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SHORT TRAINING IMPROVED STUDENT KNOWLEDGE ABOUT HYGIENE AND SANITATION AND PRODUCTION MANAGEMENT OF "JAHE SEHAT" BEVERAGE IN AL HIDAYAH SENIOR HIGH SCHOOL, MOJOKERTO

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ABSTRACT

Introduction: Most home and micro-scale industries have poor business management. Good management is able to produce the desired result or good in the business being run. It was found that healthy ginger producers still do not understand the importance of hygiene and sanitation in the production process, unattractive packaging designs and no good financial cash planning system. The community service team conducts training and outreach to solve the partner's problems. This study was aimed to increase the knowledge of students in micro-scale industry by training.

Methods: This study was pre-experiment study with pre and post-test design. The partner in this community service activity is 20 students of Al Hidayah Senior High School in Mojokerto, who has a business in making ginger drinks "Jahe Sehat" which chosen by convenience sampling. This study was conducted by training towards respondents. Training process divided into three part, preparation (analyze the respondent problems), activity planning and implementation, and evaluation. The training was conducted in one-day training. The respondents then filled the questionnaire of knowledge that had been modified. Data then analyzed using statistical paired t-Test.

Results: There was a significant change after the training activities were carried out in the the participants' knowledge on hygiene and sanitation (p-value=.000), packaging design (p-value=.000), and simple financial management (p-value=.000).

Conclusion: By carrying out this training activity, there were increasing on partner' knowledge about hygiene and sanitation, packaging design, and simple financial management. Further, those knowledge increase could also improve the healthy ginger product "jahe sehat al-hidayah".

KEYWORDS

community service; ginger drink; product hygiene; product packaging; product management

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1. INTRODUCTION

Functional drinks are a rapidly growing subsector of the market and include drinks enriched with juices, vitamins, and minerals; sports and energy drinks; wellness drinks and nutraceuticals. Many functional drinks have been developed to provide specific medical or health benefits, such as promoting heart

health, improving immunity and digestion, and helping to boost energy (Kregiel, 2015). Al-Hidayah Dlanggu Senior High School, as a private school, all operational costs are loaded by the community in the form of education funding contributions (School Tuition) and other non-binding contributions. The school tries to improve the quality of its graduates by

providing skills for students, one of which is the production of herbal drinks by utilizing existing material sources in the community, namely "Jahe sehat" beverage. This instant ginger drink product has received PIRT No: 2123516010817-22 from the Mojokerto District Health Office. This herbal drink is one of functional drink in market.

During the last two years, developments have been carried out in terms of production, packaging, marketing to waste management of instant ginger drink products "Jahe sehat" beverage. After observing for 1 year, it was found that the problem was related to hygiene and sanitation in the instant ginger production process, lack of hygiene during the production process. Several producers were asked the question of what the importance of hygiene and sanitation was still confused in answering. Observations were made, it was found that the problem of packaged ginger products was only stored in an open basket, not stored in a separate place and did not pay attention to room temperature. The observations made also found problems in the management of this Instant Ginger Product sales system. A good cash planning system has not been found yet, cash planning is still limited to simple bookkeeping managed individually, the recording is still simple and incomplete, does not pay attention to the balance sheet system, the calculation of operating results, and the recording of financial statements is still very simple. Based on those findings, the partners still lack of knowledge about hygiene and sanitation during production, lack of knowledge about packaging design and lack of knowledge about simple financial management.

Hygiene and sanitation in the field of catering services includes food, equipment, personal and the environment. In the culinary field, hygiene and sanitation are important parts of the food processing process which must be carried out properly (Yardımcı et al., 2015). This is because food is a source of food consumed by humans and its impact can affect

the health of the human body. Sanitation hygiene is not only carried out from the aspects of processing, presentation, and environmental conditions. However, personal hygiene of food vendors or handlers also needs attention. This is because food producers are subjects who have direct contact with food ingredients. Mishandling and disregard of hygienic measures on the part of the food handlers may enable pathogenic bacteria to come into contact with food and in some cases survive and multiply in sufficient numbers to cause illness in the consumer (Kibret & Abera, 2012).

Food product packaging design could affect the customer purchase decision (Wulansari, 2019). Packaging is considered as the most important factor in purchasing decisions made at the point of sale (Prendergast & Pitt, 1996). The packaging element is divided into two namely the visual element and the informational element, where the visual element is further divided into two namely the graphic and color elements, while for the informational element is divided into two namely the product information element and packaging technology (Silayoi & Speece, 2004).

