Attitude of Mothers Toward Herbal Treatment of Their Children

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Abstract

ackground: Traditional medicine (also known as indigenous or folk medicine) comprises medical knowledge systems that developed over generations within various societies before the era of modern medicine. The (WHO) defines traditional medicine as:"the health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral-based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain wellbeing.

Objectives: To evaluate the attitude of mothers toward using herbal medicine for the treatment of their children in comparison with modern treatment with trade known drugs and its relation to the educational level.

Method: The study included 145 women with age average (34)yrs ,divided in to 4 groups according to teaching level and estimate their attitude toward traditional treatment regarding modern treatment with trade known drugs ,causes for using herbal medicine ,what they prefer ,which cases they treat ,if there is any obvious side effect observed after administration of these herbs ,source of information about usage , after data collection it undergoes analysis .The study conducted between 2009-2010

Results: The study revealed high attitude of mothers towards herbal treatment in comparison with trade drugs for the treatment of their children and also revealed increase their attitude with decrease educational level.

Conclusion: There was a clear and obvious desire for mothers regarding the use of herbal therapy either as replacement or adjuncts for the treatment of mild illness (such as flu, constipation ,diarrhea , napkin rash ,nasal congestion, etc). The study showed that the major cause for using herbs was its low cost in comparison with modern drugs and seem to be free of side effect as its natural ,it also revealed that the important source of information about herbal therapy was TV ,and there was no obvious side effect noted during administration .

الخلاصة

الأهداف: لتقييم ميل ورغبة الأمهات لاستخدام الأدوية العشبية لعلاج أطفالهم بالمقارنة مع العلاج بالأدوية الحديثة التجارية المعروفة وعلاقته بالمستوى التعليمي

خلفية الدراسة : الطب التقليدي (المعروف أيضًا باسم الطب الشعبي أو الأصلي) يشمل أنظمة المعرفة الطبية التي تطورت على مدى الأجيال في المجتمعات المختلفة قبل عصر الطب الحديث. منظمة الصحة العالمية تعرف الطب التقليدي على النحو التالي: "الممارسات الصحية والمناهج والمعارف التي تعتقد بدمج الادوية النباتية والحيوانية والمعدنية والعلاجات الروحية والتقنيات اليدوية والتمارين، والتي تطبق منفردة أو مجتمعة للعلاج والتشخيص والوقاية من الأمراض أو الحفاظ على ده ام الصحة

طريقة العمل: شملت الدراسة 145 امرأة بمتوسط عمر (34) عاما، وتم تقسيمها إلى اربعة مجاميع وفقا لمستوى التعليم ومن ثم تقييم ميولهم تجاه استخدام العلاج التقليدي مقارنة بالعلاج بالأدوية الحديثة التجارية المعروفة، والأسباب الموجبة لاستخدام الأدوية العشبية، ايهما تفضل، أي الحالات التي تعالج ، وإذا كان هناك أي آثار جانبية واضحة لوحظت بعد إعطاء هذه الأعشاب، ومصدر المعلومات حول استخدامها، وبعد جمع البيانات تم تحليلها. اجريت الدراسة بين عامي 2010-2009

النتائج: اظهرت الدراسة ميول عالية من الأمهات نحو العلاج بالاعشاب مقارنة مع العلاج بالادوية الحديثة التجارية المعروفة ، كما واظهرت ان زيادة تلك الرغبة والميول مرتبطة بانخفاض المستوى التعليمي كانت هناك رغبة وميول واضحة بالنسبة للأمهات بشأن استخدام العلاج بالاعشاب إما كبدائل أو مساعدات لعلاج الامراض الخفيفة (مثل الانفلونزا، والإمساك والإسهال والطفح الجلدي ، واحتقان الانف، الخ). وكشفت الدراسة أن السبب الرئيسي لاستخدام الأعشاب هوتكلفتها المنخفضة مقارنة مع الأدوية الحديثة ، وتبدو خالية من الآثار الجانبية ، كما و كشفت الدراسة عدم وجود اثار جانبية واضحة خلال الاستخدام وان التلفزيون كان مصدرا هاما للمعلومات حول العلاج بالأعشاب .

