

**THE EFFECTIVENESS OF FOOD SAFETY  
TRAINING PROGRAM ON FOOD SAFETY  
PROCEDURES AMONG RESTAURANT FOOD  
HANDLERS IN WEST DISTRICT OF YANGON  
MUNICIPAL AREA**

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## ABSTRACT

This quasi experimental study aimed to assess the effectiveness of food safety training program on food safety procedures among restaurant food handlers in West District of Yangon Municipal Area and reassess the retained effect of food safety training program at six months after training program with finding out the influencing factors on food safety knowledge, attitude and practice changes after training periods. Among the restaurants situated in West District area, 86 restaurants were selected by simple random sampling and randomly assigned 43 restaurants in one group for intervention and control groups by lottery method. One chef from each selected restaurants was interviewed using pretested structured questionnaires. Restaurants were inspected by checklist and food samples were collected and examined in laboratory for microbial contamination. After baseline assessment, food safety training was launched and follow up assessments were made at one month and six months after training. To explore the barriers of training program, key informant interviews were conducted after quantitative data collection. The results showed that most of participants were young and active males of working age group with middle and high school level education. There were significant interaction effects of intervention and assessment times on food safety knowledge, attitude, practice and restaurant inspection scores changes ( $P < 0.001$ ). Moreover, there were significant knowledge, attitude, practice scores differences between intervention and control groups ( $P < 0.05$ ) as well as among assessment times ( $P < 0.05$ ). Although there were significant restaurant inspection score differences among assessment times ( $P < 0.001$ ), there were no significant main effects of intervention. In intervention group, knowledge, attitude, practice and restaurant inspection scores at one month and six months after food safety training were significantly higher than before training assessment ( $P < 0.001$ ), but these scores were not different between one month and six months after training assessments ( $P > 0.05$ ). Female was an influencing factor on restaurant inspection scores improvement at one month after food safety training ( $P < 0.05$ ), but there were no influencing factors on food handlers' knowledge, attitude and practice improvements at one month and six months after food safety training as well as restaurant inspection scores improvement at six months after food safety training. Knowledge, attitude, practice scores of food handlers and restaurant inspection scores in intervention group were found to be still higher than control group at six months

after food safety training program ( $P < 0.05$ ) that means retained effect of training still present up to six months after training. There were no significant differences between food samples in term of microbial contamination between intervention and control groups after training. In Key Informant interview, six main themes were extracted. Some barriers to follow the food safety procedures were poor management system, attitude and education level of food handlers and their traditional cooking practice. In conclusion, food safety training program increased food handlers' knowledge, attitude and practice on food safety procedures and study results can be used for development of standardized restaurant food safety training program for restaurant food handlers in Myanmar.