

Factors Associated to The Use of Iodized Salt by Housewives in Kecamatan Mila Kabupaten Pidie in 2020

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ABSTRACT

To improve the nutritional quality of individuals and communities by improving consumption patterns, it could be obtained by achieving household nutrition indicators in Kecamatan Mila Kabupaten Pidie. The intensity of households consuming iodized salt has decreased by year in 2017 (51%), 2018 (44%), and 2019 (31%). This condition resulted in 10 people having disorders due to iodine deficiency, 9 suffering goitre and one person suffering thyroid disease. The purpose of this study was to determine the factors associated with the use of iodized salt by housewives in Kecamatan Mila, Kabupaten Pidie, in 2020. This study used a cross-sectional analysis method. The result showed that based on univariate analysis, family knowledge and support were the most related variables with the use of iodized salt. In contrast, the health education variable (1.00) has no significant relationship with the use of iodized salt (p-value = 0.00).

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Introduction

Efforts to improve community nutrition, as stated in UUD 1945 No. 36 2009 on health, aims to improve the nutritional quality of individuals and communities through improving food consumption patterns, improving nutrition-conscious behaviour, increasing access and quality of nutrition and health services by advances in science and technology (Kemenkes, 2018).

One of the Ministry of Health's strategy targets is all nutritionally aware families (KADARZI), as stated in the Decree of the Minister of Health No. 564/MENKES/SK/VIII/2006 regarding the guidelines for implementing "Desa Siaga" development. KADARZI is a family that can recognize, prevent, and overcome the nutritional problems of family members. A family is called KADARZI if it has good nutritional behavior continuously. The nutritional awareness behaviors expected to be realized at a minimum are: regularly weighing, giving breast milk (exclusive breastfeeding), eating a variety of foods, using

iodized salt, and taking nutritional supplements as recommended (Notoatmodjo, 2012).

Efforts to improve nutrition status involve promoting a balanced diet, including nutrition counseling at the healthcare center, food fortification, providing additional food including complementary feeding, and providing nutritional supplements (vitamin A capsules and blood-supplementing tablets/TTD), monitoring and prevention of malnutrition. There are still many families who have not behaved well in nutrition, so that the reduction in nutritional problems is slow (Kemenkes, 2018).

The highest incidence of iodine deficiency disorder (IDD) in the world is in the European region, as much as 52.0%, while Southeast Asia is in fourth place, which is 30.0% after the East Mediterranean, which is 47.2% and Africa, which is 41.5% (WHO, 2007). The prevalence of goiter in elementary school children in 2005 in Indonesia had a TGR (Total Goiter Rate) of 44.9%. Monitoring data for iodized salt in Indonesia from 2006 to 2010 showed that

71.5% of iodized salt samples met the requirements (MS) (Kemenkes, 2013).

One of the IDD prevention programs is the fortification of iodine in salt. Universal Salt Iodization (iodized salt for all) is a long-term program to eliminate IDD problems. The problem of IDD is estimated to be eliminated if more than 90% of households have consumed salt-containing sufficient iodine. Based on data on the achievement of nutrition indicators in households in the working area of the Health Service of Kabupaten Pidie from 26 sub-districts of household orders that consume iodized salt in January to December 2017 about 25%, in January-December 2018 23.7% and January-August 2019 20% (Depkes RI, 2008)

Based on the profile data of Mila Health Center, the population in the area is 10285 people with the number of family cards as many as 2793 families. Based on nutrition achievement data on iodized salt, the achievement was 51% in 2017, 44% in 2018, and 31% use of iodized salt in the Mila Health Center area. From this data, it can be seen that there is a decrease in the use of iodized salt every year. This condition causes 10 people to experience disorders due to iodine deficiency (IDA), 9 of them suffering goiter and one suffering thyroid disease (Depkes RI, 2007).

Various factors can be the cause of the desire of housewives to use iodized salt. Characteristics of a person can affect every human being, including age, gender, education level, and the marital status during work in the organization (Ribhan, 2008). The other factors that may cause the low usage of iodized salt are there are many non-iodized salts that available in the market with the lower price compared to the price of iodized salt and the low of community's knowledge about the benefits of iodized salt, which will then affect their attitude in using iodized salt (Bag, Gizi Puskesmas Ponre, 2016).

This study aims to determine the factors related to the use of iodized salt in housewives in Kecamatan Mila, Kabupaten Pidie.

