

Rijwana Haque , Supervisor: Dr.Richard Meldrum

Co-Supervisor: Dr. Jordan Tustin

Introduction

Food borne diseases are responsible for the majority of mortality and morbidity worldwide among people . Consumption of food and water contaminated with potential food borne pathogens such as viruses, bacteria, parasites and toxins contribute to different types of food borne illnesses. In Canada, a total of about 4 million (1 in 8) Canadians are affected by food borne illness every year which accounts for about 11,600 hospitalization and 238 death¹. It was found in previous studies that improper food handling was a major risk factor for food borne illness and food handlers being asymptomatic carrier and maintaining poor food handling practice had been responsible for the spread of food borne diseases². Due to change in our busy lifestyle people especially urban residents tend to depend more in ‘dining out’ than home cooking. This has led to the rapid growth of local food industries and employment of huge number of food handlers. To reduce the burden of food borne illness it is crucial to gain an understanding of the interaction of food safety knowledge and practices of food handlers

Purpose

1. This study aims to assess the importance of food handlers certification over only onsite training on food handlers knowledge and attitude towards safe food handling.
2. Make recommendations with respect to the findings of the study whether food handlers certification should be mandatory for all food handlers or not.

Material and Methods

Participants were recruited from Ryerson University by advertisement through recruitment flyer. Students working in food industries as a food handler or cook were included in the study. Students enrolled in Ryerson Public health and safety program were excluded. A self administered questionnaire was completed by 21 food handlers in the presence of researcher. To assess food safety knowledge close ended questions on hand washing and temperature control were asked .Food safety attitude was assessed by questions on setting priority during busy hours, food handler’s illness and key role player in food handling. To analyze the data participants were grouped in two categories: one having food handlers certification and the other having only onsite training.

Table 1: Food Safety Knowledge (correct response)

Food Safety Knowledge	Certified n=14	Uncertified n=7
Hand washing	7(50%)	1(14.3%)
Time to check temperature of food	12(85.7%)	2(28.6%)

Table 2: Food Safety Attitude (correct response)

Food Safety Attitude	Certified n=14	Uncertified n=7
Food handlers should not come to work when ill	12(85.7%)	2(28.5%)
Food handlers are the key player in food safety	10(78.5%)	4(57.1%)
Safe food handling is the top priority	11(78.5%)	3(42.8%)

Results and Discussion

Results are summarised in Table 1 and Table 2. Data shows that certified food handlers provided more correct answers than non certified food handlers in both knowledge and attitude based questions which indicate safer food handling behaviour in certified food handlers than food handlers with only on site training. However, 50% of certified food handlers provided incorrect answer in a major food safety knowledge issue: hand washing. Out of 14 certified food handlers, 11 have 1-5 years of working experience. So, in addition to certification work experience might have contributed to better food safety knowledge and attitude.

Recommendations

1. Food handlers certifications should be encouraged and formal certification should be followed by additional learning opportunities at workplace to refresh basic food safety practice.
2. Further research needed to decide whether certification should be mandatory all food handlers or not.
3. Food handlers should always be informed of their key role in preventing food borne illness .
4. Managers and supervisors should take the leadership role to set food hygiene as top priority in business

References

1. Government of Canada(2016)._Yearly Food borne Illness Estimated. Retrieved from: <https://www.canada.ca/en/public-health/services/food-borne-illness-canada/yearly-food-borne-illness-estimates-canada.html>
2. Chapman, B., MacLaurin, T. and Powell, D. (2011), “Food safety infosheets: design and refinement of a narrative-based training intervention”, British Food Journal, Vol. 113 No. 2, pp. 160-186.