

*Letter To Editor***Knowledge and practice in association with self-medication  
of nutrient supplements, herbal and chemical pills  
among women based on Health Belief Model**JRMS 2011; 16(6): 852-853

Self medication of nutrient supplements, herbal and chemical pills have been previously reported from different countries and this problem has been remained among less developed countries.<sup>1,2</sup> There are also some reports regarding the self medication and drugs storage in Iran.<sup>3,4</sup> Therefore, determining the knowledge and practice of people in this regard might be important for preparing the educational interventions. The present study was conducted in 2009 aimed to determine the knowledge and practice regarding the self medication among women of Isfahan based on Health Belief Model (HBM). This was a cross-sectional study in Isfahan on 385 women who referred to the health centers. Since women can interfere with self-medication in the family, we chose this group. Women could affect on their family health behaviors and; therefore, focusing on this group is important in the health system researches. The stratified random sampling method was used for determining the samples of the present study. Therefore, we considered women from all parts of Isfahan in different regions and we selected samples from the entire regions in different health centers in Isfahan. One health center was randomly chosen from each region. For assessing the knowledge, attitude and practice a related researchers-made questionnaire was used in the present study. The validity and reliability of the questionnaire was assessed. This questionnaire included four parts. The parts included questions regarding the demographic characteristics (12 questions), knowledge and practice (12 questions), questions regarding the reporting of self medication (14 questions) and HBM

structures including perceived severity, sensitivity and benefits and barriers (5 questions for each part). In knowledge section, one score was allocated for each correct answer. The score for wrong answers was zero. Regarding the HBM structures, a range of 0-4 score was considered for different items. At last, the score of each subject was calculated from 100. According to the results, 86 percent of the women had experienced self-medication at least in one disease during the past 6 months. The major cause for self-medication had been previous experience and the simple availability of the medications. The main reason for avoiding self-medication was fear of the side effects. The mean score of knowledge in this regard, was  $82.9 \pm 13.8$  and the mean score regarding the perceived susceptibility was  $72.4 \pm 17.1$ . The scores related to perceived severity and benefits were  $71.6 \pm 14.7$  and  $68.2 \pm 17.1$  respectively. However, the score for barriers was  $61.6 \pm 19.6$ . The mean of the HBM structures in the present study was high comparing with other studies.<sup>5</sup> The mean score of the perceived severity and also perceived sensitivity was also high in the present study which showed that women believe that self-medication was not an appropriate method for treating different diseases. Therefore, it seems that preparing educational programs focused on barriers' structure and improving the perceived benefits may be helpful in reducing the self-medication rate among women. Educational programs should inform all the women regarding the side effects of the medications. Our previous study revealed that HBM could be a suitable model for educating patients.<sup>6</sup> The results of the men-

tioned study confirmed that education based on this model had beneficial effects for diabetic patients<sup>6</sup> and the present study showed another benefit of this model for health promotion.

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*Gholamreza Sharifirad<sup>1</sup>, Asiyeh Pirzadeh<sup>1</sup>, Leila Azadbakht<sup>2</sup>*

### Conflict of Interests

Authors have no conflict of interests.

### References

1. Verrue C, Petrovic M, Mehuys E, Boussery K, Somers A, Spinewine A, et al. Organization of the medication management process in belgian nursing homes. *J Am Med Dir Assoc* 2011; 12(4): 308-11.
2. Hounsa A, Kouadio L, De Mol P. [Self-medication with antibiotics obtained from private pharmacies in Abidjan, Ivory Coast]. *Med Mal Infect* 2010; 40(6): 333-40.
3. Sahebi L, Vahidi RG. Self-medication and storage of drugs at home among the clients of drugstores in Tabriz. *Curr Drug Saf* 2009; 4(2): 107-12.
4. Sedighi B, Ghaderi-Sohi S, Emami S. Evaluation of self-medication prevalence, diagnosis and prescription in migraine in Kerman, Iran. *Saudi Med J* 2006; 27(3): 377-80.
5. Berzanskyte A, Valinteliene R, Haaijer-Ruskamp FM, Gurevicius R, Grigoryan L. Self-medication with antibiotics in Lithuania. *Int J Occup Med Environ Health* 2006; 19(4): 246-53.
6. Sharifirad G, Entezari MH, Kamran A, Azadbakht L. The effectiveness of nutritional education on the knowledge of diabetic patients using the health belief model. *J Res Med Sci* 2009; 14(1): 1-6.

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1- Health Education and Health Promotion Department, School of Public Health, Isfahan University of Medical Sciences, Isfahan, Iran.  
2- Assistant Professor, Food Security Research Center, Department of Community Nutrition, School of Nutrition and Food Sciences, Isfahan University of Medical Sciences, Isfahan, Iran. Corresponding Author: Leila Azadbakht  
E-mail: azadbakht@hlth.mui.ac.ir