



AWARENESS OF HOMEMAKERS ON THE MEDICINAL VALUES OF COMMONLY USED SPICES

R. Geetha¹, D. Vijayarani² and B. Karunai Selvi³

¹Department of Commerce, V.V.Vanniaperumal College for Women, Virudhunagar – 626 001, Tamil Nadu, India.

²Department of Home Science, V.V.Vanniaperumal College for Women, Virudhunagar – 626 001, Tamil Nadu, India.

³Department of Botany, V.V.Vanniaperumal College for Women, Virudhunagar – 626 001, Tamil Nadu, India.

ABSTRACT

A spice is a seed, fruit, root, bark, leaf, stem, flower or other part of plant body used for flavoring, coloring or preserving food. Spices are distinguished from herbs, which are the leaves, flowers, or stems from plants used for flavoring or as a garnish. Many spices have antimicrobial properties. The uses and usage of spices were collected by a structured questionnaire. Most of the respondents were know the medicinal values of the spices. Onion, garlic, mustard, fenugreek, pepper and turmeric are commonly used by the respondents. Nutmeg is very rarely used.

KEYWORDS: Spices, homemakers, medicinal value, therapeutic value, virudhunagar.

INTRODUCTION

Spices and accessory food stuffs are mainly used for flavoring food. They are not only improving the palatability but also act as preservatives. The aroma of spices stimulates salivary and gastric secretions and helps indigestion. Certain spices have medicinal values. They are valuable because of its antispasmodic, anti-carcinogenic, anti-inflammatory, antibacterial and anti-oxidant properties. Some spices help in improving the impaired blood glucose levels in the body and reduce cholesterol levels. They are used in counter acting intestinal flatulence and for throat infections.

Typically, the women are well versed in the use of herbs for healing and act as the family's physician not only to treat illnesses but also to prepare various herbal tonics and

other remedies. The World Health Organization (WHO) estimates that 80 percent of the world's population still uses traditional remedies that are plants as their primary health care tools. Herbs are not only great in meals for spice to add flavor but also they are the key to the nutritional density in the foods. Herbs protect us against diseases, clear toxins from our body and provide us with vitamins and minerals. Spices can "upgrade" our meal by reducing toxic compounds created during the cooking process. Adding an antioxidant-rich spice blend to meat prior to cooking reduces the level of malondialdehyde (a chemical marker for oxidation) in the meat by 71 percent and levels in participants' urine by 49 percent. The botanical name, family, the parts used and medicinal uses of the selected spices are given in Table 1.

TABLE 1. Portrays the botanical name, family, the parts used and medicinal uses of the selected spices

S.No	List of commonly used spices		Family	Parts used	Medicinal Uses
	English Name	Botanical Name			
1	Aniseed	<i>Pimpinella anisum</i>	Apiaceae	Seed	Flatulence Expectorant
2	Asafoetida	<i>Ferulla asafoetida</i>	Apiaceae	Resin	Flatulence
3	Cinnamom	<i>Cinnamomum verum</i>	Lauraceae	Bark	Flatulence
4	Clove	<i>Syzygium aromaticum</i>	Myrtaceae	Dried Flower, buds and oil	Toothache
5	Coriander seeds	<i>Coriandrum sativum</i>	Apiaceae	Fruits	Diuretic Anti-inflammatory
6	Cumin seeds	<i>Cuminum cyminum</i>	Apiaceae	Seeds	Flatulence, Anti-inflammatory
7	Fenugreek	<i>Trigonella foenum-graecum</i>	Fabaceae	Seeds	Diuretic Hypoglycemic
8	Garlic	<i>Allium sativum</i>	Liliaceae	Bulbs	Anti cholesterol
9	Ginger	<i>Zingiber officinale</i>	Zingiberaceae	Rhizomes	Indigestion Anti-inflammatory Flatulence
10	Mustard	<i>Brassica juncea</i>	Brassicaceae	Seed	Flatulence, Anti-inflammatory
11	Nutmeg	<i>Myristica fragrans</i>	Myristicaceae	Seed	Expectorant Diuretic
12	Ajwain	<i>Trachyspermum ammi</i>	Apiaceae	Fruits	Diuretic Antibiotic
13	Onion	<i>Allium cepa</i>	Liliaceae	Bulbs	Diuretic
14	Pepper	<i>Piper nigrum</i>	Piperaceae	Fruits and Seed	Expectorant
15	Turmeric	<i>Curcuma longa</i>	Zingiberaceae	Rhizomes	Anti-inflammatory Anticancer Antiseptic Antimicrobial

Ginger helps to relieve headaches, joint pain, motion, sickness and nausea. Garlic is an antibacterial and antiviral

and helps to boost our immune function, while peppermint is a decongestant that helps to clear our respiratory tract.

