

## SHORT ARTICLE

**Knowledge and utilization of Indian system of Medicine in the state of Assam**Ram Janak Yadav<sup>1</sup>, Jeetendra Yadav<sup>2</sup>, Niyamat Siddique<sup>3</sup>, Arvind Pandey<sup>4</sup><sup>1,2,4</sup>National Institute of Medical Statistics, Indian Council of Medical Research, New Delhi, <sup>3</sup>RMRIMS, (ICMR), Patna

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**Abstract**

**Background:** As no study was available about the usage of Indian system of Medicine and homoeopathy in North eastern states accordingly Indian Council of Medical Research entrusted this study to this Institute. **Aims & Objective:** To know the knowledge, attitude and practices of Indian system of Medicine and homoeopathy in Assam state. **Material & Methods:** The study was conducted during 2013-14. To achieve these objectives, fifty villages were selected from each selected district for Assam states. Twenty households with at least one member ill during the last three months and availed medical care services for treatment have been selected from each village. About 3,000 households were covered to know their perception about the ISM&H. From these households in all, 4800 sick persons (who fell sick in last three months) and taken any treatment were interviewed. **Results:** More than three fourth of the household are being headed by male members. About 40 percent of households reported to have visited traditional healers at the time of their illness. Bone setting (37%), Dog bite (23%), Jaundice (20%), Measles (16%), Sciatica (9%) and Snake bite (5%). Jaundice, Sciatica, Measles and Migraine were the illnesses for which the patients also visited traditional healers. **Conclusion:** As a whole, ISM&H was preferred in Government setup by 65% in case of normal ailments but in case of serious ailments, assistance preferred for Government was about 25%. Allopathy system was more preferred in case of serious ailments as compared to Ayurveda in normal ailments which were about 45%.

**Key Words**

KAP; Utilization; ISMH; Probability proportional to size (PPS) sampling

**Introduction**

Limited information on the utilization of Indian systems of medicine and homoeopathy (ISM&H) in India is available. (1)

Though India has a strong base of ancient indigenous systems of medicine and its national health policies and programmes have consistently promoted the integration of Indian Systems of Medicine (ISM) into the country's official health system. (2)

Indian Council of Medical Research entrusted National Institute of Medical Statistics, New Delhi to undertake the study entitled "To study the

acceptance level, knowledge, attitude and practice on Indian system of Medicine in Assam".

The study involved collection of information on sick member towards the ISM&H as well as their view about this system as well as the reasons of preferring / not preferring this system.

**Aims & Objectives**

To study the acceptance level, knowledge, attitude and practice on Indian system of Medicine in Assam.

**Material and Methods**

Following methodology was adopted.

1. One tenth district (at least one) will be covered from each NE states.

2. 50 villages/blocks will be selected in proportion to the rural-urban population from each selected district.
3. 20 households with at least one member ill during the last three months and availed medical care services for treatment will be selected from each selected district.

The study was conducted during 2013-14 in the state of Assam. (1) For collection of information on Usage of ISM & H, a sample of 50 villages/UFS blocks will be selected as first stage unit (FSU) from each district of each state. Allocation of 50 FSUs (villages/UFS) among rural & urban sectors will be made in proportion to the rural-urban population of the district. Allocated number of villages will be done by using Systematic Sampling with probability proportional to size (PPS), size being the population of the villages. Allocated number of blocks will be done from the list by using circular systematic sampling with equal probability. For selection of households in each selected FSU, a house listing will be prepared by house to house visit. Using this list, twenty households will be selected randomly out of the households with at least one member ill during the last three months and availed medical care services for treatment. Twenty households with at least one member ill during the last three months and availed medical care services for treatment have been selected from each village. Information has been collected about their preferences, reasons for not preferring these system and their views for popularizing these system. In the study data have been collected on the health seeking behavior from persons who were sick (suffering from some disease) at the time of survey. The information collected relate to system of treatment availed, reasons for preference of the same and the cost of treatment. In the study, 3,000 households were covered to know their perception about the ISM&H. From these households in all, 4800 sick persons (who fell sick in last three months) and taken any treatment were interviewed.

