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THE 2nd INTERNATIONAL CONFERENCE OF HEALTH SCIENCE 2015

Optimizing The Life Quality of Children Under SDGs

POLTEKKES KEMENKES YOGYAKARTA

PROCEEDING BOOK

October, 11th, 2015

Inna Garuda Hotel Yogyakarta

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THE 2nd INTERNATIONAL CONFERENCE ON HEALTH SCIENCE 2015

“Optimizing The Quality of Life Children Under SDGs” (Sustainable Development Goals)

October 11st, 2015

INNA GARUDA HOTEL YOGYAKARTA, INDONESIA



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THE KNOWLEDGE ATTITUDE AND PRACTICE OF HYGIENE SANITATION FOOD HANDLER AS RISK FACTORS OF STUNTED ON CHILDREN 0-24 MONTHS

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ABSTRACT

The prevalence of stunted in Indonesia is still high, that the indirect factors affecting the high prevalence of malnutrition is childcare. Childcare includes mother's way to feed, mother's way to take care, keep mother and child's hygiene and how to care. This research aims to find out the level of knowledge, attitude, practice of hygiene and sanitation food handler and also the correlation with stunted incidence in children aged 0-24 months. This type of study was an observational study with case-control design. Research done was carried out in 2013, that located in Moyudan subdistrict Sleman. The samples of this study were children aged 0-24 months with food handler as responden. There were 50 children as sample of this study each for cases and controls. Control decision based on match by sex and age. The data of this study included level of knowledge, attitude, practice of hygiene and sanitation of food handler. Data were collected through interviews and observations using a questionnaire and check list. The results of research showed that 95% of the food handlers have good knowledge, 51% have a negative attitudes, and 52% have a less practices about hygiene and sanitation. The study showed that knowledge, attitudes, and practices to stunted incidence are as the following: (1) knowledge OR 1,53 (95% CI = 0,25-9,59; and $p = 0,50$), (2) attitude OR 1,08 (CI 95 % = 0,49-2,37; and $p = 0,84$), (3) practices OR 3,167 (95% CI = 1,40 to 7,17; and $p = 001$). This research conclusion that no correlation between knowledge and attitude of hygiene sanitation food handler to stunted incidence, but any correlation between practice of hygiene sanitation food handler to stunted incidence in children aged 0-24 months.

Keywords: knowledge, practice, food handler, stunted, children aged 0-24 months

BACKGROUND

The prevalence of short children (stunted) in Yogyakarta (DIY) based on the Basic Health Research (Riskesdas) of approximately 22.3%. Moyudan the districts that the prevalence of stunted children are second highest in Sleman district in 2010. The latest data per-February 2012 in children aged 0-11 months in children stunted figure of 25.1% which is above the prevalence of DIY (22.3%). While the nutritional status of H/A index for toddlers 1-5 years in the district Moyudan of 26.2% with the highest incidence region stunted his village Summersari with a prevalence of 25.9%. The cause of the high prevalence of nutritional problems directly is the nutrient intake consumed not fit between the needs of the body as well as the existence of infectious diseases. Nutrient intake is not directly influenced by parenting of children given by the mother, parenting include how mothers feed, care for, maintain the health and hygiene of children and mothers as well as mothers how to give affection to their children. ¹ Basic care and personal hygiene provide a greater contribution to nutritional status. Usually people just know that malnutrition is caused by lack of food. Actually, the problem is very complex. The main factors that also have a role is environmental hygiene factors and parenting or childcare. Negligence on three factors, namely food, personal and environmental hygiene and child care will lead to reduced inputs

of nutrients and is an infection so that children end up suffering from malnutrition.² UNICEF presented the conceptual framework which was developed further by Engle et al emphasize that the three components of food-health-care are all factors that play a role in supporting the growth and development of children were optimal. Engle et al/ suggested that upbringing includes 6 things: attention / support mother to child, breastfeeding or complementary foods in children, stimulation psychosocial against children, preparation and storage of food, hygiene or hygiene and environmental sanitation and treatment of children in sickness like health care seekers. Breastfeeding and complementary feeding in children as well as the preparation and storage of food covered in feeding practices.³ This study conducted a study to determine the level of knowledge, attitude, practice sanitary hygiene of food handlers do with the problem of stunted children aged 0-24 months.

MATERIALS AND METHODS

Observational study with a case-control design (case-control study), which examines stunted children aged 0-24 months with risk factors for knowledge, attitudes and practices of food handlers. The risk factor traced retrospectively in the case group and the control group were compared.⁴ The control group with the criteria of age and gender are relatively similar to the case group. The experiment was conducted in May-June 2013 in the District Moyudan, which is a sample of children aged 0-24 months with family food handlers as respondents, the number of comparable between cases and controls (50 cases and 50 controls). Inclusion criteria for the status of the case group was stunted children, food handlers willing to become respondents, while the inclusion criteria for the control group was normal status, food handlers willing to become respondents. Exclusion criteria for case and control groups include: children suffering from chronic infectious disease, the child in a state of paralysis or have skeletal abnormalities, and a twins.

