Indian Journal of Social Research Vol. 60 (4) (July - August, 2019) (517-525)

Academic and Law Serials

ISSN : 0019-5626
e-ISSN : 2454-3624

HYGIENE AND SANITATION PRACTICES OF SELECTED STREET FOOD VENDORS IN ANAND AND VALLABH-VIDYANAGAR

Mitali Sharma

M.Sc. Student,
P.G.Department of Home Science
Sardar Patel University, Vallabh Vidyanagar
Annand-388120, Gujarat, India

Paulomi Dalal

Adhoc Assistant Professor,
P.G.Department of Home Science
Sardar Patel University, Vallabh Vidyanagar
Annand-388120, Gujarat, India

Abstract

Street foods are perceived to be prepared in unsanitary condition by people not trained in proper food handling techniques; the street food industry has an important role in the cities and towns. It feeds millions of people daily with a wide variety of foods that are relatively cheap and easy accessible. A study to determine hygiene and sanitary practices of vendors of street foods in Anand and Vallabh Vidyanagar was carried out. A sample size of 110 street food vendors selling commonly consumed foods was selected. Data was collected using structured questionnaire and observation checklists. Information from the study shows that vendors lacked training on food preparation, surrounding not clean. Findings shows that majority of the food vendors prepared their street foods at home , did not have the garbage facility due to insufficient water supply nearby the cart most of the vendors save water in the buckets to wash the soiled utensils and for hand wash as well . Most vendors have no aprons, observed minimal personal hygiene without covering their hair and cleaning their finger nails. It can be concluded, that personal hygiene of vendors and environment of the surroundings was unsatisfactory. Awareness programs at regular intervals are the need of recent times for healthy society and clean environment.

Key words: Street vendors, Hygiene, Sanitation, Anand and Vallabh Vidyanagar

Introduction

Anand city is known as the milk capital of India. It became famous for Amul dairy and its milk revolution. Vallabh Vidyanagar, a city located 6 km from the town of Anand is known as educational hub of

Gujarat. It is a home to the prestigious Sardar Patel University. Both Anand and Vallabh-Vidyanagar cities are the food lover's paradise. With the young student population, a majority of which come from all across the world to study, being the major part of the town, one can find eateries, cafes, and street food vendors of all kinds of cuisines spread across the town serving yummy delicacies at pocket-friendly rates. Some remain open throughout the night where students studying late night can vanquish their hunger pangs. Due to these many reasons, investigator therefore undertaken to investigate hygiene and sanitation of the street food vendors on the streets of Anand and Vallabh Vidyanagar. Street-vended foods or street foods are those foods and beverages that are prepared and/or sold by vendors on the street and in other public places for immediate consumption or for consumption at a later time without further processing or preparation (WHO, 1996). The quality of raw materials, food handling and storing activities are major factor that affect the safety of street food. Due to inconsistency of tap water, street food vendors obliged to use unclean water for cooking and washing their utensil which leads to health risk to consumers. The activities of street food carry out in dreadful environmental conditions, such as presence of insects, gaseous pollutants from air, dirt particles, domestic animals (Hanashiro *et al.*, 2005). In most of the vending site, running water is not accessible so washing of hands and crockery are performed in bowls or buckets and sometimes without soap (Barro *et al.*, 2006; Abdalla *et al.*, 2008). Although studies related to most popular street food and availability of street food have been carried out by several researchers but no study was carried out in Anand and Vallabh Vidyanagar cities. Keeping this view in mind the present study was planned to collect the hygiene and sanitation among the street food vendors at different popular areas of Anand and Vallabh Vidyanagar cities.

