### USE OF FOLK REMEDIES AMONG PATIENTS IN KARACHI PAKISTAN

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**Background:** The concept that food is medicine is being practiced in certain parts of the world, with positive outcomes on health of the population. We have such practice in Pakistan but it needs to be brought in line with the available scientific evidence. **Methods:** The study was conducted on 270 patients, visiting the Family Practice Center, the Aga Khan University, Karachi. A questionnaire was used to collect information on the demographic profile, and the use of folk remedies for medicinal uses. **Results:** Substantial use of folk remedies for different medical conditions has been documented. The remedies included cinnamon, ginger, cloves, cordimon, sesame oil, poppy seeds, honey, lemon, table salt, eggs and curd. The medical conditions in which folk remedies are used in respondents' view, include conditions such as common cold, cough and flu to more serious conditions such as asthma, jaundice and heat stroke. **Conclusions:** We have found a substantial use of folk remedies for treatment of medical conditions. There is a need to organize their use on scientific lines.

**Key-words:** Traditional medicine; Folk remedies; Primitive medicine INTRODUCTION

Natural products have been in use as medicines for the past several thousand years, as a result of human knowledge. Today, several modern pharmaceuticals are manufactured from compounds derived from natural products. Aspirin is now considered a magic drug of modern times, but even as far back as two and a half thousand years, it was obtained from the white willow bark and used for its medicinal properties<sup>1</sup>.

A lot of kitchen items are used for their medicinal properties. Honey has been used as a medicine throughout the ages, and in more recent times has been 'rediscovered' by the medical profession for its medicinal properties<sup>2</sup>. It is interesting to note that several historical drugs have crossed the line from drug to food, including coffee, tea, lemon and pepper<sup>1</sup>.

In today's age of evidence-based medicine, the continuing use of folk remedies for the treatment of medical conditions warrants evaluation. As an initial step, we established the need to explore patients' perceptions concerning the use of folk remedies for the treatment of medical conditions.

## MATERIAL AND METHODS

We conducted a questionnaire based, cross sectional survey. A questionnaire was developed to collect information, on the perceptions concerning the use of folk remedies in the treatment of medical conditions, among patients presenting to the Family Practice Center, at the Aga Khan University Hospital, Karachi.

The questionnaire was piloted before the final study was started. The study investigators got together before initiating the study, so that individual bias could be minimized.

The Aga Khan University hospital is a tertiary level teaching facility, in the private sector. Approximately ten Family Physicians run the Family practice Center. On an average, twenty four patients consult each Family Physician daily. Information on the demographic profile of the respondents was also collected to see the background of the study population.

Patients were selected by convenience sampling. They were explained the details of the study and were asked to sign a consent form after confidentiality was assured.

# **RESULTS**

We were able to administer the questionnaire to 270 respondents. The mean age was 36.39 years with 207 (77%) women and 63 (23%) men. The majority was married, well educated and better placed socio-economically than the rest of the population in the country (Table-1).

Table-1: Demographic Profile of the Study Population (n=270)

Parameter	Number (%)
SEX:	
Males	63 (23)
Females	207 (77)
Mean Age (In years)	36.39
Marital Status:	
Single	52 (19.3)
Married	217 (80.3)
Others (Divorced/widowed)	1 (0.4)
<b>Educational Status:</b>	
Illiterate	13 (4.9)
Primary	9 (3.3)
Secondary	8 (2.9)
Matriculation	42 (15.6)

Intermediate	56 (20.8)				
Graduate	89 (32.9)				
Post-graduate	53 (19.6)				
Occupational status:					
Private service	51 (18.9)				
Government service	21 (7.8)				
Self employed	14 (5.2)				
Student	35 (12.9)				
Laborer	2 (0.8)				
Others including housewives	147 (54.4)				

Ten medicinal uses of eleven folk remedies were enquired from the respondents and have been listed in rank order (Table-2).