## Results & Discussion

The salient findings relating to households and sick persons availing ISM&H are presented in [tables 1, 7-9](#). General characteristics of the households surveyed have been presented in [table 2](#).

As expected, it has been observed that more than three fourth of the household are being headed by male members. About 20% of the persons were in service job, less than the one tenth was land less labour. As regards to the educational level, more than 40% were having the education level more than high school. Only few (5%) were illiterate. About half of the households were having income level more than 15,000/-. About one fourth were having income up to Rs.5000 of which about 13% were having income up to Rs 3000/-. As expected, the average family size is 4. ([Table 2](#))

*Illness for which traditional healers visited:* About 40 percent of households reported to have visited traditional healers at the time of their illness. The illnesses for which traditional healers were visited were mainly: Bone setting (37%), Dog bite (23%), Jaundice (20%), Measles (16%), Sciatica (9%) and Snake bite (5%). Jaundice, Sciatica, Measles and Migraine were the illnesses for which the patients also visited traditional healers. ([Table 3](#))

*Preference of treatment and sick persons availing ISM&H:* Information has been analyzed for the preference of a system for treatment separately for normal ailments and serious ailments as well as sick persons availing ISM&H have been presented system wise in [Table 4](#). As a whole, ISM&H was preferred in 65% in case of normal ailments but in case of serious ailments, assistance preferred was about 25%. Similarly, the Allopathy system was more preferred in case of serious ailments as compared to Ayurveda in normal ailments which were about 45% ([table 4](#)). About 41 % sick persons were actually availing the treatment of Ayurveda as well as 12% were taking treatment of Homoeopathy ([table 4](#)).

*Preference of treatment availed by literacy and income:* The percentage of households availing ISM&H were higher in case of normal ailments where the proportions were lower in case of serious ailments. These trends were same irrespective of their literacy level as well as income level. ([Table 5 &6](#)) (3)

*Sick persons availing ISM&H:* The proportion of the sick persons availing ISM&H by sex, Government/non-government as well as by age has

also been summarized (Table 7 to 9). About 73% sick persons as a whole were availing ISM&H. Among these, most of them are availing from Government setup. As regards to sex wise distribution, it has been observed that almost same proportions (about three fourth) from both the sexes are availing ISM&H treatment. As regards to their age groups, it has been observed that older persons were utilizing the services of ISM&H as compared to younger persons. (Tables 7 to 9)

*Reasons for Preference:* Of those who preferred ISM&H, information has been collected on the reasons for their preference. The reasons given were mainly Cheap (40%), No side effects (32%), Effective (21%) and almost all of the allopathic users were aware of the Ayurveda, Homoeopathy and Unani. Awareness of ISM&H among those who prefer Allopathy: Almost everyone was aware about this system of medicine.

*Reasons for No Preference:* Information has been collected on the reasons that did not prefer ISM&H. The households not preferring ISM&H, reasons reported were Slow response in treatment/ progress (16%), practitioners of these systems were not easily available (7%) and no faith (7%).

*Medical Assistance:* About 60% of the households were preferring for medical assistance from government health functionaries in case of serious ailments whereas about 51% in case of normal ailments. In case of normal ailments, about 64% (44% as Ayurveda and 20% as Homoeopathy) were taking assistance of ISMH but in case of serious ailments, only 23% (12% as Ayurveda and 11% as Homoeopathy) were taking assistance of ISMH.