Materials and Methods

The study encompassed two sub-cities in Gujarat (Anand and Vallabh Vidyanagar). From Anand city, railway station area, bus stands area and market place, Anand –Vidyanagar (A.V.) road and from Vallabh Vidyanagar city University area and nearby was chosen. The reason for selecting these two areas was due to high number of street food vendors and their customers were also enormous. The street foods that are commonly sold in the two sub-cities were panipuri, bhel, samosa/ bhajiya/vadapav/ fast food, snacks, tea & coffee Fig. 1. Map of study area. One hundred and ten (110) street vendors were purposively selected from each of the areas. The total number of street food vendors

include in the study was 39 in Anand city, 08 from A.V. road and 63 for Vallabh Vidyanagar city, giving a total of 110 street food vendors. Before starting of the survey, regular visits were made to the selected vendors to ask for their willingness to cooperate. The study was conducted through administration of questionnaires and in-depth interview to obtain information pertaining to respondents' demographic characteristics, hygiene profiles of street food vendors, water supply and source, utensil cleaning, food serving and handling practice. The investigator went door to door with questionnaires to the vendors at their working places and filled the tool. Moreover an observation was used to determine sanitary condition of surrounding environment.

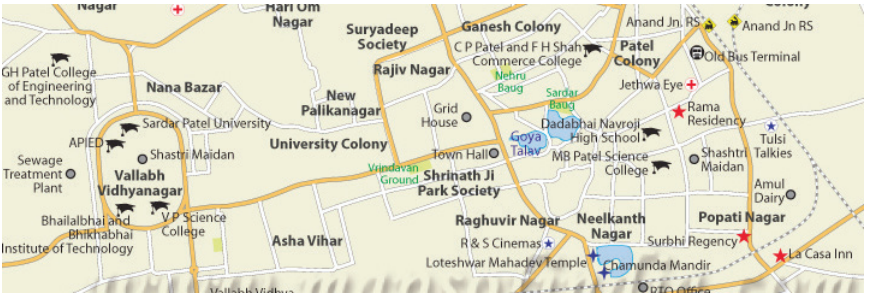


Figure 1: Map of Study area

Results and Discussions

Demographic characteristics of street food vendors are presented in table I. Most of the surveyed street vendors ages lies from 31 to 45 years (42%). Small numbers of respondents were between 16 to 30 year (37%) and age group between 46 to 60 year old (21%). The result showed that majority (97%) of the street food vendors were 'Men' in this study. The number of 'Women' engaged in street food vending was 'three' percent (3%). Ninety five percent of the street food vendors had either primary or secondary education, only three percent and two percent of them had no education and college education respectively.

Hygiene profiles of street food vendors. The information gathered based on the hygienic practices using the questionnaire is summarized in the

Table I: Demographic information of the respondents
(N = 110)

Demographic Information of the respondents		
Age groups	*Number*	*Percentage (%)*
16 – 30	41	37
31 – 45	46	42
46 – 60	23	21
Total	110	100
Gender	*Number*	*Percentage (%)*
Male	107	97
Female	03	03
Total	110	100
Education	*Number*	*Percentage (%)*
Un-educated	03	03
School	105	95
College	02	02
Total	110	100

Table II: Practice of personal hygiene and food handling among street food vendors in Anand and Vallabh Vidyanagar cities.

Water Facilities for washing utensils	*Number*	*Percentage (%)*
Utensils		
Stored water	110	100
Total	110	100
Soiled Plates		
Stored water	96	87
Hand pump	05	05
Any other	09	08
Total	110	100
Raw Vegetables		
Stored water	107	97
Any other	03	03
Total	110	100
Basin facility	*Number*	*Percentage (%)*
No	110	110
Total	110	110
Utility area facility	*Number*	*Percentage (%)*
Yes	03	03

No	107	97
Total	110	100
Washing facility near the cart	*Number*	*Percentage (%)*
Yes	12	11
No	98	89
Total	110	100
Drinking glass facility	*Number*	*Percentage (%)*
Yes	62	56
No	48	44
Total	110	100
Material of utensils served to customer	*Number*	**Percentage (%)*
Steel	77	70
Melamine plates	03	03
Paper plates	18	16
Plastic	04	03
Thermocol	21	19
Glass	15	13
Semi-food covered		
Semi cooked food covered	*Number*	**Percentage (%)*
Yes	61	55
No	49	45
Total	110	100
Raw food covered		
Yes	51	46
No	59	54
Total	110	100
Apron worn	*Number*	*Percentage (%)*
Yes	04	04
No	106	96
Total	*110*	*100*
Worn for which of the following activities	*Number*	**Percentage (%) (n=4)*
Cooking	01	25
Chopping	04	100
Selling	04	100
Washing utensils	02	50

