Participatory Action Research to Negotiating Establishment of a Model of Healthy Canteen at SDN 15 Palu

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Abstract

This study aims to analyse the process to obtaining support from local government by developing a draft of academic text of mayor’s regulation to establishment of a model of healthy canteen at SD 15 in Palu City. The research used the Participatory Action Research (PAR) method. It analyzes the participative action of school community and the stakeholders in establishing a model of healthy canteen at SDN 15 in Palu City with supported by regulation from the local government. The data were collected through interviews, focused group discusions, and participant observations. The data were analyzed in several steps including collecting the data, reducing the data, presenting the data, and drawing the conclusions. The data were presented in the forms of narrations, charts, and observations. The results of this research show that the process of negotiation in the establishment of a model of healthy canteen needs support and active participation of the school community and stakeholders. The modeling of healthy canteen at SDN 15 was undertaken in several steps including disseminating the information, developing a framework of the model of healthy canteen, conducting a training of food safety practices, and the establishment of the model framework in the school canteen.

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The community had negotiation with the local government by developing a draft of academic text of mayor’s regulation that will become the foundation of the establishment of healthy canteen at schools in Palu City.

**Keyword:** negotiation; participatory action research; healthy canteen.

1. **Introduction**

Food is one of the main sources of disease transfer, especially provided in schools where children are still very susceptible to foodborne illness. According to Aziz & Dahan (2013), schoolchildren as consumers who have no other choice in choosing food except whatever is provided in the school environment and several foodborne disease outbreaks in school continue to be reported. Foodborne illnesses can be prevented by safe food handling in school canteen [1-3]. Previous research has shown that food vendors have a good level of knowledge about the importance of food safety handling. However, this knowledge is not followed by the practice of good hygiene and sanitation so that cross-contamination is still going well in the setup process until the presentation of the food to school children [4]. Relevant to research conducted by Damayanti in 2014, indicating that only 24.3% of schoolchildren snack food vendors implement food safety practices [5]. Many efforts have been made in improving food security in schools. However, these food security efforts are still constrained by inadequate facilities and infrastructure, especially the procurement of buildings designated according to healthy standard for school canteen. This causes the schools then use the facility as is and the implementation of the improvement program independently has not been implemented. To facilitate students acquire healthy food choices and developing healthy eating habits, it is important for school has a healthy canteen [6]. Studies by Porto and his colleagues in 2015, most of the school cafeterias in the Federal District do not encourage healthful eating. The high prevalence of outsourced services with little interference from the school community gives high autonomy to the cafeteria’s owner, whose priority is the pursuit of profit at the expense of the students’ nutritional education. For that reason, the effort that can be done in overcoming the problem of snacking of schoolchildren and forming healthy eating behavior in children is by establishing healthy canteen at school [6, 7]. The establishment of this healthy canteen requires participation and policy support from the local government. Local governments play the role in financing the procurement of school canteen facilities and making regulations to support food security in elementary schools[8]. As well as government regulations in the Netherlands state about healthy canteen policy in schools that regulate the classification of food that is able to control the sale of food and beverages in schools so as to prevent obesity among students. To support this policy required negotiations with relevant parties to initiate the formation of healthy canteen modeling [9, 10]. Negotiations are part of health advocacy that can help in encouraging participation and commitment of the school community. Negotiations are commonly used in policy-related health advocacy. In the study of tobacco control negotiations, the success of the negotiation process was supported by the mobilization of community organizations, media and stakeholder discussions [11]. Negotiation is an important part in encouraging policy support from related parties in initiating the formation of healthy canteen modeling which is expected to be a model that can be replicated by other schools in Palu city. This study aims to examine the process of obtaining supporting from local government to establishment of healthy canteen modeling in schools in the future able to provide an example of school canteens that apply food safety handling practices at Palu city.
2. Materials and methods

Location and Research Design

This research was conducted in SDN 15 Palu City, the one of elementary school in Palu City, Indonesia. Methods of this research is participatory action research (PAR). The action taken in this research is socialization of the formation of healthy canteen modeling in school, declaration of school canteen of SDN 15 as healthy canteen modeling was initiated by signing a commitment to establishment of SDN 15 canteen as a healthy canteen by the school community and stakeholder. This activity involves participation National Agency of Drug and Food Control (NADFC) in Palu City (Balai POM di Palu), department of health of Palu city, department of education and culture of Palu City and School Community SDN 15 Palu City.

