

TRIBAL HOUSEWIVES' KNOWLEDGE OF MEDICINAL PLANTS

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ABSTRACT

The present investigation was carried out in Mandla district of Madhya Pradesh to know the socio-personal attributes of tribal housewives, assess the traditional wisdom on medicinal plants of human health care and determine the relationship and contribution of socio-personal personal attributes with traditional wisdom of medicinal plants. A total of 120 respondents from six villages of Bijadandi block of the district were interviewed with the help of pre-tested structured schedule. The study revealed that majority of them had medium to high traditional wisdom on medicinal plants of human health care. The variable experience of use of medicinal plants, family size and age of women were positively and significantly related with traditional wisdom on plants. However, socio-economic status, annual income, size of land holding and educational status were found to be negatively and significantly related with traditional wisdom.

Key words: Traditional wisdom; Tribal community; Medicinal plants; Human health

INTRODUCTION

The tribal region is a rich source of numerous species of medicinal valued plants in the Madhya Pradesh. The practice of herbal medicine for cure of human health is an old phenomenon as witnessed by *Charak-Samhita* and *Susruta-Samhita*. Narrations of number of poets and writers elucidated the traditional wisdom of tribal societies of remote areas. Tribals of a region are having homogenous characters and confined to traditional common dialogue, social beliefs, norms and values. Such an ethnic group mostly rely on plants for meeting their day-to-day needs and have practical knowledge on available flora and fauna of their eco-system through traditionally accumulated experiences preserved from time immemorial. Such beliefs on plants rest on simplicity, effectiveness, easy availability without cost and side effects. Keeping this aspect in mind, the present investigation was carried out with the following specific objectives:

1. To know the socio-personal attributes of tribal housewives,
2. To assess the traditional wisdom on medicinal plants of human health care.
3. To determine the relationship and contribution of socio-personal attributes with traditional wisdom of plants.

METHODOLOGY

The present investigation was carried out in Mandla district of Madhya Pradesh. The district comprises of nine blocks, out of which Bijadandi block was selected purposively on account of higher tribal population (82.30%) as compared

to other blocks. The block consists of 145 villages, out of which six villages, namely, Dobhi, Samnapur, Udaypur, Moiyana, Tickiriya and Jamunia were selected on the basis of simple random sampling method. The house-wives of tribal community who knew and using plants for health care of human being were considered as respondents. A list of such house-wives of these selected villages was prepared with the help of villagers. Twenty house-wives from each selected villages were identified on the basis of simple random sampling method. Thus, a total of 120 respondents as sample size were interviewed with the help of pre-tested structured schedule.

The extent of traditional wisdom on medicinal plants or parts for care of human health was taken as dependent variable and measured on the allotment of self scores for naming the plants, their identification, knowing and naming their use for care of human health. Scores of 1, 2, 3 ...n were allotted for the naming of medicinal plant(s). Scores of 0, 1 and 2 were given for no, partial and complete identification of particular plant(s), respectively. Accordingly, scores of 1, 2, 3.....n were given for knowledge of one or more use of particular plant(s). The total score represents the extent of traditional wisdom possessed by an individual on medicinal plants.

Extent of traditional wisdom on medicinal plants	=	Scores on name of plants	+	Scores on identification of plants	+	Scores on knowing one or more use of plants
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RESULTS AND DISCUSSION

Socio-personal attributes of respondents: It is clearly

observed from the data (Table 1) that 40.84 per cent tribal house-wives belonged to old age group (56 - 82 years), 45 per cent were illiterate, nearly half of the total have either joint or nuclear family structure, majority (60.84%) were with one to five acres of land holding, majority (69.17%) were having low socio-economic status, 45 per cent were having annual family income in between Rs. 8,000/- to Rs. 16,000/-, 40 per cent were having 31 - 40 years of experience on medicinal plants, a majority (64.17%) were using moderate information sources and majority of them (above 79.16%) were obtaining plants or their parts from forest, own house and neighbours.

Table 1. Socio-personal attributes of the tribal house-wives (N = 120)