Table-2: Folk remedies and their uses\* (n=270)

	Medicinal uses ( in rank order)									
Kitchen- item	1	2	3	4	5	6	7	8	9	10
Cinnamon	Common	Cough	Sore	In- digestion	Vomiting	Diarrhea	Chest congestion	Tooth- ache	Abdominal pain	Head-ache
(Dal Chinni)	Cold		throat							
Ginger	Cough	In- digestion	Common	Abdominal pain	Sore throat	Obesity	To reduce cholesterol	Joint problem	Constipation	Asthma
(Adrak)			cold							
Clove	Toothache	Cough	Common cold	Earache	Sore throat	Vomiting	Diarrhea	Swelling of the eye	Fever	Flatulence
(Loung)								·		
Cordimon	Mouth freshener	Indigestion	Vomiting	Cough	Diarrhea	Sore throat	Stomach	Common cold	Cough	Abdominal pain
(Alaechi)							ache			
Sesame oil	Dandruff	Hair loss	Earache	Improve quality of hair	Massaging agent	Headache	Common cold	Dry skin	Fever	Sprain
Poppy seeds (Khaskhas)	Insomnia	Diarrhea	Sharpens mind	Common cold	Cough	Energy food	Good for health	Heat stroke	Addiction	Headache
(Knasknas) Honev	Cough	Common	Improve	Sore throat	Eye disease	Constipation	Obesity	Jaundice	Acidity	Chest
Tioney	Cougn	cold	general health	Sore unout	Lyc discuse	Consupution	Obesity	suararee	ricially	congestion
Lemon	Vomiting	Indigestion	Improves skin condition	Dandruff	Common cold	Acidity	Cough	Heat stroke	Abdominal pain	Low Blood pressure
Table Salt	Cough	Low Blood pressure	Vomiting	Diarrhea	Indigestion	Sore throat	Insect bites	Burns	Hiccups	Constipation

	(for gargle)									
Eggs	Hair loss	Dandruff	Low Blood pressure	Good for general health	Common cold	Improve body weight	Cough	Good for skin	Diarrhea	Improve muscle mass
Curd/yogurt	Diarrhea	Dandruff	Hair loss	Indigestion	Acidity	Stomach ache	Heat stroke	Improve general health	Constipation	Dysentery

<sup>\*</sup> Respondent's view

#### DISCUSSION

According to the demographic profile of the respondents, the majority belonged to a better socio-economic class and had an educated background. Because of this reason, there can be an argument against the generalization of our finding to the rest of the population, where people are less educated and socio-economically not so well placed. The counter argument is that people from all classes and educational backgrounds visit the Family Physicians, at the Aga Khan University Hospital, thereby offering a more homogenous and representative group. Nonetheless, a community-based study on similar lines will be very useful.

The results show that the patients use folk remedies overwhelmingly, for a variety of medical conditions.

The medicinal uses of several folk remedies have been scientifically proven<sup>3-10</sup>, while there are others that still wait such recognition<sup>11</sup>. Their use for medicinal purposes is not always without harm<sup>12-15</sup>.

Physicians have been cautioned, concerning the possibility of adverse effects and drug inter-actions associated with herbal remedies. They are advised to ask all patients about the use of these products<sup>16</sup>.

Cinnamon is a common kitchen item with important medicinal properties including a role in the eradication of H. Pylori<sup>3</sup>. If patients are using it for indigestion then it may have a scientific basis for its use.

Ginger has been shown to have powerful medicinal properties<sup>5</sup>, and its use in cold and flu may well be justified. Its use in the pain relief from osteoarthrosis of the knee joints<sup>7</sup>, may offer tremendous benefit to patients in the community.

Cinnamon and Cloves use have been shown to have effect on insulin function but none of the respondents have quoted its use in Diabetes Mellitus<sup>10</sup>. There is need to further study the use of these kitchen items in the prevention and treatment of Diabetes Mellitus.

Cordimon is commonly used as a mouth freshener, which is a cost effective way to manage bad breath symptomatically.

The use of Sesame oil has tremendous potential in the relief of nasal dryness<sup>8</sup>. It is a cost effective measure with minimal potential for any serious side effects. Its use in the management of dandruff by the respondents needs further scientific evaluation.

Anti-oxidant properties of some of the natural products may have a role in the prevention of cancers among other diseases<sup>4</sup>.