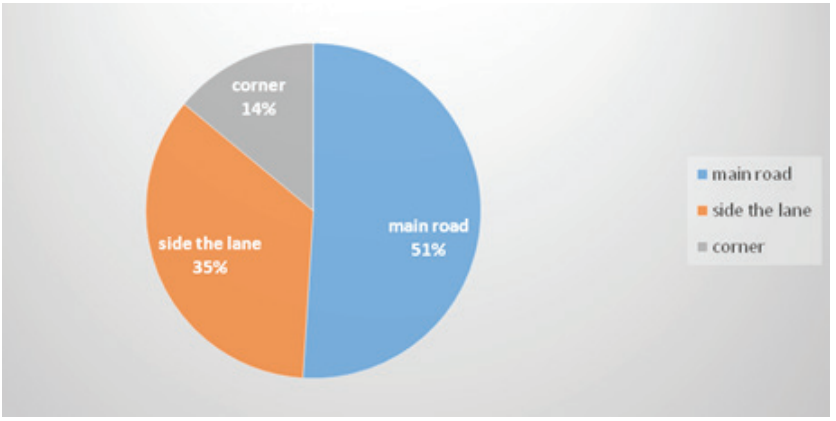
Table III: Sanitary environment surrounding the vending site in Anand and Vallabh Vidyanagar cities.

Place of cart	*Number*	*Percentage (%)*
Main road	56	51
Side the lane	38	35
Corner	16	14
Total	110	100
Surface of cart clean	*Number*	*Percentage (%)*
Yes	85	78
No	25	22
Total	110	100
Food storage	*Number*	*Percentage (%)*
Thermocol box	01	01
Any other	109	99
Total	110	100
Napkin facility for	*Number*	**Percentage (%)*
Customer		
Hand dry	32	29
Washroom facility	*Number*	*Percentage (%)*
Open	01	01
Near the cart washroom	86	78
Home	23	21
Total	110	100
Hand washing	*Number*	*Percentage (%)*
Yes	110	110
No	00	00
Total	110	100
If yes, where to wash hand?	*Number*	*Percentage (%)*
Open	63	58
Washroom	26	23
Home	21	19
Total	110	100

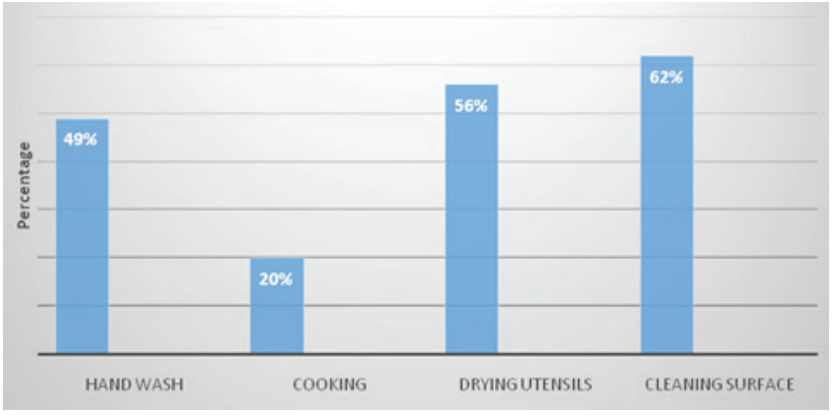
Table II. The results revealed that the majority of the vendors did not have apron 106 (96%, N=110)) while only 04 (04%) had apron. Similar study by Nayansi *et al.* (2014) pointed out that 86% (n= 30) vendors didn't have apron. A study by Nurudeen *et al.* (2014) stated that more than 50% of the vendors did not use apron. Ways of washing utensils and washing vegetables were observed. Most of the vendors wash the utensils by running water, stored water and hand pump. Washing utensils by stored water (100% vendors), soiled plates by stored water (87% vendors) and raw vegetable by stored water (97% vendors) was recorded. The reason for keeping the water stored was due to scarcity and no arrangements in the city. Majority of the vendors didn't use soap for washing their plates. The utensils were washed using water in buckets, were rinsed only once and the water was used repeatedly. It was observed that there wasn't any basin facility at/nearby the surveyed of street vendors cart and there wasn't any utility facility available at/ nearby. It was also observed that there wasn't any washing facility near the cart (89%). Fifty six percent of the street vendors had drinking glass facility near their cart. It was observed that different material of utensils were used for serving food ie., steel, melamine plates, paper plates, plastic, thermocol, glass, most vendors served in a steel plates (70%), thermocol (19%) and paper plates (16%), were used. According to the field result, as presented in table II vendors covered cooked food during selling was high among vendors i.e. semi-cooked food (55%). Fifty four percent of the vendors did not cover the raw materials on the selling cart area.

