

**Effect of Smartphone App's Intervention on Consumers' Knowledge, Attitude, Practice, and Perception of Food Poisoning Prevention When Dining Out at Selected Rural Areas in Terengganu**

**ABSTRACT**

(1) Background: Lack of food safety awareness and preventive behaviour when dining out increases the risk of food poisoning. Furthermore, food poisoning cases among rural communities have been rising in recent years. However, the health-related mobile application is a promising tool in improving food poisoning prevention knowledge, attitude, practice, and perception (KAP2) among consumers. Therefore, the current study developed a novel smartphone app, MyWarung©, and determined its efficacy in increasing awareness, attitude, practice, and perception of food poisoning and its prevention when dining out, especially among rural consumers. (2) Methods: A quasi-experimental pre-and post-intervention study with a control and intervention group were performed on 100 consumers in Terengganu. (3) Results: The intervention's inter-group outcomes were analysed using the Mann–Whitney test, while the within-group effects were ascertained using the Wilcoxon sign rank test via the SPSS software. It was found that the control group had higher median scores in knowledge (30.0, IQR 7.0), attitude (46.0, IQR 5.0), and practice (34.0, IQR 3.0) than the intervention group before intervention. After the intervention programme, the intervention group showed significant improvement in food poisoning knowledge ( $p = 0.000$ ), attitude ( $p = 0.001$ ), and practice ( $p = 0.000$ ). However, the intervention group's perceived barriers ( $p = 0.129$ ) and susceptibility ( $p = 0.069$ ) and the control group's perceived barriers ( $p = 0.422$ ) did not show any significant improvement. (4) Conclusion: The findings indicated that the MyWarung© mobile app usage enhanced the food poisoning knowledge, preventive attitude, and practice among consumers when dining out.