

Food safety: children's behaviors and its major related factors.

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Background: Food borne disease is a health problem in both developed and developing countries. It can result in long term health consequences and even death, especially in children who are at higher risk for foodborne illnesses than adults. Following steps of food safety is significant for preventing foodborne diseases. The objective of this study was to determine food safety behavior and its major related factors in children from north regions of Tehran.

Methods: For this descriptive analytical (cross-sectional) study conducted in November 2015, random cluster sampling was used to select 385 children 9-15 years old from north regions of Tehran. The World Health Organization foodsafety questionnaire was applied to obtain data. The validated questionnaire was self-administrated by children. The questionnaire consisted of three parts: children's demographic status, information sources, knowledge, beliefs and behaviors about food safety with Likert scaling. Spearman correlation, Mann-Whitney-U, and logistic regression tests were used to analyze data.

Results: The mean scores of knowledge, belief and behaviors of children were 75.7, 79.5 and 57.5 percent of total scores, respectively. Only 19.5% of children behaved appropriately. The most selected sources of information about food-safety for children were their mothers (69.2%) and the internet (31.1%). There was positive correlation between children's knowledge ($r=0.34$), belief ($r=0.38$) and age ($r=0.18$) with their food-safety behaviors ($p<0.001$ for each factor). No relationship was found between children's sex and their food safety behaviors. Logistic regression test showed that the major related factors with food-safety behaviors of the children were their knowledge (OR=1.71, CI=1.26-2.31, $p<0.001$) and belief (OR=1.41, CI=1.22-1.63, $p<0.001$) about food safety and their classmates or friends and teachers as information sources (OR=7.43, CI=1.07-51.31, $p=0.042$), (OR=0.3, CI=0.11-0.75, $p<0.001$), respectively.

Conclusion: Results showed despite the relatively high scores of knowledge and belief of children about food-safety, behavior of children is poor. With respect to classmates and friends as the major related factor, it seems necessary to train efficiently and monitoring the food-safety behaviors of children permanently.

Keyword: Food safety, Food borne disease

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