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# The Attitudes and Practice of Mothers who were referred to the Health care Centers in Iran for the Use of Medicinal Plants in the Treatment of Children's Diseases

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#### Abstract:

Background: Due to the advantages and use of medicinal plants growing in the world.

Aims and Objectives: This study was carried out to investigate the attitudes and practice of mothers who were referred to the health care centers in Bushehr for the use of medicinal plants in the treatment of children's diseases.

**Materials and Methods:** In this descriptive analytic study, 384 mothers who were referred to health center through the randomized sampling were selected. Ethical consideration was done. Questionnaire was prepared and validity and reliability were mentioned. Data were analyzed using the software SPSS 18 and chi-square, Mann-Whitney and Kruskal-Wallis analytical tests.

**Results:** The results showed that 24.7% of the samples had low attitude, 45.6% had moderate attitude, 29.7% had high attitude, 23.7% had low practice, 47.1% had moderate practice, and 29.2% had high practice. Attitude has a positive and meaningful relationship with practice. Positive and significant statistical relationship was observed between practice, being natives and non-natives, and the levels of mothers' education.

Conclusions: Due to the result of this study, it is necessary to plan for the improvement of mothers' knowledge and attitude regarding the use of medicinal plants in pediatrics diseases.

Keywords: Attitude, practice, mothers, medicinal plants, children.

## INTRODUCTION:

Using medicinal plants has a millennium background in palliating human being. Iran, China, Egypt, and India and even some Mexican tribes have been using medicinal plants as the most available resources of distress treatment.[1] They are considered as simple access, low cost, and more important factor with minimum side effect. Increasing of groceries and stores selling medicinal plants shows that the value of these kinds of plants is being enhanced every day. [2] In spite of the fact that the first year of human life has a small proportion of his lifetime, it has an important role to play in the healthy and equilibrium of energy in the adult period. [3, 4] Because of the slow growth of the body safety system, children have the ability to give most kind of distresses.<sup>[5]</sup> Using complementary medicine among children in various countries to treat different kind of illness is current and may have significant effect on the hygienic surveillances of these children. Studies have shown that parents choose the complementary medicine for their children, because they believe that these methods of treatment are natural and safe. [6] World Health Organization (WHO) estimated that 8% of the world's population, that is, about 4 billion persons, uses herbaceous medicine in treating illnesses at least one time.<sup>[7]</sup> In the estimate, the prevalence of using complementary medicine varied from 12% in USA to 51% in Australia and 37% in England. [8] In people culture and belief and the world enhancing tendency to use natural compounds, the place of using medicinal plants is the authority point and future opportunity to consume the medicinal plants. [9] So, considering the knowledge and mother's attitude of using these plants in the treatment of their children's diseases in Bushehr, is the purpose of this study. Hence, by using the results of this research, it is hopeful to help in improving the use of these medicines by responsible men.

## MATERIAL AND METHODS:

This study is a cross sectional descriptive-analytic research. The population of this research includes mothers who were referred to the health center of Boushehr city. In using the questionnaire made by the researcher, the validity of the questionnaire was confirmed by 10 respectful professors of Medical Science University of Bushehr. The reliability of the questionnaire was 75% using Cronbach's alpha. Considering the sample size at 95% and 50% of mothers' knowledge, attitude, and practice using the formula n = Z2P (1 - P) / d2, 384 people were estimated and randomized sampling was used. Four centers were selected among 10 healthy centers and at the base of the list of the family document number, the questionnaires consist of two part. The first part contains demographic questions and the second part contains seven questions about knowledge, seven questions about their practice, and seven questions about attitude. The inclusion criterion of this study consists of mothers who had children between 1 month and 7 years. The exclusion criteria consist of persons that their job or their spouse's job was grocery or anything that concern with plant medicine. Likert scales were used for numbering the questionnaire. Practice and attitude questions included five options: I completely agree, I agree, I am recusant, I disagree, and I completely disagree. The highest score is 5 to I completely agree and the least score is 1 to "I completely disagree". Practice questions had five options as "every time, mostly, sometime, rarely, and never"; the highest score is 5 for "every time" and the least score is 1 for "never". Total score was divided into three sections: weak (lower than 16), middle (between 16 and 25), and high (upper than 25). Ethical issues: After getting necessary permissions from the research deputy of the Medical Science University of Bushehr and complementation inform satisfaction by the study samples, they were assured that their information will be analyzed confidentially and anonymously. The statistic examination of Mann-Whitney U test and Kruskal-Wallis and Spearman's rank correlation coefficient was used for data analysis. [10, 11]