Socio-personal attributes	Category	Respondents N	%
Age	Young (25 - 40 years)	40	33.33
	Middle (41 - 55 years)	31	25.83
	Old (56 - 82 years)	49	40.84
Level of Education	Illiterate	54	45.00
	Can read and write	23	19.27
	Primary passed	13	10.83
	Middle passed	16	13.33
	High School passed	14	11.67
Family type	Nuclear	58	48.33
	Joint	62	51.67
Land holding	Landless	22	18.33
	Up to 1 acre	07	5.83
	1.1 to 2 acres	26	21.67
	2.1 to 5 acres	40	33.34
	5.1 to 10 acres	08	6.67
	10.1 to 15 acres	13	10.83
	Above 15 acres	04	3.33
Socio-economic Status	Low (6 - 28 scores)	83	69.17
	Medium (29 - 50 scores)	37	30.83
	High (51 - 71 scores)	00	00.00
Annual family Income	Rs. 8,000 - 16,000/-	54	45.00
	Rs. 16,001 - 24,000/-	34	28.33
	Rs. 24,001 - 32,000/-	13	10.83
	Rs. 32,001 - 40,000/-	11	9.17
	Rs. 40,001 - 48,001/-	03	2.50
	Rs. 48,001 - 56,000/-	03	2.50
	Rs. 56,001 - 60,000/-	02	1.67
Experience	Low (10 - 20 years)	33	27.50
	Medium (21 - 30 years)	39	32.50
	High (31 - 40 years)	48	40.00
Use of information Sources	Low (1 - 8 scores)	43	35.83
	Medium (9 - 16 scores)	77	64.17
	High (17 - 24 scores)	00	00.00
Availability of medicinal plants	Own house	104	86.66
	Neighbour	95	79.16
	Vaidya	54	45.00
	Market	56	44.66
	Forest	120	100.00

From the above discussion, an inference may be drawn that the traditional wisdom about the medicinal plants has been nurtured by old women living in joint family system belonged to low socio-economic status.

Extent of traditional wisdom on medicinal plants: The extent of traditional wisdom on medicinal plants possessed by tribal house-wives for care of human health was worked out on the

basis of cumulative scores on naming, identification and number of uses of each plant. The score range was from 8 to 323. The total scores indicated the extent of traditional wisdom of a respondent. The respondents were categorized into low (8 - 113), medium (114 - 219) and high (220 - 323) groups of traditional wisdom on the basis of range of scores.

The data of Table 2 reveal that 36.67 per cent of tribal house-wives had high traditional wisdom on medicinal plants of human health care, followed by 32.50 per cent had medium and 30.83 per cent had low traditional wisdom.

Table 2. Extent of traditional wisdom on medicinal plants

Category of traditional wisdom	No. of respondents	%
Low (8 - 113 scores)	37	30.83
Medium (114 - 219 scores)	39	32.50
High (220 - 323 scores)	40	36.67
Total	120	100.00

Relationship between independent and dependent variables:

The result of correlation analysis are presented in Table 3 and the empirical model showing the relationship of personal-socio-economic attributes with traditional wisdom on medicinal plants of human health care. The rank on percentage variation on traditional wisdom is explained.

Table 3. Correlation coefficient between independent variables and traditional wisdom on medicinal plants of human health care

Variable	Correlation coefficient	r ² Percentage	Rank
X1 Age	0.607**	36.84	VI
X2 Educational status	-0.595**	35.40	VII
X3 Family size	0.638**	40.70	V
X4 Size of land holding	-0.686**	47.05	IV
X5 Socio-economic status	-0.751**	56.40	II
X6 Annual income	-0.698**	48.72	III
X7 Experience on use of medicinal plants	0.760**	57.76	I
X8 Use of information sources	0.054 NS	0.29	IX
X9 Availability of medicinal plants	0.145 NS	2.10	VIII

** Significant at 1 per cent level of probability

NS- Non-significant.

As evident from the data reported, experience on use of medicinal plants, family size and age were positively and significantly correlated with traditional wisdom of medicinal plants of human health care, whereas, socio-economic status, annual income, size of land holding and educational status were negatively and significantly correlated with traditional wisdom on medicinal plants. The other two variables like availability of plants and use of information sources was not significantly correlated with traditional wisdom. Analysis showed that the tribal house-wives with higher experience of

medicinal plants, family size and age were found to have more traditional wisdom on medicinal plants.

The findings of Verma and Singh (1969) and Geeta Thakur (2001) were similar in the case of experience with knowledge and use of plants. The results of Geeta Thakur (2001) and Sharma (2002) were in support to family size and age. Further, it is also interesting to note from the analysis that higher the socio-economic status, annual income, size of land holding and educational status of tribal house-wives, lower would be their traditional wisdom on medicinal plants.

To see the contribution of all significantly correlated variables on traditional wisdom r^2 was calculated which showed that 57.76 per cent of variation in traditional wisdom was contributed by the variable experience on use of plants, followed by socio-economic status (56.40%), annual income

(48.72%), size of land holding (47.05%) and family size (40.70%).

CONCLUSION

A total of ninety five medicinal plants were known and used for care of human health by the women who were having lower level of education, poor socio-economic status and having 21 to 40 years of experience on medicinal plants. Majority of them had medium to high traditional wisdom on medicinal plants of human health care. The variable experience of use of medicinal plants, family size and age of women were positively and significantly related with traditional wisdom on plants, however, socio-economic status, annual income, size of land holding and educational status were found to be negatively and significantly related with traditional wisdom.

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