Method of collecting data

In this study, data was collect by in-depth interviews, focus group discussions and participant observation. This study involves stakeholders who play a role in the supervision of “snack” food of school children. The informants interviewed in this study consisted of the Principal of SDN 15, food vendor at school canteen, the Head of the certification and costumer service at Balai POM in Palu, the head of the environmental health, occupational health and sports department health of Palu City and the Secretary of the Education and Culture Office of Palu City. Focus group discussions were conducted to two groups of informants, teachers and student parents at SDN 15 Kota Palu. Furthermore, observations on socialization activities, the formation of a negotiator team, the preparation of a healthy canteen model framework and implementation of the model framework to the establishment of a healthy canteen at SDN 15 Kota Palu. This study involves stakeholders who play a role in the supervision of food snacks of children.

Data analysis

Data analysis in this study using content analysis. Qualitative content analysis method conducted in several steps including collecting the data, reduction the data, presentation the data and make a conclusion in the form of narration, chart and observation result.

3. Results

Condition of School Canteen in Palu City

This study observation twelve elementary schools, there are only three primary schools that have had a permanent cafeteria and are well managed by the school. While 6 (six) schools, the canteen is just a table that placed in the school yard or with canteen buildings in the form of bamboo poles that use the roof of a plastic tent. Personal hygiene and environmental sanitation are not practiced by food vendors. This condition of hygiene and sanitation is still minimal impact on the easy snack food sold in school environment contaminated microbiology. This statement was supported by examination report from Balai POM di Palu that food samples from school canteen tested contained coliform bacteria and E. Coli. One school that already has a permanent
canteen is SDN 15. SDN 15 is one of the primary schools in Palu city that has been intervened by NADFC national program to supervising a food safety in school canteen. This program as known as “aksi nasional pangan jajanan anak sekolah (AN -PJAS)” that enforment by Balai POM in Palu. SDN 15 has a permanent cafeteria but the extent is still not able to accommodate all students as described by informants NA:

"... our school canteen has been working with Balai POM to control the food safety in canteen and there has been socialization with canteen vendors and there are already toilets and washtafel in our school canteen. But canteen in our school is not equal to the number of students ...."

(NA, P of March 25, 2017)

In addition to constrained canteen facilities, food safety practices have not been applied consistently in the school cafeteria. Food safety practices are all efforts undertaken to minimize of chemistry, physics and microbiology contamination. The absence of food safety training conducted in schools is also an obstacle to the implementation of this food safety practice. Knowledge of food safety practices is well known to the school community and food vendors as described by informants:

"... we must wear apron, tie the hair, if you take food with spoon, wash our hand with soap before and after we touch the food... yes i know that but...hmm sometimes i forget to do that."

(VN, March 25, 2017)

From the informant's explanation above, it can be seen that food vendors have been well aware of the things that need to be considered if it will present the snack food of schoolchildren to avoid the occurrence of cross-contamination by bacteria. To anticipate the occurrence of food poisoning in schools and food borne illnesses, SDN 15 issued a policy to not give permission to merchants to enter and sell in the school environment. It is intended that the food and beverages provided to students in SDN 15 can be controlled procurement, the seller, the type of food, nutrition and food safety, so as to facilitate the supervision of snacks sold in the school environment.