The independent variable consists of knowledge, attitude, sanitation and hygiene practices of food handlers, while the dependent variable was the incidence of stunted children aged 0-24 months. Primary data collected include food handlers identity data and the child, the data length or the height of children, level of knowledge, attitudes and practices of food handlers on food hygiene-sanitation. Data were collected by interview and observation using a questionnaire and a check list.

RESULTS

Children and Respondent Characteristics

Characteristics of children according to sex, consisting of 27 boys were stunted and 27 children were not stunted. Characteristics of children by age mostly aged 7-12 months, consisting of 16 children suffer from stunted and 16 children not stunted. Respondents are food handlers family, that is, those that are directly related to the child's relation to food and equipment, ranging from preparation, cleaning, processing, transportation up to the presentation (5). Respondents are women, mostly aged 21-30 years, which is 50% in the group of children stunted and 48% in the group of children not stunted, graduated from high school formal education as much as 58% in the group of children stunted and 62% in the group of children not stunted, do not work as much as 62% in the group of children stunted and 74% in the group of children not stunted. Characteristics of the status of food handlers in most of the family is the mother, which is as much as 96% in the group of children stunted and 92% in the group of children not stunted.

Knowledge, Attitude and Practice Sanitation Hygiene of Food Handlers

The average score almost the same level of knowledge, in the group of children stunted by 89.66% while the group is not stunted 89.15%. The average score of respondents also almost the same attitude, the stunted group 80.36%, while the group is not stunted 80.33%. The average score of respondents in the group practice stunted 78% lower than the group not stunted 82.1%. Most respondents have a level of hygiene knowledge of food handlers good sanitation is as much as 94% in the group of stunted and 96% in the group is not stunted. Most respondents to the stunted group being negative about sanitation hygiene of food handlers, which is about 52%. While the group is not stunted the number of respondents who had a negative attitude and positive alike. Sanitary hygiene practices of food handlers in the group stunted most of the criteria is less (66%), while the group is not stunted the majority (62%) good practice.

Results of the analysis of the correlation between knowledge of hygiene and sanitation of food handlers with the incidence of stunted values obtained odds ratio (OR) of 1.53 which indicates there is a positive association between risk factors and disease. That is, children who are less knowledgeable family food handlers on food sanitation hygiene, had 1.53 times the risk for experiencing stunted, compared with children whose families are knowledgeable good food handlers. But the relationship was not statistically significant ($p > 0.05$).

Results of analysis of the relationship attitude hygiene and sanitation of food handlers with the incidence of stunted values obtained odds ratio (OR) of 1.08, which indicates there is a positive association between risk factors and disease. Child family food handlers negative attitudes toward food sanitation hygiene risk as much as 1.08 times to experience stunted, compared with baduta the family food handlers to be positive. However, the relationship is not statistically significant ($p > 0.05$).

Results of analysis of the relationship of hygiene and sanitation practices of food handlers with the incidence of stunted obtained odds ratio (OR) of 3.16, which indicates that there is a positive association between risk factors and disease. That is, children whose families are still lacking food handlers in food sanitation hygiene practices amounted to 3.16 times the risk for experiencing stunted compared to children whose family food handlers practice good hygiene by food sanitation ($p < 0.05$).

DISCUSSION

Hygiene and Sanitation Knowledge of Food Handlers

These findings are in contrast to studies conducted that food handlers knowledge about hygiene and sanitation of food will affect whether or not a healthy food product produced. Cases of food-borne illness often occurs because in general the food is prepared and served with hygiene and poor sanitation. The condition occurs due to a lack of knowledge about sanitation hygiene of food handlers, so that the food contains bacteria, toxic bacteria, or contain dangerous chemicals (contaminated) so it will have an impact on health.⁶ Knowledge of food sanitation hygiene is important for food handlers who have young children under five year old. On this golden period of the child vulnerable to all kinds of infectious diseases that could hamper the growth process. That is, the role of food handlers is also great for the survival of the child.⁷

Knowledge of food handlers are largely classified as either could be affected by several things, including the education level of the majority of food handlers who graduated from high school. Education is needed to obtain information for example the things that support

health so as to improve the quality of life. According to Mantra education can affect a person, including a person's behavior will be the pattern of life, especially in motivating to participate in the development attitude in general, the higher the education a person more easily receive information.⁸ The results showed that some respondents did not know the food handling requirements, namely with regard to the following matters: (1) Not suffering from contagious diseases such as coughs, colds, influenza, diarrhea and stomach ailments like because according to respondents flu-like illness will not greatly affect food contamination; (2) Do not use gold ornaments, according to respondents wear jewelry such as rings when cooking does not have to be avoided because it has no effect. Yet according to the theory of direct food handlers are not allowed to use the ring, well-eyed or not, also watches because bacteria can be left in the ring that could not be cleaned at work; (3) There is a conversation when handling food and drinks because in the mouth there is a lot of bacteria that would allow the contamination when food handlers chatted while preparing food, (4) Do not scratch the body when treating food as before and during the work a food handler should not be scratching your nose and other body parts that can cause germs. This is because many infections will be transmitted.