Introduction

Many pharmaceuticals used today were originally derived from plant sources (eg, salicylates from willow bark, quinine from cinchona, digitalis from foxglove leaves) suggests that some herbs may prove to be effective remedies for treating medical diseases. In laboratory studies, some essential oils have been demonstrated to have antimicrobial actions.(1,2) Artemisia species have compared favorably with chloroquine in the treatment of some types of malaria.(3,4) Astragalus membranaceus extracts enhanced the antibody response to cell-dependent antigen a T immunosuppressed mice.(5) Some Asian and African countries up to 80% of the population relies on traditional medicine for their primary health care needs. When adopted outside of its traditional culture. traditional medicine is often called complementary and alternative medicine. Herbal medicines can be very lucrative, generating billions of dollars in sales, but adulteration or counterfeit herbs can also be a health hazard.(6) Angell and Kassirer (7) stated that there is no such thing as an "alternative" medicine but only that for which effectiveness has been confirmed using the scrutiny of evidence-based science. Thus, any claims of health benefits from an herbal remedy should be subjected to the scrutiny of evidence-based Herbs that are used for medicine. medicinal purposes come in a variety of forms. Active parts of a plant may include leaves, flowers, stems, roots, seeds, and berries. They may be taken internally as pills or powders, dissolved into tinctures or syrups, or brewed in teas and decoctions.

Salves, ointments, shampoos, or poultices may be applied to the skin, scalp, or mucous membranes. Many plants contain essential oils that are distilled, packaged, and sold unregulated to the public for medicinal purposes. Essential oils include any of a class of volatile oils composed of a mixture of complex hydrocarbons (often alkaloids. and other terpenes. molecular weight compounds) extracted from a plant.(8)Essential oils give the plant its characteristic aroma and will evaporate quickly from the skin or another surface; they are so concentrated that, if applied directly to the skin, they will often cause inflammation and dermatitis. Fixed oils are nonvolatile oils made of long-chain fatty acids, such as mineral oil or safflower oil. These are often used as carriers into which a few drops of the very concentrated essential oil are diluted during their application .Resins are solid or semisolid substances organic found in secretions; they are usually applied topically as creams or ointments. The safety of herbal products may be related to the mixtures of active chemicals that they contain; their interactions with other herbs and drugs, contaminants, or adulterants; or their inherent toxicity. Plants complex mixtures of terpenes, alkaloids, saponins, and other chemicals, increasing the risk of adverse reactions to any one of them or to the additive or synergistic effects of chemical interactions.(9)

Material and methods

The study was conducted in Kerbala province during 2009-2010. The questionnaire was designed to include items such as name of mother age

number of children educational level type of treatment (either herbal or modern), source of information about using herbal therapy, the cause for using herbal therapy, cases or diseases which treated by herbal therapy preference treatment presence of any side effects during therapy. The questionnaire was given to mothers, clarification and orientation about the objectives of study were explained before, and they were informed about the importance of giving an honest response. The total number of mothers included in this study was (145), which represent the calculated sample size.

Results

The results showed that out of 145 collected mothers ,30 mothers (20.68%) their education level was primary school ,22 mothers (15.17%) ,their education level was secondary school ,37 mothers (25.5%) was illiterate, and 56 mothers (38.6%) with higher education. Table (1). Regarding their attitude toward using herbal therapy ,the results revealed that 24 mothers out of 56 (42.85%) group (1) using herbal therapy .12 mothers out of 22 (54.54%)group (2) using herbal therapy, in the other hand 22 mothers out of 30 (73.33%) group (3) using herbal therapy, and 72.79% in group (4) using

herbal therapy ,and these results reflected attitude toward using herbal therapy with decrease education level and vice versa .Table(2),figure (2) The total number of mothers using herbal therapy either alone or in combination was 85 out of 145 (58.62%) .The total number of mothers using modern medicine alone was 60(41.37%).Out of 85 mothers there was 39mothers (45.88%) using herbal therapy alone,46mothers out of 85(54.11%) using combination of both herbal and modern medicine,(p> 0.05%) . table (3),figure (3). The result also showed that 25 woman (29.41%)using herbal therapy treatment of gastro intestinal tract conditions (ex, apple extract ,nigella sativa extract and chamomile) .18 mothers (21.17%) using herbal therapy respiratory conditions ,111 mothers (12.94%) using herbal therapy for allergic conditions ,16 mothers (18.82%) using herbal therapy for flu and 15 mothers (17.64%) using herbal therapy for skin and dermatological conditions(starch, olive oil) .Table (4).The results showed that the primary cause for using herbal therapy its low cost in comparison with trade drugs available by hand there is no need for consultation and the mothers believe that ,theses herbals free from side effect or even toxicity

Table 1. Classification of mothers according to the educational level.