*Cost of treatment:* The monthly expenditure was Rs. 342 in case of normal ailments and Rs. 1400 in case of serious ailments. The cost of allopathic treatment for three months was Rs. 1326 (Rs. 1071 for medicine & Rs. 125 for consultation). The cost of treatment for those availing ISM&H was Rs. 806 (Rs. 513 for medicine & Rs. 79 for consultation)

*Satisfaction level among those preferring/using ISM&H:* Only 14% of those preferring /using ISM&H were of the view that practitioners of these system were easily available. As regards to the availability of medicine, about 16% were of the view that

medicines of these systems were easily available. About three fourth were of the view that cost of drug was not high. As regards to the consultation charge, almost all were said that it was less than Rs 50. (5, 6)

### Recommendation

Most of the households suggested to open new Government dispensary under ISM&H and also to ensure the sufficient supply of medicines.

*Availing Health facility:* About three fourth of households were utilizing/ availing government facility i.e, dispensaries under ISMH system.

### Authors Contribution

All authors have contributed equally.

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**Tables****TABLE 1 SALIENT FINDINGS ASSAM**

Total Sick Persons	4800
Visiting traditional healers	39.2
Reason for preference ISM&H (%)	32.4
No side effects	40.4
Cheap	21.4
Effective	
Reason for No Preference of ISM&H (%)	
Practitioner not available	7.2
Slow progress	16.2
No faith	7.4
Medicine not available	1.6
Availing Traditional practices (%) Multiple response	
Loose motion	51.7
Indigestion	43.2
For constipation	39.5
Kitchen remedies for sprain	32.3
Body Massage after delivery	
Hot water bath after delivery	75.7
Medical Assistance (%)	
Normal Ailment	
Government	50.5
Private	49.5
Serious Ailment	
Government	59.4
Private	40.6
Expenditure on treatment from Private (in Rupees for 3 months) ISM&H ( Average)	
Consultation	326
Medicine	2624
Total	2950
Allopathy	
Consultation	229
Medicine	1477
Total	1706
Suggestions for improvement in ISM&H (%)	
Open dispensary	35.4
Supply of Medicine	46.8

**TABLE 2 CHARACTERISTICS OF HOUSEHOLD**

	Percentage
Highest education level in the household	
Illiterate	5.1
Up to Primary	37.2
Up to High School	15.6
Above High School	42.1
Total monthly income (Rs.)	
<3000	13.2
3000-5000	12.6
5001-8000	8.7

8001-10000	5.1
10001-15000	11.8
>15000	48.6

TABLE 3 HOUSEHOLDS ACCORDING TO TREATMENT SEEKING BEHAVIOR (%)

	Percent
Visited traditional healer when ill	39.2
<b>Type of illness for which traditional healer is visited *</b>	
Bone setting	36.7
Poisoning because of dog bite	22.9
Poisoning because of snake bite	4.9
Poisoning because of scorpion bite	0.9
Jaundice	19.9
Sciatica	9.1
Measles	15.5
Other	58.6

\* (multiple response)

TABLE 3A HOUSEHOLDS WHO MAKE USE OF TRADITIONAL HEALTH (%)

Households following traditional health/ medical practices	Percent
Yes	39.2
<b>Types of traditional health/medical practices followed</b>	
Fresh herbs	66.0
Decoction of various raw drugs/herbs	17.6
Desi Dawai	7.7
<b>Percentage of household using kitchen remedies for*</b>	
Indigestion	43.2
Loose motion	51.7
Constipation	39.5
Fever	31.3
Body ache	40.1
Sprain	32.3
Cough and Cold	52.2
Percentage of households who responded about the use of seasonal preparation as traditional medical health practice	18.3
Percentage of households who responded about the use of body massage as traditional medical health practice	24.2
<b>Practices Followed by the Ladies After Delivery</b>	
Massage	50.5
Herbal decoction	54.3
Hot water bath	75.7
Gond ke Laddo/ Panjeeri	37.2
Percentage of households who responded about the use of ghutti for new born	71.0