Based on the problem, guidance and training is needed on hygiene and sanitation, the management of instant ginger production and funding related to the development of a sales management system for the production of ginger herbal drinks. Previous study indicated that training able to improve knowledge and further improve the product quality (Ituma et al., 2017). The team intends to carry out community service activities, especially to continue the innovation of ginger herbal beverage production skills by providing guidance on hygiene and sanitation in the production process and sales financial management for the development of ginger herbal drink production skills. Thus, this study explored the effect of training toward knowledge about hygiene and sanitation, packaging design and

simple financial management in student in AL Hidayah Senior High School.

2. MATERIAL AND METHODS

This study was used pre and post-test with one-group design. Through this community service training and training activity solutions will be offered to the problems formulated above.

The activities offered to community service partner problems at Al Hidayah Dlanggu Senior High School, Mojokerto are in the form of training and counseling with the following steps:

1. Preparation stage
2. Activity planning stage
3. The activity implementation stage
4. Evaluation stage

In the preparation stage, an analysis of the situation and problems of partners was carried out in order to know for sure what obstacles were faced in running their business. In the preparation stage, team of community services made a simple interview with ginger product producers. In this step we found that knowledge about hygiene and sanitation, packaging design and simple financial management was still become a problem and need to be improved. At the planning stage, discussions were held with the community service team and the school principal as well as several students of Al Hidayah Dlanggu Senior High School, Mojokerto related to the training and counseling topics that would be provided.

At the implementation stage of the activity, training and counseling were carried out with resource persons Prof. Dr. Ah Yusuf, S.Kp.M.Kes as the head of the community service team who provided training related to hygiene during the healthy ginger production process, the second material was delivered by Dr. Rizki Fitryasari, S. Kep.Ns.M.Kep regarding the material for increasing product branding through attractive packaging design and financial records. This activity was accompanied by the principal of Al Hidayah Senior High School,

Dlanggu Mojokerto and a community service team, namely Rr Dian Tristiana, S.Kep.Ns.M.Kep. and Dr. Esti Yunitasari, S.Kp.M.Kes. The training was held in one-day meeting with three section of material delivery (hygiene and sanitation, packaging design and simple financial management).

The evaluation phase of the training materials that have been provided, both hygiene and sanitation of ginger drink products, and attractive packaging designs and financial records, is where the partners directly practice the training materials that have been given. In addition, the evaluation of community service activities will use a questionnaire to determine the level of satisfaction of participants in participating in this training. Making a final report of service and making articles for journals to be published.

3. RESULTS

The participants of the training on Sanitation Hygiene Development and Production Management were Al Hidayah High School students, Dlanggu, Mojokerto. The number of participants in the activity was 20

Table 1 Demographic Characteristic of respondents

Variable	n	%	Mean
Sex			
Woman	11	55	
man	9	45	
Age (year)			17,25
Class			
X	2	10	
XI	4	20	
XII	14	70	

Table 2. Knowledge score Pre and Post Test of respondents

Variable	Pre test	Post test
Hygiene and sanitation		
Good	3 (15%)	14 (70%)
Enough	4 (20%)	6 (30%)
Poor	13 (65%)	0 (0)
Packaging design		
Good	2 (10%)	18 (90%)
Enough	6 (30%)	2 (10%)
Poor	12 (60%)	0 (0)
Simple financial management		
Good	5 (25%)	13 (65%)
Enough	10 (50%)	7 (35%)
Poor	5 (25%)	0 (0)

Table 3. Statistical test for pre-and post-test

Measure	SD	t	df	P-value
Hygiene and sanitation	.834	-6.439	19	.000
packaging	.681	-9.200	19	.000
Simple inventory book	.587	-4.951	19	.000



Figure 1 Community Service Activities of Sanitation Hygiene Development and Production Management are Al Hidayah Senior High School Students, Dlanggu, Mojokerto



Figure 2 Training on the use of aprons, plastic gloves, masks in the ginger drink production process (paying attention to hygiene



Figure 3 Practical example of ginger product packaging design for product branding to the public



Figure 4 The product packaging design that has been produced by the community service team and Al Hidayah high school students

people. The number of training participants with the total sex of women is 55%, and men are 45%. Most of the participants were in Class 11 (70%) (Table 1).

The provision of education is carried out by providing material through lectures and discussions. The evaluation process (pre-test and post-test) for all participants uses a question sheet that must be filled in by participants. The pre-test and post-test questions were to determine the students' knowledge of hygiene and sanitation, packaging design and simple financial management in the production process to marketing healthy ginger products.

