# Factors Associated with Pesticide Use Behaviors among Farmworkers Based On Health Belief Model

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## Dear Editor-in-Chief

The unsafe uses of pesticides cause problems for human health in both developed and developing countries. Improperly used or stored of these chemical agents can harm humans. Cancer, birth defects, and damage to the nervous system, depression, respiratory symptoms, skin disease and the functioning of the endocrine system are key risks of pesticides (1-3).

The current study was designed and done with the aim of determine factors associated with pesticide use behaviors among farmworkers based on Health Belief Model (HBM).

In a cross-sectional study conducted in 2014, 400 eligible Iranian farmworkers that were from Golestan Province (northwest of Iran) were selected using multi stage sampling method. Data were collected using reliable and valid questionnaire through interview. Data were analyzed via SPSS18 Software (Chicago, IL, USA) and Pearson correlation test, Independent *t* test, ANOVA and Linear regression.

All the farmworkers gave their informed written consents before inclusion in the study.

The average age of the participants was $39.38 \pm 12.71$ yr. The average level of behavior, perceived susceptibility, perceived severity, perceived barriers and health motivation was in moderate level and the average level of perceived benefits and self- efficacy was in desirable level. There was positive significant correlation between behavior and all of HBM constructs ($P<0.0001$) except perceived barriers ($P=0.213$). Self- efficacy (B=0.378 $P<0.0001$) and health motivation (B=0.277 $P<0.0001$) were the most important predictors of pesticide use behaviors.

Behavior of the participants is not in a desirable level. Self-efficacy and health motivation had an important role on behavior. Other studies showed application of some of HBM constructs in this regard (4, 5). We recommended appropriate intervention especially health education based on health belief model with special emphasis on Self-efficacy and health motivation.

## Acknowledgement

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