with reading food product labels.

3. RESULTS AND DISCUSSION

3.1 Characteristics of Respondents

The responses in this study were mothers who numbered 78 respondents. Characteristics of respondents in this study included the age and work of the mother.

Tabel 1. Characteristics of Respondents

Characteristics	Categories	F	%
Mother's age	17-25 years	10	12,8
	26-35 years	34	43,6
	36-45 years	31	39,7
	46-55 years	3	3,8
	Total	78	100
Occupation	Yes	42	53,8
	No	36	46,1
	Total	78	100

Table 1 shows that the age of the mother in the hamlet of Tajem in Maguwoharjo Village is at most 26-35 years old, which is 34 people (43.6%). Based on the work it can be seen that most work as many as 42 people (53.8%).

3.2 Variable Level of Knowledge About Food Product Labels

Table 2 shows that the level of knowledge of mothers about food product labels in Hamlet Tajem, Maguwoharjo Village has a good category of 41 people (52.6%).

Table 2. Mother's level of knowledge about food product labels

Knowledge	F	%
Low	12	15,4
Moderate	25	32,1
High	41	52,6
Total	78	100

Based on the results of the study showed that the knowledge of food product labels in the Village of Tajem Maguwoharjo Village was mostly in the good category (52.6%). This shows that the respondent's ability to answer questions regarding the label information on nutritional value, composition, expiration date and net weight is mostly good.

The results of the study showed that mothers' knowledge of food product labels in the poor category was 12 people (15.4%), enough categories were 25 people (32.1%). Consumer knowledge is all information that consumers have about products and services, as well as other knowledge related to these products and services and which are related to their functions as consumers [7].

In this study the knowledge in question is all information that the mother has about food product labels. The product knowledge that each consumer has is different from each other. This knowledge will be used by consumers to interpret the new information they obtain and to make choices in purchasing [8].

This research is in line with the research conducted by Devi, Sartono, Isworo at ADA Setiabudi Supermarket in Semarang, which found that respondents' level of knowledge about packaged food labels was quite good because 41.2% of respondents included good categories and only 10.3% of respondents were less good [9].

3.3 Variable Attitude Read Food Product Labels

Table 3 shows that the attitude of mothers about reading labels of food products in the Village of Tajem in Maguwoharjo Village is mostly supportive as many as 44 people (56.4%).

Table 3. Mother's Attitudes About Reading Food Product Labels

Categories	F	%
Poor	34	43,6
Good	44	56,4
Total	78	100

Based on the results of the study, it was found that the attitude towards reading food product labels in the Tajem Village of Maguwoharjo Village was mostly supportive as many as 44 people (56.4%). This shows that the respondent's psychological response to statements related to nutritional value, composition, expiration dates and net weight label information is supportive.

Attitude is readiness or willingness to act. This readiness is done as a form of appreciation for certain objects that exist in the individual's environment. Attitudes can be referred to as predisposing actions of a behavior, which is a reaction or closed response from someone to a stimulus or object. So that the attitude can be interpreted as a closed reaction from the individual to an object, which describes the feeling or opinion of the object [10]. The factors that influence attitudes according to Azwar quoted in Wawan and Dewi are personal experiences, influences of other people that are considered important, cultural influences, mass media, educational institutions and religious institutions, and emotional factors [11].

In this study there were 34 people (43.6%) attitudes towards reading food product labels in the hamlet of Tajem Maguwoharjo Village in the category of not supporting. Attitude is a complex system consisting of the beliefs, feelings, and inclinations of consumer actions towards objects that make it included in cognitive, affective, and conative aspects, and which represent consumers in reacting to stimuli [12]. Attitudes can be developed over time through a learning process that is influenced by several things, such as the influence of family, peer groups, experiences, and the personality of the consumer itself. In addition, age factors, the number of sources of information, and control believe also affect consumer attitudes towards a product [13].

The results of this study are supported by research conducted by Sihombing entitled "Correlation between Knowledge and Attitudes of USU FKM Students in the Class of 2014 Against Compliance with Reading Food Product Expiration Labels. The results showed 36 respondents (90%) with good attitude and 4 people (10%) with less attitudes [14].

3.4 Compliance with Mother's Food Product Labels

Table 4. shows that adherence to reading food product labels on mothers in the Maguwoharjo Village of Tajem hamlet was mostly obedient as many as 48 people (61.5%).