One respondent who still think that the bathrooms and toilets in clean condition at all times, not one way to prevent contamination, as well as poor environmental sanitation kitchen will cause children more susceptible to infectious diseases. This is not in accordance with the opinion that poor environmental sanitation will result in the child more susceptible to infectious diseases that can ultimately affect the nutritional status.⁹ Environmental sanitation is closely related to the availability of clean water, availability of toilets, type of floor of the house and hygiene utensils in every family. The more available water for daily needs, then the smaller the risk of children affected by disease or malnutrition.¹⁰

Attitudes Relationship Hygiene and Sanitation Food Handlers with Stunted

Processing activities and the presentation of food and environmental hygiene environment, especially food handlers attitude towards sanitation hygiene is very important. Good or bad the food products produced during processing is highly dependent on the attitude of food handlers. Food handlers are expected to be positive about sanitation hygiene in the processing and presentation of food, thus producing quality food products and safe for consumption.

Attitudes towards sanitation hygiene of food handlers include personal hygiene sanitation, hygiene sanitation and hygiene while the food processing environment. The analysis showed that 52% of respondents from the group stunted and 50% of respondents from stunted groups were not included in the negative category. This means that there are still many who responded negatively regarding food sanitation hygiene. Results of research conducted showed that most respondents have a negative attitude towards the following: (1) food handlers have an important role to the possibility of contamination of the food served. Whereas handle the food or personal hygiene personal hygiene is very important; (2) Do not scratch the body during food processing, (3) There is a conversation when handling food and beverages; (4) Do not use gold ornaments or assesories, (5) The bathroom and toilet in clean condition *at all times* is one way to prevent contamination; (6) Poor sanitation of the kitchen causes the child more susceptible to infectious diseases. Negative attitude towards food sanitation hygiene is the role of social influence, such as the norms and culture, the personality traits of individuals as well as information received.

Hygiene and Sanitation Practices Relation Food Handlers with Stunted

According to the WHO's behavior is influenced by the knowledge.¹ Nevertheless, the results of this study indicate that the majority of food handlers have knowledge of good, was not followed by hygiene practice good sanitation. This is evident from the number of respondents who earn more categories of sanitary hygiene practices that are less than the respondents who earn good practice category. Observations indicate that food handlers do not wash their hands often, using only water without using soap after coming out of the toilet, resulting in children's food can be contaminated with germs. In addition, there are respondents who do not keep clean nails let your nails grow long, but long nails are a source of dirt. Some respondents also ignores the requirement in food handling activities related to the following: (1) Keep cooking while suffering from contagious diseases such as coughs, colds, influenza, diarrhea (disease and the like); (2) Using gold jewelry, because the bacteria can be left in the ring that could not be cleaned at work; (3) Conversing when handling food and drinks, so there are a lot of bacteria that would allow the contamination when preparing food; (4) Scratching parts of the body when processing foods that can cause germs, since many infections will be transmitted; (5) Do not use an apron when preparing food, while the apron serves to keep food is not contaminated by dirt on everyday clothing worn respondents either while cooking or not.

Matters relating to the food distribution is still sometimes overlooked is holding a food that has been cooked without using a tool (eg a spoon). Currently there are observations made respondents to mix foods that take vegetables and side dishes directly by hand. It is likely the contamination of the food served, especially before food handlers do not wash their hands with soap. Observations of environmental conditions, also found the state of the kitchen dirty and messy, there is even a kitchen into one with storage of goods that may already be in use. The unavailability of a closed trash can in the kitchen is also still to be found, so that the garbage left open and is a source of contamination when rubbish is left piled up in the kitchen.

Sanitary hygiene practices are also still being ignored by food handlers, ie, respondents who were breastfeed the child does not clean the nipples before breastfeeding to children. Similarly, after the breastfed child's mouth is not cleaned, as well as breast-feeding should not in any place. The observation is still a lot of respondents lacking in food sanitation hygiene practices, so as to fix the necessary education on the importance of sanitation and hygiene effects on health. In general, people only know that malnutrition occurs due to lack of food, but the infection can also interact with food intake less against malnutrition in children. The problem is very complex, which if neglect to factor food, personal and environmental hygiene, and child care will result in reduced nutrient inputs and easily arise infection so that children end up suffering from malnutrition.²

The conclusion of this study there were no significant relationship between the level of knowledge and attitudes about sanitation hygiene of food handlers with stunted children aged 0-24 months. But there is a significant correlation between sanitation hygiene practices of food handlers with the incidence of stunted children aged 0-24 months. Advice for health workers should provide guidance sanitation hygiene practices of food handlers children 0-24 months, so that food handlers more attention to personal hygiene and environmental cleanliness.

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