Table III states that most of the vendors had a separate cooking area and selling area (53%). Forty six percent of the vendors prepared and sell food in the stall itself. During the survey the cart were found clean (78%). Most of the vendor stored their left over in different container (99%) such as card board boxes, insulated boxes, cans and steel utensils. Majority of the respondents use nearby wash area (78%), whereas (23%) go to their respective homes. It was found that cent percent of the respondents wash hands after using the washroom. Fifty eight percent the respondents wash hands in an open area, 23% in the washroom itself.

Pie chart 1 shows that most of the study cart vendors were positioned at the main road (busy street- 51%), side the lane (35%)



Graph 1 shows the positioned of the cart.



Graph 2 shows the napkin facility at the cart.

Graph 2 shows that napkin facilities were found mostly for all the purposes at the vendors cart i.e. hand wash (49%), cooking (20%), drying utensils (56%), cleaning surface and (62%).

Conclusion

From the interviews and observations of the study, it was clear that there is still much way to go in terms of hygiene practices and sanitary conditions of the street food vendors. The hygienic practices in question included food preparation, handling of utensils; place for food preparation, personal hygiene and methods of storing cooked food. This paper recommends that every street food vendor, helper or food handler should undergo basic training in food hygiene and safety in order to ensure that they follow the required and correct procedures

of proper hygiene and sanitation relating to food production. Thus, personal hygiene of vendors and environment of the surroundings was unsatisfactory.

REFERENCES

Barro, N., Bello, A.R., Salvadogo, A., Ouattara, C.A., IIboudu, A.J. and Traore, A.S. (2006): Hygienic status assessment of dish washing waters, utensils, hands and pieces of monies from street food processing sites in Ouagadougou, Burkina Faso. *African J. of Biotechnology*, 5(11): 1107–1117.

Hanashiro, A., Marisa, M., Glavur, R., Maria, H., Matt-e, E. and Torres, A.F.S. (2005): Microbiological quality of selected street foods from a restricted area of Sao-Paulo city, Brazil. *Food Control*, 16: 439-444.

Nayansi, Mishra, A.A., Shukla, R.N. and Ankita (2014): Analysis of Practices of Street Food Vendors and Sensory Assessment of Street Foods (Fast Foods And Juices) in Allahabad City,(U.p.) India. *Int. J. Scientific Res*. 3(8): 132-35.

Nurudeen, A.A., Lawal, A.O. and Ajayi, S.A. (2014): A survey of hygiene and sanitary practices of street food vendors in the Central State of Northern Nigeria. *J. Public Health Epidemiol*. 6(5):174-181.

WHO. (1996): *Essential Safety Requirements for Street-vended Foods*. Switzerland, Geneva: Food Safety Unit.

* * *

Received on 8.3.2019 and accepted on 21.6.2019