

Research Article

Utilization Patterns of the Community in Seeking Siddha System of Medicine in Chennai Metropolitan Area

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Abstract Very little information is available on the awareness, utilization and health seeking behavior of Community about Siddha system of medicine in Chennai. The purpose of this survey is to collect information about knowledge, awareness of the Siddha system and to know the perception and satisfaction levels of Siddha medicine. This is a cross-sectional survey done among the 384 residents which covered 10 areas in five directions of Chennai. One person from each household was interviewed using a pre-tested interview schedule. Among the 384, respondents, 52% (197) described Siddha medicine as Herbal medicine. The source of knowledge about Siddha medicine is through friends and relatives (49%). 58% have taken siddha medicine for some illnesses. 73% of respondents said that they would prefer to go to Graduate Siddha medical practitioner. The reasons for discontinuation of treatment as cited by the respondents were distance of the siddha care facility (36%), treatment ineffective (25%). Siddha medicine is widely sought by the residents of Chennai metropolis. The awareness about siddha medicine is very less. This indicates that there is an unmet need for Siddha system in Tamilnadu which underlines awareness to be increased and the policy makers have to streamline the health care delivery systems.

Keywords Awareness; Family physician; Graduate medical practitioner; Siddha medicine

1. Introduction

Health is defined as a state of complete physical, mental and social well-being and not merely the absence of disease or deformity (WHO). In Siddha system, Health is defined as a state of balance with inputs and outputs of energy and matter in equilibrium with good prospects for continued survival.

Siddha system of medicine is a traditional Indian system of medicine, which has been followed in India, especially in South India, i.e. Tamilnadu and also in certain Tamil speaking countries like Singapore, Malaysia, and Sri Lanka, Burma etc. Certain practitioners in North India also adapted this system. Siddha system of medicine is holistic in nature and preaches the way of life. The basic concepts of Siddha system mainly depend on three body constitutions namely VATHA, PITHA, KABA and also on the Panchabootha theory i.e. five elements viz., Prithvi (earth or sand), Appu (water), Theyu (fire), Vayu (air), and Akaash (Space or ether) (Uthamaryan, 2003).

When the normal equilibrium of three humors (*vatha*, *pitha* and *kapha*) is disturbed, disease is caused (Uthamaryan, 2003). The factors, which affect this equilibrium, are environment, climatic conditions, diet, physical activities, and stress. According to the Siddha medicine system diet and life style play a major role not only in health but also in curing diseases. Siddha system is being officially recognized by Central govt. and Govt. of Tamilnadu.

India has made considerable progress in health development in the recent decades, but improvement in awareness, utilization of alternative system of medicine are still lagging behind and are yet to be regularized on a large scale. Despite the far and wide impact of allopathic system in India it is important to know the health-seeking behavior of the community and awareness about Siddha system and if we know utilization of this system by community we can take measures to make this worthwhile as a preventive and regenerative medicine. This will be useful in evaluating and planning the existing health care delivery through Siddha system of medicine. e.g., targeting a particular disease(s) either by Siddha treatment alone or combined with allopathic. Increasing or regulating the Siddha dept in Govt. Hospitals.

However, a study done at Salem almost 20 years back gives some insights regarding the knowledge, attitude and practice pattern of Siddha in the community (Ramesh et al., 1989). This study examined the patterns of utilization and consumer behavioral characteristics of Siddha medicine (SM). Previous studies focused on individual illnesses like diabetes, rheumatoid arthritis etc. and showed that the preferences to Complementary and were equal (Bhalerao et al., 2013). None of the studies have looked into the health seeking behaviors for siddha treatment for common morbidities.

There is hardly any information available on the awareness and utility of Siddha medicines among the common public of Chennai. The purpose of this survey is to collect information about knowledge, awareness of the Siddha system in the community of Chennai. The survey was designed to know the perception and satisfaction levels about Siddha system as a whole among the community. This survey was also designed to understand the patterns of the community in seeking Siddha system, useful in clarifying doubts and perception, identifying methods of promoting Siddha system.

2. Materials and Methods

This is multistage cross-sectional study done among the Chennai metropolitan residents. There is hardly any study available to estimate the proportion of people in Chennai metropolitan area supposed to utilize Siddha medicines. Hence, the sample size was estimated based on the assumption that 50% of the people of Chennai metropolis are utilizing Siddha system. The assumption would yield the maximum sample size also, as there are no previous studies to have the assumption of the estimate. Based on this prevalence for 5% precision, the required sample size is 384.