## **RESULTS:**

The results of the study showed that most of the mothers' age were between 20 and 29 years and the least age is under 20 years. Most of the mothers were Bushehrian native and their job is housekeeping. Concerning education, most of the persons (49.5%) graduated from high school. Most of the husbands of the mothers (34.6%) were clerk. Regarding the amount of children, most of the mothers (38.8%) had two children (Table 1). Mean and standard deviation of attitude score were obtained as 23.17±2.42. According to the average of their attitude scores about the effect of medicinal plants in the treatment of children diseases, 24.7% had low knowledge, 45.6% had middle attitude, and 29.7% had high attitude. Mean and standard deviation scores of mothers' practice were observed to be 23.45±5.15. According to the average of practice scores, mothers had 23.7% low practice, 47.1% had middle practice, and 29.2% had high practices about using medicinal plants in children. Kolmogorove-Smirnove test was used to determine normal distribution and attitude; therefore, the score of attitude (P=0.002) and operation P=0.01) did not have normal diffusion. Then, Spearman's rank correlation coefficient test was used to evaluate the relationship between attitude and practice. Attitude has a positive and meaningful relationship with practice (P=0.0001, r=0.3)(Table 2). In the current study, the result showed that there is a meaningful difference in attitude score between native and non-native persons (Table 3). According to the attitude and practice score, there is a meaningful statistical difference between the various level of mothers education using Kruskal-Wallis test and the LSD of POST HOC test. Women with MSc level of education or higher, had lower average score of attitude and practice than women with lower education. The research finding showed that no meaningful difference existed between attitude and practice scores among a group of mothers with various age, job, husband's job, the level of spouse education, and the situation of mother marriage.

**Table 1.** Frequency distribution of referred mothers to care centers of Bushehr in terms of demographical variants

centers of Bushehr in terms of demographical variants						
Variant	Variant level	Number	Percent			
	20<	11	2.9			
20	20-29	162	42.2			
20	30-39	157	40.9			
	40-49	53	13.8			
Marital status	Married	373	97.1			
Maritar status	Divorced	10	2.6			
	Elementary	39	10.2			
Education level	Middle	190	49.5			
	BA	142	37			
	MA and upper	13	3.4			
Job	Householder	264	68.8			
	Job holder	120	31.3			
	1	148	38.5			
	2	149	38.5			
Number of children	3	60	15.6			
	4	20	5.2			
	4<	7	1.9			
Native and	Native	234	60.9			
nonnative	Nonnative	149	38.8			
	Elementary	28	7.3			
Education level of	Middle	189	49.2			
spouse	BA	139	36.2			
•	MA and upper	28	7.3			
Cmaysa's ich	clerk	133	34.6			
	Grocery man	7	1.8			
Spouse's job	Self-employed	125	32.6			
	Military	118	30.7			

**Table 2.** Correlation coefficient between practice and attitude of mothers referred to Bushehr care centers.

Variant	Correlation	Practice	Attitude
Practice	r P value	1	0.302 0.0001
Attitude	r P value	0.302 0.0001	1

**Table 3.** Comparison between average practice and attitude scores of the mothers referred to Bushehr care centers based on their native and non-native status.

Va	riant	Mean ± SD	Score average	Z	P value
Practice	Native Nonnative	23.32±2.46 22.92±2.35	200.97 177.92	-2	0.04
Attitude	Native Nonnative	23.52±5.34 23.30±4.86	194.77 187.64	- 0.61	0.53

# **DISCUSSION:**

In the world, 74.8% of the adults use the complementary and substitute medicine and it is reported that the tendency of using this method among children is increasing. In 2007, the American National Health Organization reported that 11.8% of children (12 months of age) have used complementary and substitute medicine. In the current study, the results showed that most of the people (68.8%) believed that the distress of their children was not remedied by using medicinal plants. In Sereshti's studies, 60% (1368) of the people reported that their distress was completely treated by using medicinal plants and just 9% claimed that these plants did not have any effect on their treatment. The results showed that most of the people