Table 4. Compliance with reading food product labels on mothers

Categories	F	%
No compliance	30	38,5
Yes compliance	48	61,5
Total	78	100

Based on the results of the research study, it was found that the compliance of reading food product labels for mothers in the Maguwoharjo Village of Tajem hamlet was mostly obedient, namely 48 people or 61.5%. This shows that the respondent's actions to read food product labels related to nutritional value, composition, expiration date information and obedient category net weight.

Compliance or obedience (compliance or adherence) as: the level of the patient carrying out the treatment method and the behavior suggested by his doctor or by others. Obedience behavior is often interpreted as the patient's attempt to control his behavior, even if it can pose a risk to his health and this important factor is often forgotten [15].

Labeling on packaged food products does not only function as a means of identifying product brands and classes or for promoting products, but also has a function in providing information about these products, from manufacturers to how they are used. The actions of consumers who do not read labels before buying or consuming packaged food products can increase the occurrence of health risks [16].

Health behavior indicators are compliance. Health behavior (compliance) is associated with health education which is influenced by several factors, namely: predisposing factors (predisposing factors), enabling factors (enabling factors), and reinforcing factors. Label reading behavior can be used as a preventive and promotive measure to maintain health [17].

Based on the research there were 30 mothers or 38.5% of adherence to reading food product labels in the non-compliant category. Compliance also tends to be greater for respondents who do shopping activities than those who don't. The disobedience of mothers in reading food labels is because mothers of consumers prefer to cook their own food for family members rather than buying food so that is not necessarily healthy, mothers prefer not to buy flavorings that are in the market and more choose to make your own seasoning [6].

Factors that influence disobedience include: 1) understanding of instruction. No one can understand instructions if he misunderstands the instructions given to him. 2) Social and family isolation. The family can be a very influential factor in determining the beliefs and values of individual health can also provide support and make decisions regarding the care of sick family members. Learning where someone is isolated from other people's assistance, social isolation, is negatively related to obedience. 3) beliefs, attitudes and personality. The health belief model is useful for estimating non-compliance. People who are not obedient are people who experience depression, anxiety, are very concerned about their health, have a weaker ego power and whose social life is more focused on themselves [18].

The results of this study are supported by research conducted by Djarat et al. (2016) entitled "Compliance Correlations Reading Labels of Nutritional Substances with the Ability to Read Labels of Nutritional Information on Housewives in Mandonga Wet Market Kendari City". The results showed that obedient respondents read nutritional information labels of 44 people (65.7%) and non-adherents as many as 23 people (34.4%) [6].

3.5 Correlation Level of Knowledge About Reading Food Product Labels With Compliance Reading Food Product Labels

Based on Table 5. the results of cross tabulation of the level of knowledge about food product labels by adherence to reading food product labels on mothers can be seen that the most knowledge about food product labels is in a good category and compliance with food product label compliance categories is 36 people (46.2%)

Based on the results of the Spearman Ranks correlation test it can be seen the significance value of 0,000. This shows that the sig value. <0.05, the hypothesis is accepted, meaning that there is a significant Correlation between the knowledge of food product labels and the adherence to reading food product labels on mothers in the Tajem Village of Maguwoharjo Village.

Table 5 Correlation Level of Knowledge About Reading Food Product Labels With Compliance Reading Food Product Labels

Knowledge	Compliance						p-value
	No		Yes		Total		
	f	%	f	%	f	%	
Low	7	9,0	5	6,4	12	100	0,000
Moderate	18	23,1	7	9,0	25	100	
High	5	6,4	36	46,2	41	100	

Based on the results of the study, it was found that there was a significant Correlation between the level of knowledge about food product labels and the adherence to reading food product labels on mothers in the Tajem Village of Maguwoharjo Village. This can be seen from the Spearman Ranks significance value of $0,000 < 0,05$. This shows that the better the mother's knowledge about food product labels, the more obedient to reading food product labels on mothers.

Knowledge is all the results of knowledge that exist in a person from sensing something that is influenced by the intensity of attention and perception of the object. The source of knowledge is mostly obtained from sensing using ears and eyes. Good knowledge is the basis for someone to do good behavior [19].

The results of cross tabulation on the level of knowledge about food product labels by adherence to reading food product labels on mothers can be seen that the most knowledge about food product labels is good category and compliance with reading food product labels in compliant categories is 36 people or 46.2%.

