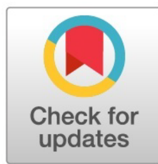

Practice and Challenges Towards Healthy Cafeteria in Selangor, Malaysia

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Abstract

Dietary intake is directly affected by the availability of food choices at the cafeteria. Understanding the issues among cafeteria operators in providing healthy eating environment is vital. Thus, a qualitative study was conducted to identify the practice and barriers among cafeteria operators in Selangor. Eleven food handlers were recruited by a convenience sampling. This study revealed respondents have similar understanding of healthy cafeteria and challenges faced by them were making sure every staff has the correct understanding of healthy foods and financial constraint. Respondents suggested to provide training on food handling and health promotion campaign.

Keywords: Dietary intake, Healthy Eating, Cafeteria Operator

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1.0 Introduction

The prevalence of non-communicable diseases (NCDs) is increasing throughout the years in many developing countries caused by rapid social and economic growth, and it has become a serious health problem (Jan Mohamed et al., 2015). Wolfenden et al., (2015) stated that besides healthy food intake; regular physical activity also contributes to overall health and fitness. The healthy eating environment is related to the dietary intake of an individual. Therefore, this study had come out with factors that associate with healthy cafeteria practice among cafeteria operators.

2. Literature Review

Vyth et al. (2011) stated that a worksite cafeteria is a crucial place where people will be exposed to healthy food choices, and the food intake during lunch appears to contribute significantly to the consumption of this food. It is proven that restaurants are the utmost settings for interventions to improve the food environment (Valdivia Espino et al., 2015). This statement also supported by Khakzand & Aghabozorgi (2015) where they agreed that the environmental condition does have a relationship with food choice. However, Thomas, Puig Ribera, Senye-Mir, & Eves (2015) stated that there are some barriers at worksites that may limit the healthy food choices. In Malaysia, a guideline for a cafeteria had been made public by Malaysian Ministry of Health which is Garis Panduan Penilaian Pengiktirafan Kafeteria Sihat Edisi Kedua 2016. According to this guideline, a healthy cafeteria is defined as a premise that provides, serves and sells food and drink that is nutritious, clean and safe to be consumed.

However, the current guideline was not being fully implemented by the foodservice operator, and the reasons remain unclear. Therefore, a study to identify the factors of non-compliance foodservice operator, is necessary to understand the phenomena. According to Gill, Stewart, Treasure, & Chadwick, (2008), interview method is the most suitable method for qualitative study in providing a deeper understanding of social phenomena as compared to quantitative methods.

3.0 Methodology

A total of 11 respondents were recruited in this study. A semi-structured interview was conducted with managers (n= 3), food handlers (n=5) and cleaners (n=3). Semi-structured interviews have some key questions that help to define the areas to be explored. Face to face also interviewed was conducted. Coding such as [Food 1, Man 2 and Clean 3] is to maintain the anonymity of the managers, food handlers and cleaner. [Food] is for Food handlers, [Man] is for a manager and [Clean] is for the cleaners. They were numbered accordingly such as [Man 1] for the first manager who had been interviewed. Then [Man 2] is the second manager who had been interviewed and same goes to the third manager and other samples.

3.1 Sampling

A purposive sampling strategy was used in this study focusing on staffs involved in the foodservice industry. The total respondents are eleven respondents including three full-time managers, five full-time food handlers and three full-time cleaners. All of them were interviewed face-to-face. A manager, at least a food handler and a cleaner was the respondent for each of the cafeterias. Semi-structured questions were used in this interview as it is more suitable for this research because it involves open-ended questions that will give opportunities for the interviewer and respondent to elaborate more detail (Dixon, 2015; Hancock, 2006). On the other hand, qualitative research does not have a specific number of the samples as data was collected until it reached a saturation phase.
The inclusion criteria for the respondent are food handlers must be the one who handles food. Besides that, the respondents who have chronic disease and not able to understand or speak Malay language fluently has been excluded in this research. Samples were chosen from three different cafeterias, two of them are in Shah Alam and one cafeteria is in Sungai Buloh, Selangor.

3.2 Interview protocol

Before the interview began, the respondents were informed about the study details as this can give an idea to the respondents to answer the questions. Besides, they are given assurance about the ethical principles such as guarantees that all the information given by them will be confidential and they have the right to privacy and refuse to answer certain questions if they feel uncomfortable to answer those questions. All interviews were tape recorded and transcribed verbatim afterwards, as this protects against bias and provides a permanent record of what was and was not said. Notes were also taken during the interview session. Permissions were sought from the respondents before the interview session start. Triangulation method was implemented to validate the accuracy of information.

3.3 Data analysis

Data were transcribed and transcripts were categorised by using key themes. All the other information was categorised into the suitable key themes, and each of the themes had its mind map that shows the connection between one respondent and another.