Method

This research is analytic with a cross-sectional design, which means that the research is designed to study the research variables by using an approach or collecting data at the same time (point time approach). The population in this study were all housewives in the Kecamatan Mila Work Area, Kabupaten Pidie, in 2020, which amounted to 2841 housewives. The Cluster Random Sampling Technique carried out the sampling method with the

determination of inclusion and exclusion criteria. The data were obtained from interviews and headman in Kecamatan Mila, Kabupaten Pidie. The instrument in this study used a questionnaire.

The dependent variable in this study is the use of iodized salt, while the independent variables include knowledge, education, family support, and health education. Univariate analysis was conducted to describe each research variable using the mean value. Bivariate analysis was carried out to see between the dependent variable and the independent variable.

Results

Table 1. The frequencies distribution of factors associated to the use of iodized salt by housewives in Kecamatan Mila Kabupaten Pidie in 2020

Variable	Total Respondent	
	N	%
Variabel Dependent		
Utilization of Iodized Salt		
Using	29	29,9
Not Using	68	70,1
Variabel Independent		
Knowledge		
Good	13	13,4
Not Enough	84	86,6
Educational Background		
High	41	42,3
Middle	43	44,3
Low	13	13,4
Family Support		
Good	64	66
Not Enough	33	34
Health Education		
Received	95	97,9
Not received	2	2,1

Table 1. shows that the majority of utilization of iodized salt is in not using category (70.1%), the knowledge majority is not enough (86.6%), the educational background majority in the middle (43.3%), the family support majority in support (66%), and health education majority in received (97.9%).

Table 2. Bivariate analysis of factors associated with iodized salt use by housewives in Kecamatan Mila Kabupaten Pidie in 2020.

Independent Variable	Utilization of Iodized Salt				P-value
	Yes		No		
	N	%	N	%	
Knowledge					
Good	12	92,3	1	7,7	0,000
Not Enough	17	20,2	67	79,8	
Educational Background					
High	19	65,5	22	32,4	0,023
Middle	8	27,6	35	51,5	
Low	8	68,9	61	87,3	
Family Support					
Yes	27	93,1	37	54,4	0,000
No	2	6,9	31	45,6	
Health Education					
Received	29	100	66	97,1	1,000
Not received	0	0	2	2,9	

Based on Table 2. above, there are three variables related (p -value < 0.05) to the use of iodized salt, and there is one variable (health education (p -value 0.05) that has no relationship with the use of iodized salt.

Discussion

Relationship between Knowledge and The Use of Iodized Salt

The results of this study indicate that there is a significant relationship between knowledge and the use of iodized salt in Kecamatan Mila, Kabupaten Pidie in 2020, the p -value of $0.00 < 0.05$ was obtained. The result is in line with previous research by Wardani (2015) conducted in Purworejo Regency in 2011, which showed there was a significant relationship between knowledge and mother's behavior in using iodized salt. Another research by Yuni (2017) reported that many factors can affect housewives who have low knowledge but still consume iodized salt, including they are accustomed to using iodized salt (refined salt).

Knowledge about health has a very important role in determining someone's personal health. The broad knowledge and understanding of health correlate with their awareness of health (Eko Suryani and Hesty Widayasih, 2008:40). However, knowledge is not enough to make a person accept health values. Acceptance of health values is influenced by someone's belief in health. Belief in the good or bad value of health is based on its assessment of the

perceived benefits and in terms of emotional/psychological, social, economic, perceived losses and consequences, as well as perceived obstacles (Eko Suryani and Hesty Widayasih, 2008).

Relationship between Educational Background and The Use of Iodized Salt

Education is an activity or human effort to improve personality by fostering personal potential in the form of spiritual (creation, taste, and intention) and physical (five senses and skills). Education is the result of achievements achieved by human development and the efforts of these institutions in achieving their goals (Gibney, 2009).

Education can be done formally or informally to provide understanding and change behavior (Meliansari, 2013). Women play a very important role in education at home. They instill habits and become role models for future generations regarding the treatment of the environment. To be able to carry out this education well, women need to be educated both formally and non-formally because a mother can take care of and educate her child well if she is educated (Gusti Ayu, 2013).

From the results of the study, it is known that the educational background has a relationship with the use of iodized salt, where the p -value is $0.023 < 0.05$. The higher the education level of the head of the household, the more households that use iodized salt. This is reinforced by the results of the chi-square statistical analysis, which shows a significant relationship between the education level of the head of the household and the use of iodized salt ($p = 0.000$). Likewise, the wife's education level shows that the higher the wife's education level, the more use of iodized salt. The statistical analysis results showed a significant relationship between the housewife educational background and the use of iodized salt ($p=0.000$).

