

HYGIENE AND SANITATION PRACTICES OF STREET FOOD VENDORS IN MABINAY: DISTRICT II ELEMENTARY SCHOOLS, NEGROS ORIENTAL, PHILIPPINES

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Abstract

Street foods are perceived to be prepared in unsanitary conditions by people not trained in proper food handling techniques. As nutrition is believed to play a great role in improving the mental capability of school children, this study investigated how sanitary and hygienic street foods are prepared before they were sold in elementary schools in Mabinay District II, Negros Oriental, Philippines and the impact it created on the nutritional status and academic achievement of the pupils. Findings show that majority of the food vendors prepared their street foods at home and acquired their cooking skills through trial and error or self-taught. They have garbage receptacles, yet garbage was not segregated and some unrefrigerated leftovers were reheated and sold the following day. Insufficient water supply resulted in the vendors' unsanitary method of washing their utensils as well as their stalls, and most vendors have no aprons, observed minimal personal hygiene without covering their hair and cleaning their fingernails. Most of them talked while serving allowing saliva to spread and usually blew air into the plastics in packing the food. The study revealed that significant relationship occurred between the vendors' personal hygiene and sanitation to their educational attainment, method of garbage disposal, serving of food, packaging and storing of food implying highly educated vendors were more hygienic. No direct link was established between pupils' nutritional status and academic achievement to vendors' hygiene and sanitary practices because most of pupil's food intake come from the foods their parents prepared at home. It is recommended that school children be continuously informed as to the risks of eating street foods and strict food safety measures be implemented among food vendors surrounding the schools to safeguard the health and well-being of the pupils.

Keywords: Street food, Food vendors, Hygiene and sanitation practices

1. INTRODUCTION

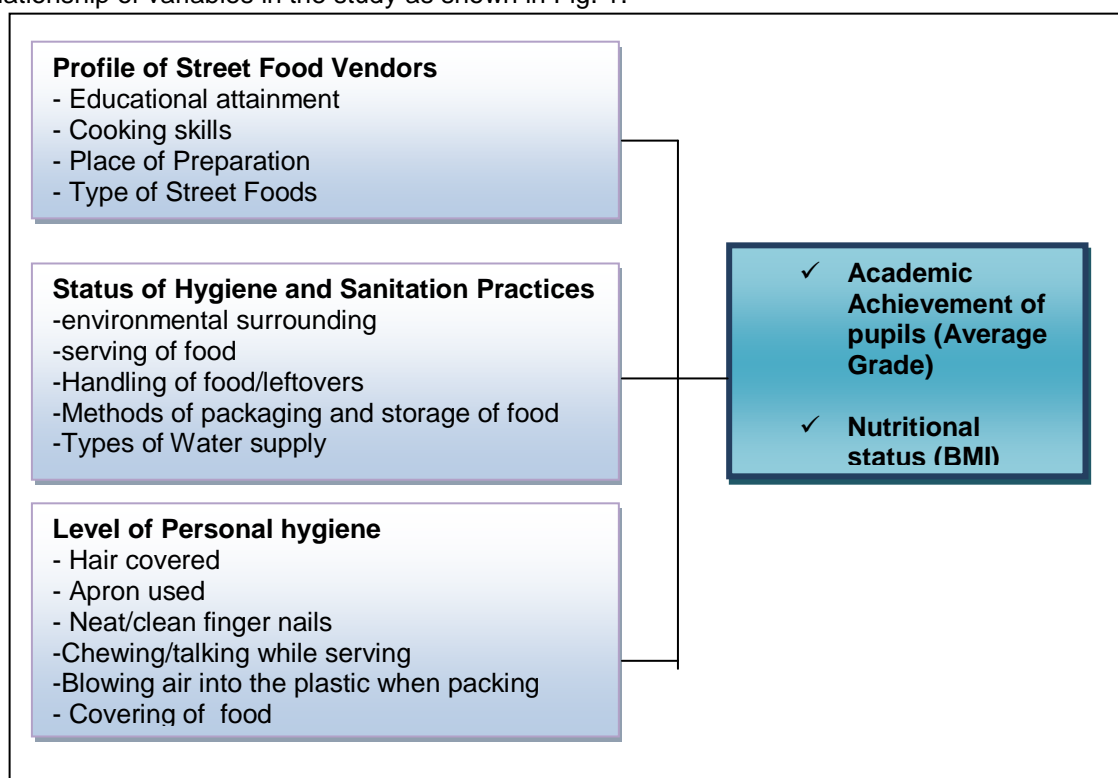
Lack of proper personal hygiene and environmental sanitation contributed significantly to food contamination resulting to food borne diseases (Sharmila, 2011). Street food contamination is inevitable, yet millions of people depend on this source of nutrition and economic livelihood. Street food vending is regarded as informal as most vendors businesses are usually not registered. They are small in nature, and are usually