Basil provides Vitamins A, C and K, along with iron, manganese, magnesium, and potassium. Loaded with flavonoids, basil helps to prevent cell damage from radiation and oxygen. Fenugreek is a mediterranean herb. It is good for menstrual cramps, menopause symptoms, cholesterol and diabetes. The Cork Cancer Research Centre's test results showed that turmeric can kill gullet cancer cells in 24 hours. Turmeric is a general immune system booster due to its high antioxidant capacity. Turmeric is 5 to 8 times stronger than vitamins C and E, and even strong enough to scavenge the hydroxyl radical, which is considered to be the most reactive of all oxidants. Researchers have suggested people with diabetes may see improvements by adding 1/4 - 1 teaspoon of cinnamon to their food. Just half a teaspoon of cinnamon a day has been shown to significantly reduce blood sugar levels, triglycerides, LDL (bad) cholesterol and total cholesterol levels in people with type 2 diabetes. In another earlier study cinnamon was found to increase glucose metabolism 20 fold. Keeping the abundant medicinal values of spices in mind the study was under taken to find out the awareness of women towards the usage of spices. The objectives of the study are to analyze the awareness of women on the medicinal values of the spices, to find out the role of spices in our today life, to know the source of knowledge on the medicinal values of spices and to give suggestions to utilize and improve the usage of spices in our day to day life.

METHODOLOGY

Primary data were collected by a structured questionnaire using convenience sampling. Sixty women were selected to find out the awareness on medicinal uses of spices. Data

were collected from sixty married and unmarried women of joint and nuclear family from Virudhunagar District. The collected data were represented by percentage.

RESULTS

Profile of the respondents

The educational status and age wise distribution of the selected respondents is shown in Fig. 1 and Fig. 2. Regarding the educational qualification of the respondents (Fig. 1) 45 percent of them completed higher secondary school studies, 22 percent were professionals, 20 percent of them completed under graduation and the rest 13 percent belonged to other category. All the respondents were educationally qualified. Questionnaire distributed to women with the age group from 18 to 60. Among them, maximum of 38 percent were in the middle age group of 36 - 45, followed by 46-55 age group i.e., 28 percent (Fig. 2). The least number of respondents from the age group of 18-25 is only 3 percent. Sixty percent of the selected women were employed and the rest of them were house wives. Seventy three percent of the respondents were from nuclear family and the rest of them from joint family. In joint family, only eight percent of the mother-in-laws were involved in cooking. Regarding the marital status, 95 percent of them were married. The usage of spices by the selected women in their day to day life is shown in Table 2. It was found that the respondents used mustard and fenugreek (98%), turmeric (95%), cumin seeds (93%), coriander seeds (85%), pepper and garlic (83%), fenugreek (73%) and asafetida (65%) daily and a few of them used other spices daily. The research also revealed that 87 percent and 48 percent of the selected respondents respectively used clove and aniseed once in a week.

TABLE 2. Usage of spices by the selected women respondents

List of commonly used spices			Daily	Once in a week	
Tamil Name	English Name	Number	Percentage	Number	Percentage
Grambu	Clove	8	13	52	87
Inchi	Ginger	33	55	27	45
Jathikkai	Nutmeg	-	-	15	25
Kadugu	Mustard	59	98	1	2
Kothamalli	Coriander seeds	51	85	9	15
Manjal	Turmeric	57	95	3	5
Milagu	Pepper	50	83	10	17
Omum	Omum	9	15	19	32
Pattai	Cinnamom	10	17	43	72
Perungayam	Asafoetida	39	65	16	27
Perunseragam	Aniseed	21	35	29	48
Poondur	Garlic	50	83	10	17
Seragam	Cumin seeds	56	93	4	7
Vengayam	Onion	59	98	1	2
Venthayam	Fenugreek	44	73	16	27

Table 3 shows the awareness on the therapeutic uses of the spices by the selected respondents. Sixty two percent, forty percent, thirty percent and twenty eight percent of the selected respondents knew that ginger, aniseed, asafetida and bishop weed are useful for indigestion respectively. Eighty seven percent of the respondents aware that clove was good for toothache. Sixty five and thirty seven per cent of the respondents said that garlic and asafetida were good for flatulence. Seventy percent of respondents accepted that pepper was a good expectorant.