4.0 Results and Discussion

4.1 Profile of respondent

Table 1: Demographic data of the respondent

Staff (n)	Age range	Gender %		Education level	Working experiences
		Male	Female		
Manager (3)	39-57	0	100	Tertiary	1-20 years

Food handler (5)	23- 61	80	20	Secondary	1-20 years
Cleaner (3)	23-27	100	0	Secondary	1-20 years

The respondents' profile is shown in Table 1. The overall age range for all the respondents is around 23 years old to 61. All managers and cleaners are female. 80 percent of food handlers and 20 percent are female.

4.1.1 The understanding of Healthy Cafeteria

All the cafeteria managers were interviewed defined a healthy cafeteria as a cafe that serves healthy choices of food. Three of them described the example of healthy food is vegetable: "…vegetables are a must, because it's important" [Man 1], "...example like salad" [Man 2] and "for example, healthy types of vegetables" [Man 3].

Most of the food handlers (60%) defined a healthy cafeteria as a cafe that is clean and follow the hygienic practice: "…make sure ourselves are clean before entering the cafe" [Food 2], "In addition, cleanliness is a very important aspect in cafeteria" [Food 4] and "…a clean place" [Food 5].

Besides, two food handlers (40%) had mentioned about the food pyramid. They claimed that a healthy cafeteria should follow food pyramid: "like…that triangle diagram" [Food 1] and "…follow the triangle thing, what we need to eat the most and the less" [Food 3].

Majority of food handlers (80%) indicated that a healthy cafeteria is also a cafeteria that serves healthy meals: "a healthy cafeteria has healthy food that serves fresh food" [Food 1], "…a place that serves healthy food" [Food 3], " the preparation of the food to the customer such as a balanced meal" [Food 4] and "A healthy food" [Food 5].

A food handler (20%) said that an example of ingredient that should be avoided in a healthy cafeteria is MSG: "…no MSG in cooking, this is very important." [Food 4].

Interviews with cleaners had come out with the result, most of them (67%) defined a healthy cafeteria is a cafe that is clean: "first, is the food hygiene… [Clean 1] and " …the cleanliness of the floor. In short, the cafe has to be clean" [Clean 2].

4.2 Current practice in cafeteria

4.2.1 Food safety

Almost 91% of the respondents claimed that they already had typhoid injections to ensure the food safety in their cafeteria. However, a respondent claimed that he had an injection to secure the food safety during the interview session but he was not sure the type of injection that he had received: "not sure" [Food 2]. Also, all managers reported that it is compulsory for their workers to get typhoid injection: "every year, they must get an injection but I'm not sure what it's called" [Man 1], "yup, typhoid injection. It's a compulsory" [Man 2] and "typhoid is a must" [Man 3].

All the responses reported that they already attended a food handling course. Only two of them (18%) did claim that the course is compulsory for cafeteria staff to learn about food

hygiene and food safety: "It's an obligatory condition in handling food"" [Food 1] and "it's a must to attend food handling course" [Man 3].

This research showed that all the respondents had attended the food handling course and taken typhoid injections. To prevent food contamination, food training on a regular basis is suggested by Abdullah Sani & Siow (2014). Most cafeterias aware of safety in the food preparation; cooking methods and ingredients used in the menu, the cafe's menu itself, and the sanitation and hygiene part.

4.2.2 Food availability and methods of cooking

The interviews revealed that all cafeterias served 'Nasi lemak' for breakfast: "we served 'nasi lemak' for breakfast…" [Food 5] and "the menu is a typical menu. For breakfast we have 'nasi lemak',…" [Clean 3]. A manager claimed that western dishes are not the customer choices in his cafe: "we also serve western menu but it's not a customer preference." [Man 3].

Out of eleven respondents, 2 of them (18%) claimed that in order to make a healthy menu, they reduced the amount of salt while preparing the foods: "For breakfast, I serve porridge and only use little salt " [Food 1] and "we reduce the use of salt to make the food less salty" [Man 3]. However, only a respondent (9%) misunderstood the purpose of reducing salt in dishes: "we don't use salt in dishes for diabetes people" [Food 2].

Also, 18% of the respondents claimed that they don't use artificial food flavouring in their dishes: "no, we don't use food flavouring in our dishes…" [Man 1] and "we only used traditional way by using salt and sugar only and sometimes we blend anchovies to add in our dishes" [Food 5].

The method of cooking and food availability play an important role in determining a person's health status. However, food should taste good as well as the food quality is one of the important factors for customer satisfaction and loyalty (Voon, 2012). Besides, in another research done by Saad, See, Abdullah, & Nor (2013), also agreed that activities such as cutting or slicing of cooked food, adding garnishes could potentially reintroduce the food to the harmful organisms.

4.2.3 Sanitation and food hygiene

Among eleven of respondents, five of them (45%) indicated that they must wear proper and clean uniform to ensure the food hygiene: "we must wear gloves when holding anything" [Man A], "the complete uniform including the gloves and chef's hat" [Clean 2], "so, first. Uniform is very important. A proper uniform will also display the cafeteria" [Food 4], "another thing, uniform must always be clean" [Food 3] and "the uniform must always be clean as well as the personal hygiene" [Food 5].

Besides, two of the respondents (18%) said that dishwashers were used to clean all the dirty plate or other cooking utensils. Besides, one of the food handlers (20%) did explain about the first in-first out system in their cafe to maintain the quality of their food: "we practice first in-first out system. So we keep all the new ingredients, and we use the old ingredient "[Food 1].