According to Notoatmodjo 2003 cited in Wawan and Dewi 2011, it was explained that knowledge is influenced by one's experience, external factors of the person (environment), both physical and non-physical and socio-cultural, which is then known, perceived, believed to cause motivation, intention to act and ultimately the manifestation of intention occurs in the form of behavior. In this case sufficient knowledge will also improve a person to do something because someone will find out information that is around him. The better the knowledge of a person, the more obedient they will be in reading food product labels, whereas if a person's knowledge is sufficient then that person will find out information so that someone who knows enough will also obey reading food product labels and if there is less knowledge and information or lack of information available on food product labels, it is likely that a person will not obey reading food product labels [11].

In this study there were 5 people (6.4%) lacking knowledge and obedience, and there were 5 people (6.4%) knowledge of good and non-compliant categories of 18 people (23.1%) knowledge of sufficient and non-compliant categories. Compliance with reading low food product labels is due to business information-seeking constraints. One obstacle is the disinterest in information that can be caused by an understanding of the label that is lacking.

The results of this study are supported by research conducted by Zahara and Triyanti (2009) entitled "Compliance with Reading Nutrition Substances Among FKM UI Students. The results showed that there was a Correlation between knowledge and compliance with reading nutritional information labels in FKM UI students in 2009 [6].

3.6 Correlation Mother's Attitudes About Reading Food Product Labels With Compliance Reading Food Product Labels

Based on Table 6, the results of cross tabulation of mothers' attitudes toward adherence to reading food product labels on mothers can be seen that most attitudes toward reading food product labels are supporting and obediently reading food product labels, which are 36 people or 46.2%. Based on the results of the Spearman Ranks correlation test, it can be seen that the significance value is 0,000. This shows that the sig value. $< 0,05$, the hypothesis is accepted, meaning that there is a significant Correlation between attitudes towards reading food labels and by obedience to reading food product labels on mothers in Tajem Village, Maguwoharjo Village.

Table 6. Cross tabulation between maternal attitudes and adherence to reading food product labels on mothers

Attitude	Compliance						p-value
	No		Yes		Total		
	f	%	f	%	f	%	
Poor	22	28,2	12	15,4	34	100	0,000
Good	8	10,3	36	46,2	44	100	

Based on the results of the study, it was found that there was a significant Correlation between the attitude of mothers towards reading food labels and by obedience to reading food product labels on mothers in the hamlet of Tajem Village, Maguwoharjo. This can be seen from the Spearman Ranks significance value of $0,000 < 0,05$. This means that the mother's attitude towards reading food product labels is increasingly supportive, so that adherence to reading food product labels on mothers in the hamlet of Tajem, Maguwoharjo Village is more obedient.

The results of the cross tabulation of mothers' attitudes to adherence to reading food product labels on mothers can be seen that most attitudes toward reading food product labels are compliant categories and adherence to reading food product labels is in the good category of 36 people or 46.2%.

The attitude greatly influences a person's compliance in reading food product labels because the attitude means readiness or willingness to act and is not an implementation of certain motives. In other words, the attitude function is not an action (open reaction) or activity, but it is a predisposition of closed behavior (action) or reaction [19]. From the research, a positive attitude will be taken by someone who will obey reading food product labels because attitude is a person's behavior to do something or action while a negative attitude can cause a person not to read food product labels. From that attitude related to compliance in reading food product labels.

In this study there were 12 people (15.4%) the attitude of the mother in the non-supportive category but obedience in reading the label of food products in the obedient category. This is in line with the factors that influence compliance, one of which is attitude, the attitude itself is influenced by several factors, such as experience, other people, culture, mass media, and emotional factors. According to Palupi's research, et al. Showed that there was a Correlation between perceptions and attitudes after getting information about nutritional menu labels. Palupi et al. Stated that consumer perceptions of product value will influence consumer decisions on the product which will also affect attitudes [20].

The results of this study are supported by research conducted by Sihombing (2014) entitled "Correlation between Knowledge and Attitudes of USU FKM Students in the Class of 2014 Against Compliance in Reading Food Products Expiration Labels". The results showed that there was a Correlation between attitudes and adherence to reading label information on expiration of food products in USU FKM students in class of 2016 in 2016 [14].

4. CONCLUSION

There is a significant correlation between the level of knowledge about food product labels and compliance with reading food product labels for mothers in the hamlet of Tajem, Maguwoharjo Village, $p\text{-value} = 0,000$. There is a significant correlation between mothers' attitudes towards reading food product labels by adhering to reading food product labels on mothers in the hamlet of Tajem, Maguwoharjo Village, $p\text{-value} = 0,000$.

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