run from homes, street pavements or informal arrangements Educating street food vendors in hygiene and sanitation matters is recommended for improving safer food handling practices. Vending of street food in school areas is a growing and worldwide phenomenon and today street foods are important sources of daily foods for massive urban populations – not least in Philippine towns (Buted and Ylagan, 2004). But food poisoning, food borne diseases and food safety have been declared a major public health concern by international health agencies and street foods have in many studies been associated with microbiological contamination and low hygienic standards (FAO, 1997). It is a fact that nutrition plays a great role in improving the mental capability of school children, thus findings on how sanitary and hygienic these foods are prepared creates an impact on the nutritional status of the pupils (Arambulo, *et al.*, 1994). Hence, this study aimed to assess the food hygiene and sanitation practices of street food vendors in schools and investigate the impact it created on the pupils’ nutritional status and academic achievement.

2. METHODOLOGY

A descriptive survey design was used to determine the food hygiene and sanitation practices of street food vendors using structured interview and observations. The respondents of the study were the 360 pupils and 62 street food vendors in 12 elementary schools in Mabinay District II, Negros Oriental namely; Canggohob E/S, Cansal-ing E/S, Cantombol E/S, Capanun-an E/S, Dagbasan E/S, DCCTMES, Lamdas E/S, Lanot E/S, Pantao Brgy.Site ES, Pantao ES, PGSMES and Tingtingon E/S.

Means, percentage distribution were used to obtain the profile of the street food vendor respondents, students achievement and nutritional status, the weighted mean was used to analyze the extent of hygiene and sanitation practices and Analysis of Variance and the Pearson r were used to analyze the interrelationship of variables in the study as shown in Fig. 1.



3. FINDINGS

3.1 Socio-Demographic Profile of the Street Food Vendors

Results showed that majority (30.6%) of the Street Food Vendors were at the age of 30–39 years old, female, married and attained elementary education only. Most of them (41.9%) acquired their cooking skills through trial and error or self-taught because they were not able to attend formal trainings due to financial constraints, few of them (37.1%) learned to prepare food through observation and from their parents.

3.2 Types of Foods Street Sold by Vendors

The various food/snack items sold by the vendors at school were; banana cue/Sweet potato cue, maja blanca, packed vegetables, ice candy/ice juice, rice cakes, rice- cheese cake, fish ball, tempura, cassava ball, salted peanuts, hotdog and vegetable/chicken lumpia. These types of food were the most common food items that most pupils were looking for.

3.3 Status of Hygiene and Sanitary Practices

Also revealed in this study were the ways street vendors dispose their garbage, method of serving food, handling practices of food and leftovers, methods of packing and storing food, and the types of water supply. Most vendors (64.5 %) have waste bin but wastes were not segregated. Majority of them (77.4%) use tongs, fork, spoon in serving, consumed the food which means that they do not have leftovers (69.4%). Few stored their leftovers in the refrigerators but most (45.2%) got their water supply from a protected well. Safety of water should be of great consideration, inasmuch that all food prepared needs water because pupils oftentimes asked water after eating. Washing of food stuffs and utensils needs more than enough water on, thus cleanliness on the preparation of foods depends on the availability and abundance of water supply. Some of the vendors (21%) served the foods with the same ladle all throughout the food/soup and soak the ladle in the container with water on it for quite some time a long period of time which a long time which promoted cross contamination and eventually food spoilage.