Groups	Educational level	Numbers	Percentage
Group (1)	Higher education	56	38.6%
Group (2)	Secondary school	22	15.17%
Group (3)	Primary school	30	20.68%
Group (4)	Illiterate	37	25.5%
Total		145	

Table 2. represent the frequency of mothers using herbal therapy.

Groups	No .of sample using herbal	No .of sample not using	Percentage
	therapy	herbal therapy	
Group (1)	24	32	42.85%
Group (2)	12	10	54.54%
Group (3)	22	8	73.33%
Group (4)	27	10	72.97%

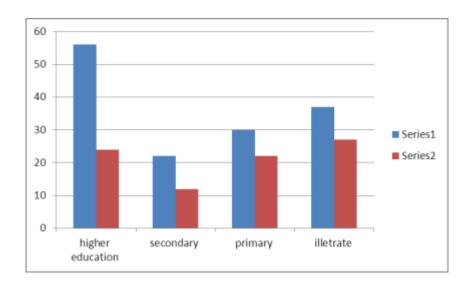


Figure 2. Represent the frequency of mothers according to the use of herbal medicine out of total.

Table 3. Represent the frequency of mothers using modern medicine and herbal therapy either alone or in combination.

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Groups	No .of mothers using	No .of mothers using	No .of mothers using modern		
	herbal therapy alone	combination	medicine alone		
Group (1)	6	18	32		
Group (2)	7	5	10		
Group (3)	10	12	8		
Group (4)	16	11	10		

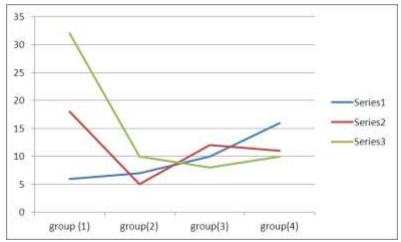


Figure 3. represent the frequency of mothers using modern medicine and herbal therapy either alone or in combination.

Discussion

There are many herbal treatments that are safe and effective for use with children of all ages(10),and the level of education of parents very important, as they are dealing

with substances whatever it is natural it may produces harm to their children. In this study 145 mothers arranged according to their educational level in to 4 groups and it revealed that (85) mothers out of (145) collected mothers using herbal

therapy either alone or in combination in comparison with the 60 mothers using

modern medicine alone (41.37%)

Table 4. Represent the diseases which have been treated by using herbal therapy and its frequency.

Conditions treated	Numbers	Percentage
GIT	25	29.41%
Respiratory	18	21.17%
Allergic conditions	11	12.94%
Flu	16	18.82%
Dermatological condition	15	17.64%

The results revealed that (42.85%) from group (1) using herbal therapy, this percentage increase to reach 54.54% in group (2), and (73.33%), (72.79%) in group (3,4) respectively. These results a strong relation between reflected attitude for using herbal therapy with the educational level of mothers as there is noticeable increase with decrease educational level .(Table 2,Figure 2), these results differ from what was approved in a profile of adult CAM users , which found that the parents were highly educated individuals of high a socioeconomic status, who often were treating their own chronic problems refractory conventional to medical management.(11) Out of 85 mothers there was 39mothers (45.88%) using herbal therapy alone,46mothers out of 85(54.11%) using combination of both herbal and modern medicine and the later may be the cause for possible toxicity which already comes from combination as a result of effect s on the distribution, metabolism, or excretion of drugs may be pronounced and may lead to drug toxicity(12), also the WHO also notes. that "inappropriate traditional medicines or practices can have negative or dangerous effects" (13)The result also showed that 25 woman (29.41%)using herbal therapy gastro intestinal treatment of conditions .18 mothers (21.17%) using herbal therapy for respiratory conditions ,11 mothers (12.94%) using herbal therapy allergic conditions ,16 mothers