Sampling Frame

The sampling frame consisted of residents of metropolitan city of Chennai. The metropolitan area was geographically divided into five divisions i.e. North Chennai, Central Chennai, West Chennai, East Chennai, and South Chennai. Two areas from each division were chosen randomly for the study. The areas and the corresponding direction are listed in Table 1.

Forty respondents from each area were interviewed except in Eastern direction, where only 32 were interviewed in each of the two areas to adjust for sample size. Participants from each area were selected from four randomly selected streets. From each street first 10 consecutive houses were selected. The Head of the family in each household was interviewed after getting an informed

consent. If he/she was not available the immediate elder person in the family was interviewed. If the respondent from a house hold refused to give an interview or if the house was locked then the available respondent in the next house was interviewed. One person from each household was interviewed using a pre-tested interview schedule

Statistical Analysis

The data collected in the questionnaire was analyzed using SPSS version 19.0. Continuous variables were presented as mean and standard deviation whereas categorical variables as proportions. Chi square test was used to find out statistically significant associations between independent and dependent categorical variables. One-way ANOVA was done to compare the mean age. P < 0.05 was taken as cut off for statistical significance.

3. Results

Of the 384 respondents, 272 (70.8%) are females and 112 (29.2%) are males. Their age ranges from 18 years to 90 years with the mean and SD of 48.5±14.3 years. Among the 384 respondents, 25 (6.5%) are illiterate, 240 (62.5%) were school level educated, 88 (22.9%) are graduates and 31 (8.1%) are professionally qualified. Three hundred forty-four (89.6%) are married; 14 (3.6) are unmarried and 26 (6.8%) are widowers. 59% of the respondents were in the low socioeconomic group (Table 2).

Table 1: Areas and their directions chosen for the study

| S.no | Geographical direction | Areas chosen | No respondents |
|--------------|------------------------|--------------|----------------|
| 1 | North Chennai | Perambur | 40 |
| 2 | | Korattur | 40 |
| 3 | South Chennai | Chromepet | 40 |
| 4 | | Madipakkam | 40 |
| 5 | Central Chennai | Kodambakkam | 40 |
| 6 | | Nungambakkam | 40 |
| 7 | West Chennai | Anna nagar | 40 |
| 8 | | Padi | 40 |
| 9 | East Chennai | Triplicane | 32 |
| 10 | | Ice House | 32 |
| Total | | | 384 |

Table 2: Demography data

| Age(N=384) | No | Percentage |
|------------------------------------|------------|-------------------|
| <25yrs | 9 | 2.3% |
| 25-35yrs | 54 | 14.1% |
| 35-45yrs | 98 | 25.5% |
| 45-55yrs | 90 | 23.4% |
| >55yrs | 133 | 34.6% |
| Gender(N=384) | No | Percentage |
| Male | 112 | 29.2% |
| Female | 272 | 70.8% |
| Education(N=384) | No | Percentage |
| Graduate | 88 | 22.9% |
| illiterate | 25 | 6.5% |
| Professional | 31 | 8.1% |
| School | 240 | 62.5% |
| Socioeconomic status(N=249) | No | Percentage |
| <10,000Rs | 146 | 58.6% |
| 10,000-20,000Rs | 84 | 33.7% |
| >20,000Rs | 19 | 7.6% |
| Total | 249 | 100.0% |

Table 3: Respondents description on various aspects of Siddha medicine

| Description of siddha medicine (N=384) | N&% |
|--|-----------------|
| Ayurvedic medicine | 74(19%) |
| Herbal medicine | 197(52%) |
| Country medicine | 113(29%) |
| Source of knowledge | N&% |
| Advertisements | 72(19%) |
| Friends/relatives | 191(49%) |
| Newspaper | 29(8%) |
| Family trend | 11(3%) |
| Other sources | 81(21%) |
| Respondents who have taken Siddha medicine | N&% |
| Yes | 222(58%) |
| No | 162(42%) |
| Diseases for which Siddha medicine was taken(N=222) | N&% |
| Joint pain(Arthritis) | 101(46%) |
| Gastritis | 36(16%) |
| Respiratory problems | 32(14%) |
| Skin problems | 27(12%) |
| Diabetes | 7(3%) |
| Others | 19(9%) |