TABLE 4 HOUSEHOLDS WITH PREFERRED SYSTEM BY LITERACY LEVEL

System of medicine preferred for	Illiterate	Up to High School	Above High School
<b>Normal ailment</b>			
Ayurveda/ Desi dawai	66.9	65.8	14.0
Homeopathy	8.9	11.6	32.4
Allopathic	19.4	21.4	52.0
<b>Serious ailment</b>			
Ayurveda/ Desi dawai	16.1	8.7	14.5
Homeopathy	7.3	11.7	10.3

Allopathic	21.8	27.1	72.9
<b>Households with Preferred System by Income</b>			
<b>System of medicine preferred for</b>	Below Rs. 5000	Rs. 5000-10000	Rs. Above 10,000
<b>Normal ailment</b>			
Ayurveda/ Desi dawai	54.0	35.4	41.8
Homeopathy	17.5	25.3	20.2
Allopathic	26.3	37.5	36.8
<b>Serious ailment</b>			
Ayurveda/ Desi dawai	5.6	16.7	12.9
Homeopathy	9.6	11.0	11.4
Allopathic	37.6	51.2	48.5

**TABLE 5 SICK PERSONS ACCORDING TO TREATMENT AVAILED BY SYSTEM OF MEDICINE DURING LAST 3 MONTHS**

System of medicine	Sick persons (%)		
	Government	Private	Total
Ayurveda/ Desi dawai	70.7	41.2	62.1
Homeopathy	7.3	18.3	10.5
Allopathic	17.2	39.7	23.8
Other	4.8	0.9	3.7

**TABLE 6 SICK PERSONS ACCORDING TO TREATMENT DURING LAST 3 MONTHS**

System of Medicine	Sick persons (%)				
	≤5	6-18	19-45	>45	Total
Ayurveda/ Desi dawai	5.5	7.9	70.6	67.8	62.1
Homeopathy	19.3	16.7	9.8	9.0	10.5
Allopathic	67.9	63.3	17.0	20.5	23.8
Other	7.3	12.1	2.6	2.6	3.7

**TABLE 7 HOUSEHOLDS WITH PREFERRED SYSTEM OF HEALTH CARE (%)**

	Percent
<b>Type of medical assistance preferred for normal ailment</b>	
Government	50.5
Non-government	49.5
<b>Type of medical assistance preferred for serious ailment</b>	
Government	59.4
Non-government	40.6
<b>System of medicine preferred for normal ailment</b>	
Ayurveda/ Desi dawai	44.1
Homeopathy	20.2
Allopathic	34.2
<b>System of medicine preferred for serious ailment</b>	
Ayurveda/ Desi dawai	11.5
Homeopathy	10.9
Allopathic	46.1
<b>Average Monthly Medical Expenditure of Households (in Rs.)</b>	
Normal ailment	342
Serious ailment	1395

**TABLE 8 EXPENDITURE (IN RS.) ON TREATMENT DURING LAST 3 MONTHS**

System of medicine	Consultation	Medicine	Total
Ayurveda	4	156	292
Homeopathy	75	357	514
Allopathic	125	1071	1326
Other	42	276	407

**TABLE 9 SATISFACTION LEVEL AMONG THOSE PREFERRING / USING ISM&H (%)**

Availability of practitioner	Percent
Easily available	13.7
Somewhat difficult	78.5
Very difficult	7.8
Availability of medicine	
Easily available	15.9
Somewhat difficult	52.4
Very difficult	31.6
Effectiveness of medicine	
High	21.0
Moderate	63.9
Low	15.1
Cost of Drug	
High	20.9
Moderate	53.1
Low	26.0
Percentage of households who responded for home visit of ISM&H practitioners in affirmative	9.9
Consultation charges for home visit (Rs)	
Less than 50	97.9
51-100	0.7
More than 100	1.4
Suggestions for improvement in the facilities under ISM & H	
Need to open new government dispensaries	35.4
Need to ensure supply of medicines	46.8
Households availing government health care facility	
From where	
PHC/Hospital/ sub centre/Dispensary/ F.W. Centre	18.1
Dispensaries under ISM&H	74.2
Both	7.7