The use of some of the natural products may have deleterious effects on health. The use of table salt, for conditions such as low blood pressure may have long term adverse consequences 13,14,17.

The use of poppy seeds for various medical conditions, including cancer prevention, may be a serious cause for concern<sup>9,12</sup>.

Okinawan food culture is one of the world's most interesting because its consumers have the longest life expectancies and low disability rates. The concept that 'food is medicine' is intrinsic of Okinawan culture<sup>18</sup>. Certainly there is a need to replicate this model in the Pakistani society.

## **CONCLUSION**

We have found substantial use of folk remedies for various medical conditions. There is a need to seek further scientific evidence for their use. We recommend further trials and education sessions for the doctors and patients on this issue.

## **REFERENCES**

- 1. Riddle JM. History as a tool in identifying 'new' old drugs. Adv Exp Med Biol 2002;505:89-94
- 2. Molan PC. The potential of honey to promote oral wellness. Gen Dent 2001;49(6):584-9
- 3. Nir Y, Potasman I, Stermer E, Tabak M, Neeman I. Controlled trial of the effect of cinnamon extract on Helicobacter Pylori. Helicobacter 2000;5(2):94-7
- 4. Shobana S, Naidu KA. Antioxidant activity of selected Indian spicies. Prostaglandins Leukot Essent fatty acids 2000;62(2):107-10
- Afzal M, Al-Hadidi D, Menon M, Pesek J, Dhami MS. Ginger: an ethmomedical, chemical and pharmacological review. Drug Metabol Drug Interact 2001;18(3-4):159-90
- Cooney RV, Custer LJ, Okinaka L, Franke AA. Effects of dietary sesame seeds on plasma tocopherol levels. Nutr Cancer 2001;39(1):66-71
- 7. Altman RD, Marcussen KC. Effects of a ginger extract on knee pain in patients with osteoarthritis. Arthritis Rheum 2001;44(11):2531-8
- 8. Johnson J, Bratt BM, Michel-Barron O, Glennow C, Petruson B. Pure sesame oil vs isotonic sodium chloride solution as treatment for dry nasal mucosa. Arch Otolaryngol Head Neck Surg 2001;27(11):1353-6
- 9. Aruna K, Sivaramkrishnan VM. Antocarcinigenic effects of some Indian plant products. Food Chem Toxicol 1992;30(11):953-6

- Broadhurst CL, Polansky MM, Anderson RA. Insulin-like biological activity of culinary and medicinal plant aqueous extracts in vitro. J Agric Food Chem 2000;48(3):849-52
- 11. Sambaiah K, Srinivasan K. Effect of Cumin, cinnamon, ginger, mustard and tamarind in induced hypercholesterolmic rats. Nahrung 1991;35(1):47-51
- 12. Crivellaro M, Bonadonna P, Dama A, Senna GE, Mezzelani P, Mistrello G, et al. Severe systemic reactions caused by poppy seed. J Investig Allergol Clin Immunol 1999;9(1):58-9
- 13. Tanoue A, Koba M, Miyawaki S, Koshimizu TA, Hosoda C, Oshikawa S, *et al*. Role of the alpha1D-adrenergic receptor in the development of salt-iduced hypertension. Hypertension 2002;40(1):101-6
- Kagota S, Tamashiro A, Yamaguchi Y, Nakamura K, Kunitomo M. High salt intake impairs vascular nitric oxide/cyclic guanosine monophosphate system in spontaneously hypertensive rats. J Pharmacol Exp Ther 2002;302(1):344-51
- 15. Luyckx VA, Ballantine R, Claeys M. Herbal remedy-associated acute renal failure secondary to Cape aloes. Am J Kidney Dis 2002;39(3):E13
- 16. Cupp MJ. Herbal Remedies: Adverse Effects and Drug Interactions. Am Fam Physician 1999;59(5):1239-45
- 17. Vesely J. Determination of blood pressure sensitivity to salt. Unity Lek 2002;48(3):241-7
- 18. Shott. History and characteristics of Okinawan longevity food. Asia Pac J Clin Nutr 2001;10(2):159-64

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