

21st International Conference on

Food & Nutrition

July 25-26, 2018 | Vancouver, Canada

Home food safety practice and food insecurity: A structural equation modeling approach

Fatemeh Esfarjani¹, Hedayat Hosseini¹, Ramin Khaksar¹, Roshanak Roustaei¹, Haleh Alikhanian¹, Marjan Khalafi¹, Amin Mousavi Khaneghah² and Fatemeh Mohammadi-Nasrabadi¹

¹Shahid Beheshti University, Iran

²University of Campinas (UNICAMP), Brazil

Introduction: Food safety and food security are interrelated concepts with a profound impact on the quality of human life. Therefore, the current study, for the first time, was set to identify associations between home food safety practice and food insecurity by a Structural Equation Modeling (SEM) approach.

Material & Methods: In this cross-sectional study, urban households were selected from among 10 health centers of five districts of Tehran, Iran. The questionnaires were completed by interviewing in order to obtain the following information: Socio-Economic Status (SES), food security and food safety. Structural equation modeling was applied for predicting the relationships between SES, food insecurity, and food safety in the households.

Results: Food security was observed in 56% of the households. Mild, moderate and severe food insecure households were determined to be 29, 12, and 3%, respectively. Also the scores of home food safety practice in 37.5, 33 and 29.5% of the households were classified as desirable, acceptable and weak, respectively. The majority (83%) of the moderate and severe food insecure households had weak food safety practice. Based on the SEM results, an inverse association between food safety practice and food insecurity score was observed. Food insecurity and undesirable food safety practice were relatively prevalent among the households. In addition, the economic and social factors could significantly and inversely affect both food insecurity and food safety practices.

Conclusions: Policy makers should provide food safety education programs for food insecure households and those with weak food safety practice in order to reduce the risk of food borne diseases. It is suggested that establishing a national government plan can promote food security and food safety, and thus give support to sustainable development.

fesfarjani@hotmail.com