Table 4: Frequency distribution of respondents across various strata who had taken Siddha medicine

| Variables | | Taken Siddha Medicine | | Total | Statistical Significance* |
|------------|--------------|-----------------------|-------------|-------|---------------------------|
| | | No | Yes | | |
| Sex | Female | 109(40%) | 163(60%) | 272 | 0.191(ns) |
| | Male | 53(47%) | 59(53%) | 112 | |
| Age | Mean (SD) | 48.7 (14.9) | 48.3 (13.9) | 384 | 0.74(ns) |
| Education | illiterate | 14(56%) | 11(44%) | 25 | 0.46(ns) |
| | School | 102(43.5%) | 138(57.5%) | 240 | |
| | Graduate | 34(39%) | 54(61%) | 88 | |
| | Professional | 12(39%) | 19(61%) | 31 | |
| Occupation | Business | 16(45.7%) | 19(54.3%) | 35 | 0.37(ns) |
| | House wife | 88(43%) | 116(57%) | 204 | |
| | Retired | 24(48%) | 26(52%) | 50 | |
| | Skilled | 18(36%) | 32(64%) | 50 | |
| | Teaching | 4(21%) | 15(79%) | 19 | |
| | Unskilled | 12(46%) | 14(54%) | 26 | |
| Total | | 162(42%) | 222(58%) | 384 | |

*Chi-square test, One-way ANOVA, ns - Not significant

Table 5: Frequency distribution of reasons for seeking Siddha medicine

| Reasons | Frequency | Percent |
|------------------------------|-----------|---------|
| Advertisements | 16 | 7.2% |
| Cross reference | 11 | 5.0% |
| Faith | 55 | 24.8% |
| Friends referred | 96 | 43.2% |
| Hospital is nearby | 13 | 5.9% |
| Not satisfied with Allopathy | 31 | 14.0% |
| Total | 222 | 100 |

Table 6: Frequency distribution of responses on effectiveness/cure rate of Siddha treatment

| Responses(N=222) | Frequency | Percentage |
|--|------------------|-------------------|
| Effective | 162 | 73% |
| Not effective | 36 | 16.2% |
| No response | 24 | 10.8% |
| Cured | Frequency | Percentage |
| Yes | 159 | 71.6% |
| No | 63 | 28.4% |
| Total | 222 | 100.0 |
| Reasons for discontinuing Siddha medicine (N=51) | Frequency | Percentage |
| Distance | 18 | 36% |
| Ineffective | 13 | 25% |
| Not suitable | 13 | 25% |
| Irregular in taking medicine | 7 | 14% |

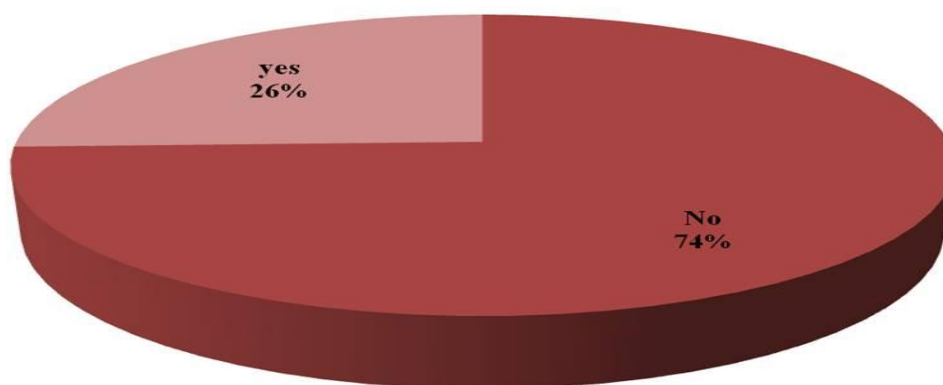


Figure 1: Respondents interest to accept Siddha Doctor as a family physician

Knowledge and Awareness of Siddha System of Medicine

Among the 384 respondents, more than 50% of the respondents interpreted Siddha system of medicine as Ayurvedic medicine. When the source through which they came to know about Siddha system of medicine was asked, 191 (49.7%) respondents said through their friends and relatives; 72 (18.8%) through advertisements; 29 (7.6%) through newspapers; 11 (2.9%) through family trend and 81 (21.1%) said through other sources. 58% of the respondents had taken Siddha medicines. 46% of the respondents had taken Siddha medicines for Joint pain, Gastritis (16%), Respiratory problems (14%), Skin diseases (12%) and very less proportion (3%) had taken Siddha treatment for Diabetes (Table 3).