The role of stakeholders in the supervision of food in school canteen

In the handling of snack food of schoolchildren in Palu City, the Education and Culture Office of Palu City does not yet have a special program that oversees snacks food for school children, but the Office of Education and Culture provides support to other stakeholder programs such as Balai POM in Palu and Departement Health of Palu City, presented by the informant:

"... socialization this program to our student only with the appeal in convey during the ceremony every monday. For support in the form of a non-existent program, programs funded by local governments are not yet ad. But we always support school-based programs ... "

(KA, L, March 27, 2017)
Departement Health of Palu City has a hygienic and sanitation inspection program for the canteen but the program is still voluntary from the canteen vendor to request for hygiene and sanitation inspection of the school canteen to obtain a certificate of hygiene. In addition, the UKS and PHBS programs at schools have also been running at SDN 15, where these programs also oversee healthy snacks and cafeterias. Balai POM in Palu as a technical implementation unit of drug and food supervision has intervened school food snack monitoring (AN-PJAS) that has provided socialization, technical guidance of school food cafeteria safety and school food canteens star safety star awarded to schools that already have canteen Permanent and have followed technical guidance implemented by Balai POM in Palu. As the informant has explained:

"... food safety audit in school had been done at SDN 15. There was a school that we have first stage selection then submitted shortcomings and done repairs and audited again then SDN 15 one of the few schools that have earned star food safety (Food safety certification from NADFC) ... "

(JR, L, March 31, 2017)

Problem identification shows the root of food problem of school children in Palu city that condition of canteen and snack food of schoolchildren in Palu city is constrained by the lack of canteen facilities, the lack of food safety practices by food vendors and the high contamination of microbiology on snack food of school children. In addition, the lack of synchronization school basic program between stakeholder who responsible to supervising a food safety in school canteen so that not maximal role of government in addressing the problem of food vendor school canteen

**Establishment of healthy canteen modeling**

Healthy canteen modeling aims to form the canteen of SDN 15 into a healthy canteen which can be an example of applying food safety practices and food control system for other schools in Palu city. SDN 15 can serve as modeling school based on the availability of canteen facilities and has been awarded a food safety certificate from BPOM in Palu. The formation process modeling healthy canteen was started with the process of socialization, forming negotiator team, the preparation of food safety practices framework and a framework for a model that has been developed together with the community of SDN 15 school canteen Palu city as depicted in the attached schematic. This establishment of healthy canteen modeling doing by participatory action research. Establishment a healthy canteen need a active participation from the school community by giving and sharing with stakeholder what they needed to make their school canteen being a healthy school canteen model.