The higher the level of education, the greater their awareness of using iodized salt. This is in line with several previous findings. The higher the education level of the head of the family, the greater the percentage of families using iodized salt. Mother's education level is the dominant factor related to the use of iodized salt in households in Mojogemi Village, Sukowono Jember through the results of his research in Ulak Karang Selatan Village, Padang reported that the use of iodized salt in households is related to family education level (Muliarsari D, 2011).

Relationship between Family Support and The Use of Iodized Salt

This study indicates that family support has a significant relationship with the use of iodized salt, and the p-value is 0.000. The results of the study on support (family/neighborhood/health workers/ village leaders) with the use of iodized salt at the household level showed that mothers who did not receive support with the use of iodized salt at the household level did not have enough iodine as many as 42 respondents (71.2%) and 17 respondents (28.8%). Meanwhile, 6 respondents (28.6%) did not receive support using iodized salt at the household level, and 15 respondents (71.4%). Based on table 1, the results of statistical analysis state that there is a significant relationship between support (family/neighbors/health workers/village leaders) and the use of iodized salt at the household level (Sutiah, 2017).

Family support is defined as verbal or non-verbal information, advice, tangible assistance, or behavior provided by people who are familiar with the subject in their environment or in the form of presence and things that can provide emotional benefits and affect the behavior of the recipient. In this case, people who feel emotionally supported feel relieved because they are cared for and get suggestions or a pleasant impression (Smet, 1994 in Christine, 2010).

Family support is a process that occurs throughout life. The nature and type of support differ in different stages of the life cycle. Family support can be in the form of internal social support, such as support from husband, wife, or support from siblings, and can also be in the form of external family support for the family. Family support makes the family able to function with various intelligence and senses. As a result, it improves family health and adaptation (Friedman., M. 2010).

Relationship between Health Education and The Use of Iodized Salt

The amount of services provided by health workers by providing health education is 97.9%. Based on Table 2. it is known that mothers who use iodized salt based on counseling are 100%, and those who do not use iodized salt but extension officers provide counseling are 97.1% compared to mothers who do not receive counseling and do not use iodized salt only 2.9%. Based on the results of the p-value obtained $1,00 < 0.05$, the conclusion is that there is no significant relationship between health education and the use of iodized salt in Kecamatan Mila, Kabupaten Pidie in 2020. This means that the health

education provided by health workers from the Mila Health Center does not change the community.

According to Suliha et al. (2012), health education is a process of change in a person associated with achieving individual health goals and society. Health education cannot be given to someone by another person, not a set of procedures that must be carried out or a product that must be achieved, but is a dynamically changing developmental process, in which a person accepts or rejects new information, attitudes, and practices related to the goal of healthy living.

The influence of customs in receiving new information cannot be ignored because our society still values and considers something that should not be ignored. In public trust, people pay more attention to information conveyed by people they already know because public trust has arisen with conveying information. When delivering information, the availability of time in the community must pay attention to the level of community activity to ensure the level of community presence in counseling.

The results of the research on health worker counseling showed that the results of the analysis showed a relationship between health worker counseling and the use of iodized salt at the household level. Providing health education about iodized salt, in general, will increase a person's knowledge so that the person will have good behavior in choosing and using iodized salt in daily life.

Conclusion

Conclusion: There is a significant relationship between mother's knowledge, mother's last education, family support, and the use of iodized salt in Kecamatan Mila, Kabupaten Pidie in 2020. However, there is no significant relationship between health education and the use of iodized salt. Knowledge and family support are the most dominant factors related to the use of iodized salt in Kecamatan Mila, Kabupaten Pidie in 2020.

Recommendation: (i) The health office and related agencies should be able to guarantee the availability of iodized salt in the field by monitoring the distribution of iodized salt in the market and monitoring iodized salt in the community, as well as involving the community in ensuring the availability of iodized salt within the scope of housewives by storing iodized salt and processing salt at home. cooking process properly so that the consumption of iodized salt can increase. (ii) it is hoped that housewives will be able to increase efforts to

improve the family's nutritional status, especially in terms of using iodized salt in the right way, as well as reducing the consumption of goitrogenic substances. (iii) The need for the husband's support and participation in using iodized salt by providing information on the use of iodized salt, both from the benefits and impacts of iodine deficiency. (iv) It is necessary to improve monitoring, counseling, and promotion of iodized salt on a regular basis in order to achieve the status of "families with good consumption of iodized salt" by using leaflet, audiovisual and social media. In addition, there is guidance for producers to provide adequate iodine according to the Indonesian National Standard (SNI), containing as much as 30-80 ppm in collaboration with surrounding sectors.

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