(18.82%) using herbal therapy for flu and 15 mothers (17.64%) using herbal therapy for skin and dermatological conditions. In one study, herbal teas that contained chamomile seemed to have a favorable effect on infantile colic. (14),and in 1 survey, 11% (or 208 children) of families (n 1911) that used the outpatient clinics of the University of Montreal for their children's care sought CAM for medical conditions(15), They used CAM for respiratory tractillnesses (37%); ear, nose, and throat conditions (24%);musculoskeletal conditions (15%); skin conditions(6%); gastrointestinal conditions (6%); allergies(6%); prevention (5%); and other conditions (11%). The source of information about using herbal comes from TV, according to our study while National Center for Complementary and Alternative Medicine (NCCAM) offers information for parents who are thinking about using a CAM therapy for their child(16) The results showed that the primary cause for using herbal therapy its low cost in comparison with trade drugs available by hand there is no need for consultation and the mothers believe that theses herbals free from side effect or even toxicity ,but it is a fact that most herbal medicines have not been subjected to rigorous clinical trials. The lack of standardization and regulation of many products complicates the Testing of their clinical utility. (17–19) and because of the variability in herbal product ingredients, the actual dose of active ingredients being consumed is often variable, unpredictable, or simply unknown. When compared with adults, children may be particularly susceptible to the effects of such dosage variations by virtue of their smaller size and different capacity for detoxifying chemicals. This is an important point which the mothers did not take attention about it. (20)

Recommendations

- Education of mothers about proper use of herbal.
- The ministry of health should put strong restriction about herbal seller with low education and give the permission just for authorized person with higher education and scientific knowledge.
- Education via TV about proper use for herbal and educate about avoid dealing with un authorized herbal shops ,in addition to concentrate about the risk of undesirable effect of herbal specially in children

References

- 1. Kishore N, Mishra AK, Chansouria JP Fungitoxicity of essential oils against dermatophytes. *Mycoses*. 1993; 36: 211–215
- 2. Carson CF, Cookson BD, Farrelly HD, Riley TV. Susceptibility of methicillinresistant *Staphylococcus aureus* to the essential oil of *Melaleuca alternifolia*. *J Antimicrob Chemother*. 1995;35:421–424
- 3. White NJ, Waller D, Crawley J, et al. Comparison of artemether and chloroquine for severe malaria in Gambian children. *Lancet*. 1992;339:317–321
- 4. Rediscovering wormwood: qinghaosu for malaria. *Lancet*. 1992;339:649–651
- Zhao KS, Mancini C, Doria G. Enhancement of the immune response in mice by Astragalus membranaceus extracts. Immunopharmacology. 1990; 20:225–23.

- 6. "Fact sheet no. 134: Traditional medicine". World Health Organization. 2008-12-01.
- 7. Angell M, Kassirer JP. Alternative medicine—the risks of untested and unregulated remedies. N Engl J Med. 1998;339:839–841.
- 8. Woolf A. Essential oil poisoning. J Toxicol Clin Toxicol. 1999;37:721–727
- 9. Carson CF, Riley TV. Toxicity of the essential oil of *Melaleuca alternifolia* or tea tree oil. *J Toxicol Clin Toxicol*. 1995; 33:193–194
- 10. http://www.herbaldiary.org/Natural-Child-care/herbal_treatment_ children.html
- 11. Spigelblatt L, Laine-Ammara G, Pless IB, Guyver A. The use of alternative medicine by children. *Pediatrics*. 1994;94:811–814
- 12. Saxe TG.Toxicity of medicinal herbal preparations .Am Fam Physician .1987;35:135-142.
- 13. http://www.who.int/mediacentre/factsheets/fs134/en/index.html. Retrieved 2009-05-02
- 14. Weizman Z, Alkrinawi S, Goldfarb D, Bitran C. Efficacy of herbal tea preparation in infantile colic. J Pediatr. 1993;122:650–652
- 15. Astin JA. Why patients use alternative medicine: results of a national study. JAMA. 1998;279:1548–1553
- 16. Breuner CC. Complementary medicine in pediatrics: a review of acupuncture, homeopathy, massage, and chiropractic therapies. Current Problems in Pediatric and Adolescent Health Care. 2002;32(10):353-384.
- 17. Kemper KJ. Seven herbs every pediatrician should know. Contemp Pediatr.1996;13:79-93
- 18. Gardiner P, Kemper KJ. Herbs in pediatric and adolescent medicine.Pediatr Rev.2000;21:44-57
- 19. O'Hara M, Kiefer D, Farrell K, Kemper K. A review of commonly used medicinal herbs. Arch Fam Med. 1998;7:523–536
- Center for disease control and prevention .Water hemlock poisoning –maine,1992.
 MMWR Morb Mortal Wkly Rep.1994:43:229-231.