

Maternal Health Care through Medicinal Plants

Kiranjot Sidhu and Ramthirath Kaur

*Department of Extension Education, Punjab Agricultural University,
Ludhiana 141 004, Punjab, India*

KEYWORDS Indigenous methods; newborn child; food sources

ABSTRACT The health of the mother determines the health of the child. Indigenous methods and materials have been used since ages in maternal health care both before and after the delivery. Gorter *et al.* (1995) reported that mothers had more confidence in folk logic treatments that they themselves or the traditional healers applied, than the service offered at health centers. It was observed that in certain cases traditional treatments were used in combination with the western medicine. The present study is an attempt to determine the awareness of the rural women regarding the purposes of use of some selected plants and their products for maternal health care. The data collected from 300 rural mothers from three districts of Punjab (India) during the year 2002-2003 using a structured interview schedule revealed that majority of the respondents were aware of the purpose of use of Jaggery. All purposes of use of Turmeric and Chebulic myrobalan were known to more than seventy percent of the women. The use of Black pepper in inducing fertility and Indian lilac in controlling skin diseases was known to very few women. Purpose of use of Dry zinger and Acre nut was known to majority of the women. Lesser percentage of women being aware of some properties provides scope for creating awareness regarding their use. The findings points towards a need to focus on dissemination of knowledge on use of these plants/products through emphasis on purpose of their use to convince the users regarding their effectiveness.

INTRODUCTION

The health of a mother and 'to be born' child depends upon the kind of maternal health care both at pre and post delivery stage. It is a matter of concern especially in India with limitation of health care services for a vast population. This care was provided to the women at the household level even when health care facilities were not available. Various food sources available with-in the household are used at different stages of health care. The uses of various plants and their products have been reported for health care by Blackwell (1990) and for post delivery care by Kaur (1999). The traditional knowledge about the use of these naturally available plants and their products has been transmitted through oral and aural communication within the society and has passed from generation to generation. This has come to be referred as the indigenous knowledge. Some of the synonyms to the term are 'traditional knowledge', 'local knowledge' and 'wisdom of the elders'. The memories and activities of the people are the store house of indigenous knowledge. People acquire this knowledge over a period of time through the accumulation of experiences, day to day informal experimentation and intimate understanding of the environment in a given culture and hence this rich heritage needs to be preserved.

In this context the attempt was made under the Extension Component of All India Coordinated Research Project on Home Science to generate and document the indigenous knowledge regarding maternal health care. The data thus generated revealed the use of various plants and their products by the rural women. The present study was aimed at determining the awareness of rural women regarding the purpose of use of some selected plants and their products documented from the state of Punjab.

MATERIAL AND METHODS

Locale of the Study: Three districts of Punjab namely Bhatinda, Faridkot and Ferozpur were selected for the study with representation of two blocks per district and two villages per block. From the list of all households, twenty five households per village were randomly selected who had at least one female member between the age group of 25-45 years and have given birth to at least one child. Thus three hundred respondents were selected. The data was collected through personal interview using a structured interview schedule designed for the purpose of study.

The schedule was tested for its reliability (0.78) and validity (0.88) and was pre-tested on a sample of 30 rural women of non-sampled areas of the selected districts.

Steps in Determining the Awareness Regarding the Use of Foods: From the list of plants and their products documented from the state of Punjab, the most frequently and extensively used plants and their products were selected. All the 300 respondents were personally interviewed for determining their awareness regarding the plants and their products being used for maternal health care. The interview pertained only to the awareness of use for maternal health care (pre and post delivery) The respondents who responded positively (those aware that these plant or their products were used during maternal health care) were further interviewed to determine their awareness regarding specific properties which these plants and their products possessed due to which they were used for maternal health care. These properties have been compiled with the help of ayurvedic doctors and literature. The response of the respondents was recorded in terms of 'Yes' or 'No'. The number and percentage were worked out of the total number of respondents.

RESULTS AND DISCUSSION

The awareness of rural women regarding commonly used plants and their products, that were Jaggery, Turmeric, Chebulic myrobalan, Black pepper, Indian Lilac and Dry ginger and Areca nut was recorded and have been discussed as under:

Awareness regarding Jaggery: All the women were aware of the usefulness of Jaggery and were also aware that it prevents anemia and controls cough. Majority were aware that it controls cold (98.0%), increase secretion of milk (81.6%), provides strength (81.0%) and induces delivery pains (73.7%). Its use as a laxative was known to

Table 1: Distribution of respondents according to the awareness regarding use of Jaggery for maternal health care.

Purpose of use	Respondents	
	Frequency	Percentage
Control abortion	144	48.00
Prevent anemia	300	100.00
Control cold	294	98.00
Control cough	300	100.00
Use as laxative	204	68.00
Increase secretion of milk	245	81.67
Induce delivery pains	221	73.67
Provide strength	243	81.00
Reduce fatigue	112	37.33

68.0 per cent of the respondents. The common availability of Jaggery and its use both in raw form and in various preparations at the household level in the state of Punjab may be the reasons for majority of the respondents knowing about its uses. The effectiveness in reducing the chances of abortion and reducing fatigue were known to only 48.0 % and 37.3 % of the rural women.