Twenty five percent and eighteen percent of the selected respondents were aware of that fenugreek was good for diuretic and hypoglycemic activity respectively. Fifty five percent of the selected respondents had known the medicinal property of turmeric as an antimicrobial agent. Below fifteen percent of the respondents had known the other medicinal properties of the spices. Respondents knew the medicinal properties of the commonly used spices in the kitchen.

TABLE 3. Awareness among the respondents on therapeutic uses of the spices

Spices	Therapeutic use	Number	Percentage
Clove	Toothache	52	87
Ginger	Indigestion	37	62
Turmeric	Antimicrobial	33	55
Pepper	Expectorant	42	70
Omum	Indigestion	17	28
Asafoetida	Flatulence	22	37
	Indigestion	18	30
Aniseed	Indigestion	24	40
Garlic	Flatulence	39	65
Fenugreek	Diuretic	15	25
	Hypoglycemic	11	18

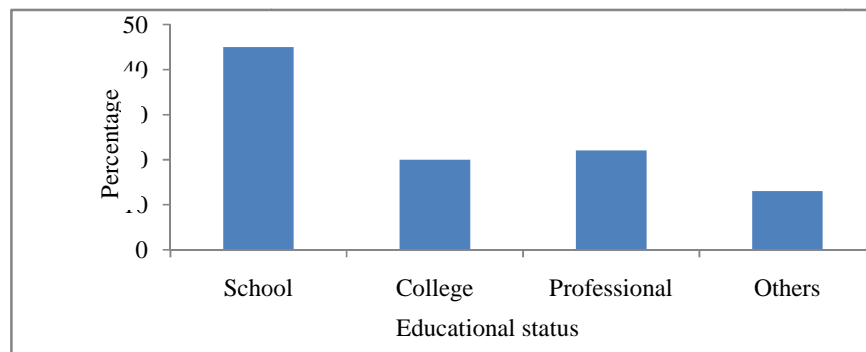


FIGURE 1. Educational status of the respondents

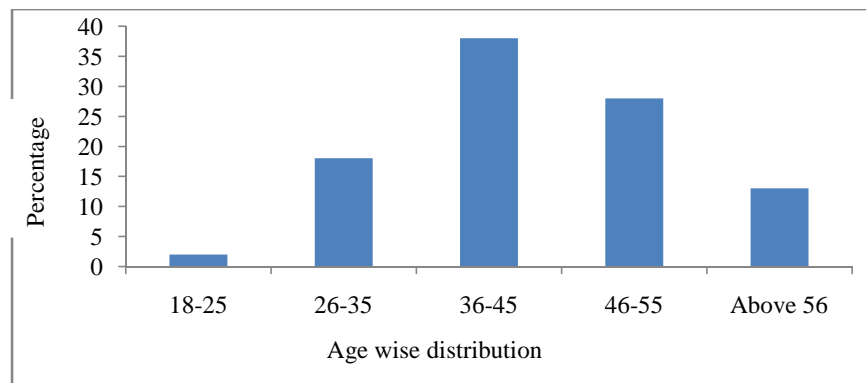


FIGURE 2. Age wise distribution of the respondents

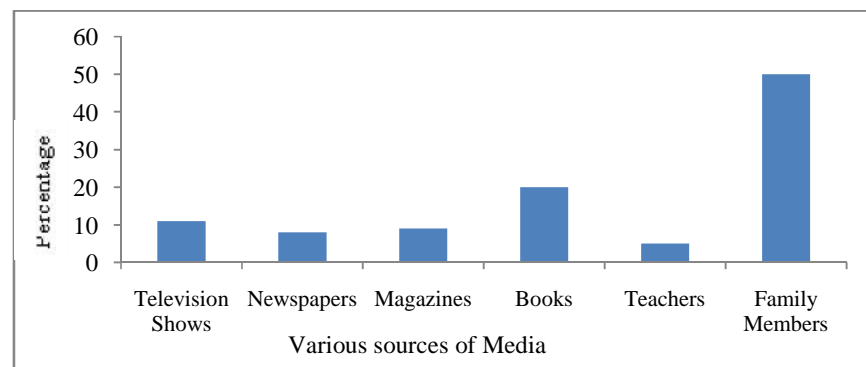


FIGURE 3. Various sources of media to gain knowledge on medicinal uses of the spices by the respondents

Fig. 3 showed the sources of knowing the medicinal values of various spices. The respondents came to aware of the medicinal values of spices through various media. It was found that nearly 50 percent of them learnt through their family members, 33 percentage of them through

books, 18 percentage of them through television media and a very few of them learnt through magazines, newspapers and teachers.