In table 2, it can be seen that most of the participants did not understand the low scores on

hygiene and sanitation (65%) and packaging design (60%), while in simple financial management, most of the training participants had sufficient knowledge scores (50%). After the training activities were carried out, the participants' knowledge scores increased entirely in knowledge of hygiene and sanitation (70%), packaging design (90%), and simple financial management (65%).

4. DISCUSSION

This study result found that training could improve respondents' knowledge about hygiene and sanitation, packaging design and simple financial management. Other study found that training with duration is relatively short could improve knowledge

and performance in participants of training (Adesokan et al., 2015). Knowledge improvement through training method could be achieved because participants were gain information from the training process and also the short time of evaluation made participants were easier to recall the fresh information provided.

Preparation stage is a critical stage to find the problem in the study setting. In this study, team were discussed the problem that faced by partner of the study. The result of the discussion in the preparation stage, then used as the basis for planning intervention activities to be carried out at the study setting. Based on previous study, the participation in in designing, delivering and evaluating the intervention could be user-friendly information and more appropriate strategies for problem solving (Harris et al., 2018). The team participated in designing, delivering and evaluating the intervention to find the potential intervention that relevant and appropriate to be applied to resolved the problem in the study setting.

In the training activity, it was conveyed to the participants that the way food production is good for home industries, some of which are that the production environment must be free from potential pollution sources so that it can be done to protect the materials to be produced (Odonkor & Odonkor, 2020). Home industry must be free from pollution, shrubs, stagnant water, free from nests of nuisance animals/pests, and not in the area around landfills, whether solid or liquid waste (Saada et al., 2013; Yoada et al., 2014). Food storage is a way to organize, store, maintain dry and wet food and record its reporting (Akabanda et al., 2017). The optimum conditions for pathogenic microorganisms in fast food will cause the microorganisms to multiply within 1-2 hours (Appelhans, 2017; Mulugeta, 2012). The World Health Organization has introduced five key features of safe food. These are 1. Keep clean; 2. Separate raw and cooked materials; 3. Cook thoroughly; 4. Keep food at safe temperature; and 5.

use safe water and raw materials (Aghajafari et al., 2018).

The environment must also be maintained in a clean condition, one of which can be done by removing the trash so that it does not accumulate, the trash cans are always closed, and the roads around them are considered so that they are not dusty and the gutters are functioning properly. Other hygiene that also delivered was personal hygiene during production processing. The components of personal hygiene included the cleanliness of the hands and body and maintaining good personal cleanliness, wearing clean and appropriate uniforms, and by following hygienic sanitary habits (Wandolo et al., 2018). Working on ginger production, staff must be equipped with PPE (such as headgear, gloves and mask, apron). Education and training were expected to enable the participants to perform the given tasks effectively and with understanding about the hygiene and sanitation. Further, the knowledge of hygiene and sanitation could be benefit on safe product handling.

The knowledge of participants about packaging design was improved after the intervention. A package has an attraction, which is classified into two, namely visual appeal and practical scorching attraction (Gunaratne et al., 2019; Mohede et al., 2018). Visual appeal to the appearance of the package which includes graphic elements to create an impression (Rambabu & Porika, 2020). A good design must be able to influence consumers to give a positive response without realizing it. Practical appeal is the effectiveness and efficiency of a package aimed at both consumers and distributors. A successful packaging is a combination of marketing and design, which must meet the criteria for stand out, the contents of the package must be able to provide information about the contents of the package and what is contained in the product, distinctive (Cortina-Mercado, 2017; Han et al., 2018). Overall the packaging design should be unique and different from competitors' products and suitable. Further, the

improved knowledge about packaging design allow the keeping and catching the new and existed customers, because packaging has vital influence and also helps producer in obtaining and retaining the new consumers for their new looks products.

The knowledge of participants about simple financial management was improved after the intervention. Information about financial could enhance the financial knowledge of participants. Previous study showed that financial knowledge had significant effect on financial management behavior (Budiandriani & Rosyadah, 2020; Illmeyer et al., 2017; Razak & Amin, 2020). Management of financial and budget planning shows the plan for cash inflows, cash outflows, and the final cash position for each period. The cooperative manager must prepare a cash flow plan both long and short term. Cash budgets have a direct relationship with the income budget, cost budget, and capital expenditure budget. In addition, the balance sheet system also provides advantages in terms of the financial managerial of a business. The balance sheet presents information on assets, liabilities and capital. The cash records of the financial statements also present information that contains accounting policies, namely policies in accounting in the context of preparing financial reports.

5. CONCLUSION

Providing short training in product hygiene and sanitation, packaging design and simple financial management can improve the knowledge of Al-Hidayah Mojokerto high school students. It is expected that further, it can increase the sales and profits of these students.

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