Hence there is a scope for creating awareness among the rural women regarding the usefulness of Jaggery in controlling abortion, inducing labour pains and its use as laxative and provider of strength. This will further increase the use of Jaggery in day to day life among all the members of the family. The cost effectiveness and easy availability of Jaggery further adds to its advantages.

Awareness regarding Turmeric (*Curcuma longa*): Turmeric was also known for most of its uses to all the respondents. All of them were aware that it prevents infection, controls skin diseases, softens the skin and purifies the blood. Its ability to control skin allergies was known to 93.0 % of the respondents. More than 70.0 % knew that it increases appetite (90.3%), heals the cuts and wounds (83.7%) and prevents discoloration of the skin (79.0%). Fifty eight per cent were aware that it prevents acne and pimples. Blackwell (1990) in his book 'Poisonous Medicinal Plants' reported that red chilly or pepper used as a spice in the food in cooking was considered as an important source of vitamin C.

Awareness regarding the use of turmeric for increasing appetite, preventing discoloration of skin, controlling allergies of the skin, healing of cuts, wounds and prevention of acne and pimples will further increase the use of this effective and

Table 2: Distribution of respondents according to the awareness regarding use of Turmeric (*Curcuma longa*) for maternal health care

Purpose of use	Respondents	
	Frequency	Percentage
Prevent infection	300	100.00
Control skin diseases	300	100.00
Soften the skin	300	100.00
Purify the blood	300	100.00
Increase the appetite	271	90.33
Prevent discoloration of the skin	237	79.00
Control allergic conditions of the skin	279	93.00
Heal the cuts and wounds	251	83.67
Prevents acne and pimples	174	58.00

easily available spice. The above stated properties not only make turmeric useful for maternal health care but also for prevention and cure of many health disorders. The presence of Turmeric in each household for cooking purposes is another factor which can contribute to increase in its use.

Awareness regarding Chebulic Myrobalan (*Terminalia chebula*): Commonly known as 'Harad' in Punjab, was known to all the respondents for its effectiveness in cleaning bowel. More than 99.0 % were aware that it controls constipation and promotes digestion (93.1%). Its use in controlling weight, reducing fatness and preventing infection was known to nearly seventy percent of the women. Punia and Chikara (1999) found that people adopted home remedies for the treatment of fever, where tea was prepared by boiling of *Tulsi* and *Harad*. For dysentery *Jaiphal* and *Harad* were used .

The lesser known effectiveness in reducing fat, controlling weight and preventing infection can be made known to the population as these are the most common health related problem among the masses. The awareness regarding these properties will help to enhance its use for general well being too.

Table 3: Distribution of respondents according to the awareness regarding use of Chebulic myrobalan (*Terminalia chebula*) for maternal health care.

Purpose of use	Respondents	
	Frequency	Percentage
Control constipation	279	99.00
Clear bowel	300	100.00
Reduce fatness	211	70.33
Control weight	209	69.67
Promote digestion	281	93.67
Prevent infection	215	71.67
Purify the blood	249	83.00
Improve urinary disorders	231	77.00
Control fever	266	88.67

Awareness regarding Black Pepper (*Piper nigrum*): A commonly available spice in an average Indian household was known to nearly all the rural women for its ability to promote digestion and improves urinary disorders (98.0 % and 99.3 % respectively). But lesser percentage was aware of other purposes of use like control of weight, reduction in fatness and to induce menstruation. Inducing fertility was the least known purpose of use (5.7 %). Hence, there is a need to make rural women aware of the effectiveness of Black pepper not only for maternal health care but also for general health.

Table 4: Distribution of respondents according to the awareness regarding use of Black pepper (*Piper nigrum*) for maternal health care.

Purpose of use	Respondents	
	Frequency	Percentage
Promote digestion	294	98.00
Prevent infection	231	77.00
Induce menstruation	298	54.00
Improve urinary disorders	162	99.34
Reduce fatness	156	52.00
Control weight	154	51.34
Induce fertility	17	5.67

Awareness regarding Indian Lilac (*Azadirachta indica*): This commonly growing tree was known to all the respondents for its use in preventing infection, healing of wounds and reducing swelling. Similarly 93.0 % even knew about its use in purifying blood. However it was known to very less percentage of women for its effectiveness in improving appetite. The least known purpose of its use were killing if intestinal worms (14.7 %) and control of skin diseases (9.7%). *Neem* was also reported by Hedge (1996) as well known for its medicinal properties especially its effectiveness in treating major disorder and diseases and as a home remedy for sore gums, tooth ache and ringworms, disinfectant and its use as a mouth wash.