(49.7%) think that the effects of chemical medications are better in distress treatment of their children. In Bakhtiary's studies (Persian 20), 37% of the patients said that the effects of medicinal plants are better than chemical medications and about 21% of the patients thought that chemical medications are better and the rest of them did not have any idea about this.<sup>[8]</sup> A study in London presented that 18% of patients believed that the traditional and complementary methods are better than the standard and customary medicine. [9] In a study in Nigeria, 22.4% of the people believed that the effects of plants are better than the usual medication. [13] According to the researcher's opinion, there are some differences between these studies and our studies and this variation is because of the quick effect of chemical medication on the diseases and on the other hand the change in the amount of effective elements of the medicinal plants in various place, and also mothers are hasty and their disappointment about quicker effect of medicinal plants in treatment of their children causes this consideration in mothers. The results showed that most people (62.5%) believed that medicinal plants do not have any harm and bad effect. In Sardashti's study (2006), about 62.6% of patients believed that medicinal plant does not have any harm and bad effect. [12] In the studies of Beheshti (2013), in the patients who had come to the clinics affiliated to Shiraz Medicine Science University, 73% of the participants say that consuming medicinal plants is safe and secure. [14] In a research in London, 22% of the persons believed that using of traditional and complementary method is more secure and safer than new medicine drug, In the research between pregnant women in Nigeria, 21.1% of patients believed that natural plants consuming are safer and more secure than chemical drugs in the pregnant woman. [13] There are some deviations between these studies and the present study. A due attention is that most of this people are originally from Bousher, and in this province culture, they traditionally use medicinal plants[15] and individually observed their effects; so, there is a belief that these plants do not have any harm and bad effect. In this study, the results showed that most of the mothers (66.6%) believed that using medicinal plants is not a suitable scientific method. In Sedighy's research (2004), 32.9% of the patients believed that herbaceous medicine is completely a scientific method. 34.3% of them believed that this method is not completely scientific and 9% said that this method is not scientific at all. The rest of them did not know anything about that.<sup>[16]</sup> There is deviation between the results obtained from the current study and Sedighy's research. In the research of this study, information transmission of traditional medicine that accompany some inherited experiences and cultural believe, is from one generation to another,[15] and they believed that this method is empirically; they also said that herbaceous medicine method was not scientific. The study results showed a significant relationship between scores at different levels of education, husbands' wives, mothers' age groups, homemaker Vshaghl women, and marital status. In Golshadi's research (2001), there was no meaningful difference according the practice levels, knowledge, and attitude between various groups of age,

that is, it may be because of the information transmission of traditional medicine with some inherited experiences and believe of culture from one generation to another one, and in spite of improved methods, it is still quoted by the old methods and with a lot of mistakes. [17] According to the obtained results, in women with MSc education or above, the average of practice and attitude scores was lower than women with BC or primary education. In the Honda, Conboy, and Ni's researches, performing the methods of complementary and substitute medicine is more about person with upper education, [18-20] whereas it is not important in the Kim and Singh's studies. [21]

#### **CONCLUSION:**

Medication remedy has an important and vital effect on the health of people and especially children. Reasonable and logical use of medications, herbaceous or chemical, has formed an important part of hygienic and remedial politics of the society. [12] According to all the presented results, Bushehrian people who participated in this research had the middle practice and attitude about the type, amount, and consuming period of the medicinal plants. Most of medicinal plants have a lot of potential advantages, but immethodical and incorrect use, may be dangerous for people and especially children. As a result of the extensive use of this herbaceous medications by people and the importance of considering the medicinal interference and their unknown effects, especially for children, because of their particular condition, it is necessary to perform public training by mass media about herbaceous medications and specialized trainings to physicians as the most fundamental authority, to enhance their knowledge about native and usable herbaceous medications.

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# CONFLICT OF INTEREST STATEMENT:

None declared

### REFERENCE

- Akbarzadeh F, Jahanpour F, Hajivandi A. The relationship of general health, hardiness and spiritual intelligence relationship in Iranian nurses. Iranian Journal of Psychiatry. 2013: 8(4):165-67.
- Jahanpour, F, Sharif, F, Salsali, M, Kaveh, M.H, Williams, L.M. Clinical decision-making in senior nursing students in Iran. International Journal of Nursing Practice. 2010: 6(10): 95-602.
- Hadian Shirazi Z, Sharif F, Rakhshan M, Pishva N, Jahanpour F. Lived Experience of Caregivers of Family-Centered Care in the Neonatal Intensive Care Unit: Evocation of Being at Home. Iran J Pediatr. 2016; 26(5):3960-68.
- Gashmard R,Bagherzadeh R, Pouladi S, Akaberian S, Jahanpoor, F. Evaluating the factors influencing productivity of medical staff in hospitals affiliated Bushehr University of Medical Sciences 2012, Bushehr, Iran. World Applied Sciences Journal. 2013; 28(12):2061-68
- Jahanpour, Paymard A, Pouladi S, Azodi F, Shayan A, Azodi P, Molavi Vardanjani M, Khalili A. Comparing the Durability of Professional Ethics' Learning in Two Methods of Group Discussion and Multimedia Software, Research Journal of Medical Sciences. 2016: 10(3):120-23.