DISCUSSION

Aniseed, a herb that relieves gas pains and bloating. Anise is an expectorant that is also antiseptic to the mucous membranes. Asafoetida is useful as a digestive spice that has the additional benefit of lowering cholesterol and reducing gas. Inayurvedic terms "Asafetida is a grounding herb that can therefore balance an overactive, over emotional, turbulent system". Cinnamon has anti-inflammatory compounds help to relieves pain and stiffness of muscles and joints due to arthritis. Also helps prevent urinary tract infections, tooth decay and gum disease. Cloves are potent anti-inflammatories with antibacterial and antioxidant properties. Beneficial against muscle pains from injuries, arthritis and rheumatism. It contains eugenol and its mild anesthetic benefits are useful for toothaches, gum pain and sore throats. Coriander (seeds) has anti-inflammatory properties can help to reduce joint swelling in rheumatoid arthritis. In Ayurvedic medicine, coriander is considered tridoshic, good for all body types. Cumin is used as a diuretic and to treat stomach upset and flatulence. In Sri Lanka, toasting cumin seeds and then boiling them in water makes a tea used to soothe acute stomach problems. Cumin seeds are also being studied for their anti-carcinogenic properties. Fenugreek is taken for digestive problems such as loss of appetite, upset stomach, constipation, inflammation of the stomach (gastritis). Fenugreek is also used for diabetes, painful menstruation, polycystic ovary syndrome, and obesity. Garlic contains *allicin*. Garlic lower blood-sugar levels in people with diabetes. Garlic and onions have long been used to treat bronchitis, allergies and asthma by helping to open the lungs and ease breathing. They lower total cholesterol and triglycerides, another type of blood fat, all the while increasing HDL, "good cholesterol". Ginger has anti-inflammatory properties and helps protect against bacteria and fungi. It also eliminates intestinal gas and relaxes and soothes your intestinal tract, while boosting your immune system. It protects against atherosclerosis by lowering cholesterol levels and preventing the oxidation of low density lipoprotein (LDL). Mustard seeds have been used as appetite stimulants, emetics, and diuretics. Nutmeg extract has antibacterial activity. Nutmeg is also beneficial for joint pain and gout, and nutmeg oil has been

traditionally used to treat toothaches. Ajwain seeds water is said to increase the metabolic rate which helps burn body fat. Black pepper is stimulating to the digestive system, expectorates coughs, and helps to clear the lungs of congestion. Black pepper is added to turmeric and many other herbal formulations as an activator. The potent anti-inflammatory property of turmeric comes from curcumin. Curcumin has been shown to influence more than 700 genes, and it can inhibit both the activity and the synthesis of cyclooxygenase-2 (COX2) and 5-lipoxygenase (5-LOX), as well as other enzymes that have been implicated in inflammation. The high concentration of essential oils in ajwain seeds, primarily thymol, gives them an aroma and flavor resembling thyme, with a stronger bite. Ajwain seeds are used to flavor vegetables and fish in Indian cuisine and are fried in oil or ghee (clarified butter) to mellow the acrid taste.

CONCLUSION

Awareness on the usage of medicinal valuable spices among homemakers is traditionally transmitted from generation to generation orally. Maximum respondents are well aware of the usage of clove, which is used as a home remedy for tooth ache. Spices play a vital role in healthy practices of tamil tradition.

REFERENCES

- Daniel, M. (2006) Medicinal Plants – Chemistry and Properties. Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi.
- Gamble, J.S. (1921) Flora of the Presidency of Madras, Volumes I, II and III. Adlard and Son Ltd. London.
- Somasundram, S. (1997) Maruthurva thavaravial. Elangovan pathippaham, Tirunelveli, India. (Tamil)
- Thirugnanam, S., Akbarsha, M.A. and Krishnamurthy, K.V. (2010) Indian Medicinal Plants and Home Remedies. Selvi Pathippaham, Trichy, India.
- Warrier, P.K., Nambiar, V.P. K. and Ramankutty, C. (1994) Indian Medicinal Plants – a compendium of 500 species. Vaidyaratnam P.S. Varier's Arya Vaidya Sala, Kottakkal, Orient Longman Publications, Chennai.