Table 5: Distribution of respondents according to the awareness regarding use of Indian lilac (*Azadirachta indica*) for maternal health care

Purpose of use	Respondents	
	Frequency	Percentage
Prevent infection	300	100.00
Purify the blood	278	92.67
Improve appetite	109	36.33
Heal wounds	300	100.00
Decrease swelling	300	100.00
Control the skin diseases	29	9.67
Kill the intestinal worms	44	14.67

Awareness regarding Dry Ginger (*Zingiber officinale*): Commonly used in Punjabi household and called 'Sundh' was known for its use for various purposes. More than 90.0 % knew that it controls cough and cold. Its effectiveness in killing intestinal worms and improving digestion was known to 88.0 % and 87.0 % of the respondents respectively. Nearly seventy per cent were aware that it acts as laxative, improves digestion and controls weight. Study conducted by Kaur (1999) on 'Scientific Validation of Indigenous Homestead Practices for Use by Rural Home Makers in Malwa Area of Punjab' revealed that the food sources rich in iron were used for

pre-post maternal care beside those which act as nerve tonic, emollients and gives relief from pain. However there was still scope for increasing their use as some properties were not known to all the respondents.

Table 6: Distribution of respondents according to the awareness regarding the use of Dry ginger (*Zingiber officinale*) for maternal health care

Purpose of use	Respondents	
	Frequency	Percentage
Improve appetite	229	76.00
Improve digestion	261	87.00
Use as laxative	234	78.00
Reduces fatness	223	74.33
Control cold	297	99.00
Control cough	300	100.00
Control weight	206	68.67
Kill intestinal worms	264	88.00

Awareness regarding Acre nut (*Areca catechu*): 'Supari' as it is commonly known is not so commonly available at the household level. Still its effective as a nerve tonic was known to all the respondents. Similarly 87.0 % to 96.3 % were aware that it was used to provide strength, improves digestion and urinary disorders and also in prevention of infection. Lesser known purpose was keeping joints and bones healthy.

Table 7: Distribution of respondents according to the awareness regarding use of Acre nut (*Areca catechu*) for maternal health care.

Purpose of use	Respondents	
	Frequency	Percentage
Improve urinary disorders	268	89.33
Improve digestion	273	91.00
Prevent infection	263	87.33
Promote strength	289	96.33
Act as a nerve tonic	300	100.00
Use as a laxative	261	87.33
Provide strength	284	96.33
Provide healthy joints	131	44.33
Keep the bones healthy	129	43.00

This indicates that the use of *Supari* can be enhanced by making women aware of its effectiveness for lesser known reasons during pre-post delivery care. There is a wide scope for its use as a bone strengthener at the crucial stage of growth of fetus in the womb.

The present study hence revealed that although rural women were aware of use of

selected plants and their products but they were not aware of many properties possessed by them and their effectiveness in maternal health care. The lack of passage of this information from one generation to other or its dilution over a period of time can be the contributing factor to lack of awareness.

The easy and affordable availability of these plants and their products at household level, involvement of minimum risk and procedures can be considered as the reasons for encouraging the dissemination of scientific information regarding their properties to the future generations. Oliver (1994) also concluded that indigenous technologies were time tested and transmitted from generation to generation. People used these technologies because such technologies were very cheap, easy to handle and adopt, beside they were local specific. This will also help to preserve and maintain continuity in its transfer for generations to come besides providing alternate health care.

Women should be encouraged to grow plants which can be grown easily in the region. The use of other commonly available sources like Indian lilac can reduce the cost incurred on outside sources for maternal health care. The use of easily available sources like dry ginger and black pepper can be further enhanced through strengthening of indigenous information and knowledge dissemination mechanism.

REFERENCES

- Blackwell, H.W. 1990. *Poisonous and Medicinal Plants*. New Jersey: Prentice Hall Inc.
- Gorter, A.C., G.Sanchez, J. Pauw, R. M.Perez, P. Sandiford and G.D. Smith. 1995. "Childhood diarrhoea in rural Nicaragua: beliefs and traditional health practices." *Boletin-de-Pacificina -Sanitaria Panamericana*, 119: 377-90.
- Hedge, N. 1996. "Neem for all." *Yojana*, 40: 29-30.
- Kaur, T. 1999. *Scientific Validation of Indigenous Homestead Practices for Use by Rural Home Makers*. Ph.D. Dissertation, (Unpublished). Ludhiana: Punjab Agricultural University.
- Oliver, J. 1994. "Traditional Agriculture of Tamil Nadu." *Interaction*, 12: 37-51.
- Punia, S. and S. Chhikara. 1999. "Zonewise adopted health practices in rural Haryana." *Indian Journal of Social Research*, 40: 181-186.
- Roy, S. 2001. *Maternal Health - Data Bank on Pre and Post Delivery Care*. New Delhi: Indian Council of Agricultural Research.