- Ben-Arye E, Traube Z, Schachter L, Haimi M, Levy M, Schiff E and Lev E. Integrative Pediatric Care: Parents' Attitudes Toward Communication of Physicians and CAM Practitioners . PEDIATRICS is the official journal of the American Academy of Pediatrics. 2011; 127(1):84-95.
- Eftekhari N, Eslamnik PA, Khalili A, Davoodi M. Comparing cesarean wound complications in high-risk women with and without anticoagulation. Journal of Mazandaran University of Medical Sciences. 2015: 25(124):48-55.
- Akbarizadeh F, Jahanpour F, Hajivandi A. The relationship of general health, hardiness and spiritual intelligence relationship in Iranian nurses. Iranian journal of psychiatry. 2013; 8(4):165-67.
- Dezhdar S, Jahanpour F, Firouz Bakht S, Ostovar A. The Effects of Kangaroo Mother Care and Swaddling on Venipuncture Pain in Premature Neonates: A Randomized Clinical Trial, Iran Red Crescent Med J. 2016; 18(4):29649-58.
- Shamsaei, F, Cheraghi, F, Zamani, G. Comparing mental health of school-age children with and without epilepsy. Iranian Journal of Child Neurology.2016:10(3): 35-41.
- Khosravi SH, Ebrahimi MS, Shayan A, Havasian MR, Jamshidi F. Investigation of Early Maladaptive Schemas in Patients with Bipolar Disorder Compared to Healthy Individuals. J. Pharm. Sci. & Res. 2017; 9(6):771-74.
- Khalili A, Davodi M, Pouladi S, Paymard A, Shayan A, Azodi P, Azodi F, Molavi Vardanjani M, and Jahanpoor F. Comparative Study on the Effect of Professional Ethics Education Using Two Methods, Group Discussion and Multi-Media Software on the Knowledge of Nursing Students. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 2016: 7(4):2776-81.
- Khalili, A.a, Shayan, A.b, Khodaveisi, M.c, Masoumi, S.Z.d, Soltani, F.d, Havasian, M.R.e, Horiat, F.E.f. Construction of Professional Ethics Questionnaire in Midwifery. Indian Journal of Forensic Medicine & Toxicology, July-December 2017: 11(2):241-44

- Afshari A, Khalili A, Dehghani M, Beiramijam M, Lotf MD, Noodeh FA, Oshvandi K. Comparing the frequency of occupational injuries among medical emergency staff and nurses of Intensive Care Units in Hamadan. Ann Trop Med Public Health. 2017; 10(3):646-50.
- Arash Khalili, Farzan Azodi, Parviz Azodi, Maryam Daryaei Motlagh, Zahra Sedighi, Faezeh Jahanpour. Patient Safety Situation from the Nurses Viewpoints in an Educational Hospital. Pharm.Sci & Res. 2017; 9(9):1647-50.
- Rasti, R. Jahanpour, F. Viewpoints of nurses and patients on paying respect to the privacy of patients in care, Journal of Mazandaran University of Medical Sciences. 2014; 24(111):33-42.
- Farzan Azodi, Farkhondeh Sharif, Parviz Azodi, Zahra Hadian Shirazi, Arash Khalili, Faezeh Jahanpour. The Reasons of Tendency toward Hookah Smoking among Teens and Youth in Iran - A Qualitative Study. Pharm.Sci & Res. 2017; 9(9):1642-46.
- Conboy L, Patel S, Kaptchuk TJ, Gottlieb B, Eisenberg D, Acevedo-Garcia D. Sociodemographic determinants of the utilization of specific types of complementary and alternative medicine: an analysis based on a nationally representative survey sample. Journal of Alternative & Complementary Medicine: Research on Paradigm, Practice, and Policy. 2005; 11(6):977-94.
- Ni H, Simile C, Hardy AM. Utilization of complementary and alternative medicine by United States adults: results from the 1999 national health interview survey. Medical Care. 2002; 40(4):353-58.
- Kim IJ, Kang JK, Lee SA. Factors contributing to the use of complementary and alternative medicine by people with epilepsy. Epilepsy & Behavior. 2006; 8(3):620-4.
- Singh V, Raidoo DM, Harries CS. The prevalence, patterns of usage and people's attitude towards complementary and alternative medicine (CAM) among the Indian community in Chatsworth, SouthAfrica. BMC Complementary and Alternative Medicine. 2004; 4(1):3-13.