3.4 Level of Personal Hygiene

Findings showed that majority (79.0%) of the vendors do not consider covering their hair during preparation, do not use apron (80.6%) and keep on talking while serving food (74.2%) but do not care to use face mask. Majority (74.2%) cared to clean their fingernails yet some do not, most (66.1%) blew the plastic during packing which allows germs to contaminate the food in the plastic and many flies were observed in their stalls as well as in some foods displayed in containers without cover.

3.5 Academic achievement and Nutritional Status of Pupil-respondents

Most of the pupil-respondents (51.5%) got an average grade of 80-84%, few (15%) got grades of 85-89%, which implies they performed well academically. As to nutritional status, 94.7% or majority of the respondents were normal, 4.4% wasted, 0.4% was severely wasted and 0.4% obese. No significant relationship was found between vendors' hygiene and sanitary practices to pupils' nutritional status and academic achievement. This result may be due to the food intakes of the pupils which do not primarily depend on the street foods they were eating but from their families preparing foods at home.

3.4 Profile of Street Food Vendors, Sanitation Practices and Level of Personal Hygiene

Personal hygiene may be described as the principle of maintaining cleanliness and grooming of the external body. Maintaining a high level of personal hygiene will help to increase self-esteem and confidence, while minimizing the chances of developing imperfections and failure to keep up a standard of hygiene can have many implications. Findings showed highly significant relationship between the vendors' educational attainment and the level of personal hygiene, but not with age, sex and marital status. Education plays a vital role in one's personal hygiene and the higher the education acquired by a person, the higher is the level of personal hygiene. Since there are very few highly educated vendors in the study, it can be implied that majority were not concerned about their personal hygiene when preparing foods.

4 SUMMARY, CONCLUSIONS AND RECOMMENDATION

Based on the findings, it can be concluded that street food vendors surrounding the elementary schools in Mabinay District II, Negros Oriental, Philippines showed inadequate knowledge of food safety and hygiene. Although no direct link was established with the vendors' sanitation practices and personal hygiene to pupils' academic achievement and nutritional status, DepEd should initiate a food safety program for the vendors to be trained in hygienic preparation of foods and good sanitation practices to better safeguard the health and wellness of students. Partnership between the Local Government Unit and DepEd is encouraged to materialize this food safety endeavor as well as provision of potable water and stalls for the vendors. The Department of Health should closely supervise the vendors' handlers in school to ensure that they handle food in most hygienic ways.

REFERENCE LIST

- Arambulo, P., Almeida, C., Cubblar, S. & Bellotto, A. (1994). Street Food Vending in Latin America. Accessed at: [http://www.ifrnd.org/Research%20Papers/J6\(3\)3.pdf](http://www.ifrnd.org/Research%20Papers/J6(3)3.pdf) on: Aug 24, 2015
- Buted, D. and A.P. Ylagan. (2004). Street Food Vending and Hygiene Practices and Implications for Consumers. *Asia Pacific Journal of Education, Arts and Sciences* 1(2) 188-193
- Campbell, P. T. (2011). Assessing the knowledge, attitudes and practices of street food vendors in the city of Johannesburg regarding food hygiene and safety. School of Public Health, University of the Western Cape.
- FAO Food hygiene basic texts. (1997) FAO, Rome. 1997: 14-32
- Mwangi, A. (2002). Nutritional, hygienic and social-economic dimensions of street foods in urban areas: The case of Nairobi. (Unpublished Doctoral thesis): University of Wageningen, The Netherlands, 43, 91 and 108.
- Mensah P, Yeboah-Manu D, Owusu- Darko K and Ablordey A. (2002). Street foods in Accra, Ghana: how safe are they? *Bulletin of the World Health Organization. The International Journal of Public Health.* 80, (7). WHO, Geneva.2002: 546-553
- Sharmila, R. (2011). Street Vended Food in Developing World: Hazard Analyses *Indian Journal of Microbiology* 51(1):100-106