4. Discussion

This study shows that the condition of school canteen in Palu still needs serious attention from school community and government. The unavailability of canteen in schools such as the findings of observations in this study, resulted in the lack of availability of food snacks children who meet the requirements. From the test results Balai POM Palu in 2015, data showed that the number of school children snack food contaminated with aerobic bacteria, molds and *E.coli* reached 72% from the total of 100 samples have been tested. The results of this investigation relevant with the research presented by Adolf & Aziz (2012), who found
an aerobic bacterial contamination and *taphylococcus S aureus* in snacks derived from primary schools in the area Kawaraci, Indonesia [12, 13]. The presence of bacterial contamination can be the cause of food poisoning in primary school. Food consumed can be a carrier medium of microbes or hazardous chemicals. From the poisoning data of Indonesian National Agency of Drug and Food Control, the percentage of food poisoning that occurred in schools in 2012 reached 73%. These data relevant with our findings obtained in the field as described by informants that food poisoning has occurred in SDN 15 Palu [13]. The root cause of food poisoning is the contamination of microorganisms that resulted from the lack of hygiene and sanitation practices of food vendors and the lack of school canteen facilities. Generally the school canteen is only a makeshift building without awareness to hygiene and health standards. From the results of the observation obtained the picture of the school canteen in the city of Palu is generally just an open building with a plastic roof or just a row of school benches in the field. Sanitation facilities are a means and completeness that must be available to maintain the quality of the environment. The availability of an uncovered garbage can certainly invite the presence of flies and cockroaches that can mediate bacteria to contaminate food [14]. The role of goverment in the implementation of school-based programs by providing facilities such as research Jago and his colleagues in 2015, which describes the strategy in the dietary intervention and physical activity in schools is the government's role in providing healthy canteen facilities and facilities to enable the student activity physical [15]. School canteen plays an important role in the formation of children's eating behavior. The survey results show 91% of children have experienced health problems after consuming PJAS in schools because of the unavailability of healthy canteen facilities in schools. For this reason a healthy canteen program is required which applies the five key models of food security by establishing a healthy canteen modeling program [16]. Negotiation is needed in the process of behavioral change in society where behavior change requires a technique that can convince people to change their behavior. In addition, with individual or community negotiations can know the benefits or impact of behavioral change through a process of exchange. Negotiations are also needed in the policy-making process, for which the policy is important in supporting behavioral change [17]. The negotiation on the establishment of healthy canteen modeling in SDN 15 involves various parties, both from the school community such as principals, teachers, parents, and food vendors in the school cafeteria, related institutions of food supervision of school children such as Education and Culture Office, Health Office and Balai POM in Palu and Local Government. Modeling healthy canteen at SDN 15 by the use of *Participatory Action Research (PAR)* focuses on the establishment of a commitment to collect information about problems or issues faced by the community, k einginan to engage in self-reflection and group to get clarity on the matter at hand. Research using *PAR* is also used in exploring the reasons children in choosing foods in schools where the results of this study indicate the selection of children's meals at school is influenced by the availability of food in the school cafeteria [18]. The establishment of healthy canteen modeling begins with the establishment of commitment of willingness of related parties to participate. In this study, the participation of the school community became the foundation for the establishment of a healthy canteen in SDN 15. The establishment of this healthy canteen is a collaborative process aimed at enhancing the school community's understanding of the importance of healthy canteen facilities in shaping and changing students' healthy snack behavior in schools. The process of commitment formation begins with the socialization of the importance of healthy canteen. The formation of this model requires the active participation of the principal, this relevant with the research conducted by Robert and his colleagues 2015, that the principal role in negotiating, motivating health-
based programs and build commitment to a sustainable basis [19]. In the process of negotiating school-based programs, it requires preparation from planning, implementation to evaluation. Thus, in the negotiation process, there is a need for a team that cooperates in preparing and preparing for the negotiation. The framework of the healthy canteen model compiled is a model framework that will be used as a reference in establishing healthy canteen modeling in SDN 15. This model framework contains guidelines for school canteen managers on the application of food safety and food quality requirements, school children's nutritional needs, food selection appropriate food safety and school management to control food safety in school. Healthy canteen in SDN 15 is intended as a means of providing healthy and safety food for students in SDN 15. To be referred to as a healthy canteen, the canteen in SDN 15 has met the requirements contained in the canteen modeling framework in terms of building, hygiene and sanitation The availability of nutritious food in the canteen area. Through the method of Participatory Action Research (PAR), community schools (principals, teachers, parents and hawkers canteen) jointly participated in the formation of healthy canteen. Judging from the process, all forms of participation from both the school community and related institutions tend to involve interdisciplinary methods that seek various inputs and equations of perspectives on the importance of healthy canteen formation in schools. In this process, the school community is directly involved in managing and developing its school canteen according to the conceptual framework discussed together with stakeholder. So with this process of involvement, healthy canteen establishment program can be continued and developed by the school community assisted by stakeholders in supervision and fostering of healthy canteen at SDN 15.

5. Conclusions and recommendations

There has been a healthy canteen modeling in SDN 15 Kota Palu that applying the food safety principle based on the model framework that has been developed by the school community and stakeholders. Required involvement of Education and Culture Office of Palu city, and Health Office coordinated by NADFC in Palu in initiating other schools to be able to form a healthy canteen as a model and applied in SDN 15 Palu City.

References


[18]. Waddingham, S., et al., “Most of them are junk food but we did put fruit on there and we have water” What children can tell us about the food choices they make. Health Education, 2015. 115(2): p. 126-140.