Almost 40% of the food handlers did explain about avoiding cross contamination in receiving ingredients: "cross contamination such as onion and chicken" [Food 4] and "wet

ingredients like chicken and meat, because this can cause cross-contamination" [Food 3].

A research by Baş, Şafak Ersun, & Kivanç (2006), revealed that food handlers might transmit pathogens passively from a contaminated source, for example, from raw poultry to a food such as cold cooked meat that is to be eaten without further heating. George et al., (2015), supported that one of the barriers in creating a healthy cafeteria is the cafeteria does not have proper kitchen equipment. A respondent had mentioned about the door used in their kitchen is not suitable. According to Jali, Ghani, & Nor (2016), in avoiding the entry of insects and maintaining a good airways pressure to maintain cleanliness in food premise, a suitable door should be used which is self-closing doors. Thus, a cafeteria must follow the Good Manufacturing Practices (GMP) because it is one way to achieve a high standard of food quality (Rodrigues, 2016). However, food handlers should have proper training in managing kitchen facilities and equipment because this may improve or maintain the standard of sanitation environmental condition (Jeon, Park, Jang, Choi, & Hong, 2015).

4.3 Challenges to implementing the healthy cafeteria

Most of the responses claimed that they have no major problem in their cafe. However, to implement this healthy cafeteria module, there are certain problems. First, a food handler reported that he is having trouble in dealing and teaching the foreign workers to do work. Respondents claimed that they need to hire foreign workers because their salary is cheaper compared to the local worker: "The current problem is the foreign workers "[Food 1] and continues with "the first factor is because there are no local workers and second is the financial" [Food 1]. Woh, Thong, Behnke, Lewis, & Mohd Zain (2016), concluded that the intake of foreign workers keep increasing by years because Malaysian foodservice industry keep growing by years and same goes to the demand of manpower.

A food handler (20%) indicated that costing is a problem. The prices of the goods are increasing making the food costly: "…the price of goods are expensive" [Food 4]. In contrast, to 2 of the respondent claimed healthy menu could save cost and not necessary costly: "it depends on what we want to serve…not necessary all the healthy food is expensive" [Man 3] and "so, it's actually will save cost". [Clean 3].

4.4 Suggestions for developing the healthy cafeteria

Most of the 45% suggestions given by the respondent to develop a healthy cafeteria were by having printed materials such as posters, banner and template as a promotion for healthy eating: "we should put images that explain about healthy food "Food 3], "via poster or bunting "[Man 3]. Another respondent gives an idea to make a campaign about healthy eating as it may help in creating awareness about healthy eating: "we make a campaign…" [Man 3].

In term of printed materials, almost half of the respondent suggested putting the printed materials such as banner, poster, pamphlets and Banting at the strategic area in the cafe to create a healthy eating environment. A study by Roberto, Schwartz, & Brownell (2009) had discovered that menu labelling might have effects on food choices and health status. According to Sonnenberg et al. (2013), traffic light food labels initiate customer to make a healthier choice and increase the awareness on making a healthy food choices at the point-of-purchase as well.

A research stated that healthy eating advertisement is a relevant action by encouraging consumption of healthy food such as fruits and vegetables, (Wang & Kaiser, n.d.). Apart from this, nutrition education among workers is also very crucial. In a research by Rockett et al. (2005) found out that nutrition education on the importance of a well-balanced diet may help in promoting adolescent weight maintenance. This strategy may also be applied to cafeteria workers.

You, Zhang, Davy, Carlson, & Lin (2009) claimed that to achieved better diet, time availability, food accessibility, and cooking skills must be considered as well. This support the statement of the respondent about serving healthy menu in the cafe can create a healthy eating environment. Also, suitable kitchen equipment also should be added to maintain the freshness of the foods and to avoid food spoilage. Besides, Condrasky & Hegler, (2010) suggest to improve healthy cooking technique by enhancing culinary nutrition concepts to support eating practices that will improve the health status of the nation.

4.5 Limitation of the study

The limitations of qualitative research are that we may become bias in analyse the date or during. Different respondents gave different opinions and suggestions in certain questions, and some of them support the other respondents answer though they are not from the same cafeteria. Some of the workers were not comfortable with the questions, and this may lead to inconsistent information. Some of the respondents were rushing during the interview session. Apart from that, some of the respondents refused to participate in this study, limiting the data for this study. Some respondents gave less cooperation making the data collection become difficult and not detail.

5.0 Conclusion

This study showed that cafeteria operators have the basic understanding of healthy cafeterias but further education still necessary. Other than that, providing the right understanding, knowledge, practices, and many ways of healthy eating promotions will create a healthy eating environment among workers and healthy practices among cafeteria staff. However, there are several limitations experienced by the foodservice operators that need to be taken into consideration. The information from this study can be used for the Malaysian government to consider these issues and find the best solutions. It is suggested to conduct this study according to the area; urban or suburban or rural areas as the challenges probably different according to the location.

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