More female respondents (73%) have taken Siddha medicine than the males (27%). Among the respondents those who have taken Siddha medicines (N=222), 211, (95%) were educated. The respondents those who have taken Siddha treatment were mostly house wives and retired persons (64%). The mean age of respondents those who have taken siddha medicines was 48.3 ± 14 years

(Table 4). There was no statistically significant association between the age gender, education, and occupation with the respondents those who have taken siddha medicine (P value-NS).

When the reasons for taking Siddha treatment was asked, 96 (43.2%) of the 222 respondents said that they sought Siddha therapy by the influence of their friends and relatives; 55 (24.8%) because of faith and 31 (13.9%) said that they were not satisfied with allopathy (Table 5). The response was negative from 286 (74%) of the subjects when they were asked whether they would accept a Siddha Physician as a family doctor. Two hundred and eighty (73%) respondents said that they would prefer to go to a graduate Siddha physician.

Perception and Satisfaction of Siddha Treatment

One hundred and sixty-two (73%) respondents of 222 subjects who have taken Siddha medicine said that it was effective for their illnesses, 36 (16.2%) said it was ineffective and remaining (10.8%) did not want to respond. (Table 5). Of the 222 respondents who used Siddha medicine, 159 (71.6%) told that their illness (s) was cured by Siddha treatment. Among the respondents those who had taken Siddha treatment (51), 36 % answered that distance of the Siddha health care facility was the main reason for discontinuation and 25% told that the treatment was ineffective and 25% told that the medicines were not suitable and 14% said that they were irregular in taking medicine (Table 6).

4. Discussion

This cross-sectional survey was conducted to assess the knowledge, awareness about Siddha medicine, the perception and satisfaction levels and the health seeking behavior of the community in of Siddha Medicine. The respondents of this study were predominantly females (70.8%), around 48 years of age, 62.5% had education at school level, and most of them were housewives (53.1%).

More than 50% of all the respondents told Siddha medicine as herbal medicine. However, this proportion is high in professionally qualified and graduates as compared to respondents who had lesser educational qualifications and this goes down even further when illiterates were asked this question; i.e. the majority (76%) of the illiterates referred Siddha medicine as country medicine.

In this survey it was found that around 50% of all the respondents got knowledge about Siddha medicine through their friends / relatives. This response was found more in females (54.04%) than males (39.3%). This finding is in concordance with the similar study done at Salem (Ramesh et al., 1998).

In this study 58% of all the respondents said that they had taken Siddha medicine at one point in time for various ailments. This proportion is even higher in subjects with professional degree and graduates as compared to illiterates and educated up to school level. However, this finding does not agree with the study by Ramesh et al. (1989), where an inverse relation was found between education and occupation of the subjects and their utility patterns of Siddha medicine. Although both studies were done in similar settings, the plausible reason for this striking difference in this finding between the two studies is due to the fact that the other study was done almost 20 years back. This finding is slightly lesser (35%) in a study done by Bhalerao et al. (2013) The reason for this difference is that the study was done in a hospital setting and among specific disease patients. The preference to Siddha system of medicine is more in Urban settings (72%) in a study done by Singh P et al. (2004), which is slightly lesser in our study where Chennai is also an urban setting (58%). The plausible reason for this difference in this finding is the previous study (Singh P et al.) was done in a large scale in 35 districts of 19 states in India and the present survey is conducted only in Chennai metropolitan areas. This survey also found that higher the level of education more the usage of

Siddha medicine. This is similar to the study done by Singh P et al. (2004) that high school level (90%) as well as above high school level educated (60%) preferred to utilize Siddha medicine. This is against the common belief that illiterates and school educated only use more Siddha medicine and this again proves my hypothesis that nowadays educated people turn towards Indian systems of medicine as opposed to two decades ago as found by Ramesh et al. (1989).

Most persons sought Siddha treatment for chronic and episodic diseases whereas none of them found to have sought Siddha for acute and emergency conditions. Among all the conditions for which Siddha was sought, joint pain (45.5%) was the leading condition reported by the respondents. This is similar to the study done by Bhalerao et al. (2013) that 50% utilized Siddha medicine for Rheumatoid arthritis. Likewise, the commonest reason for seeking siddha treatment was found to be influence from friends / relatives; this was the common reason found by another study Ramesh et al. (1989) in a similar setting.

Of the 222 persons who took siddha treatment, the survey found that 51 (23%) persons discontinued it; the commonest reason cited was distance to travel to go a Siddha care giver. Hence, there is an unmet need for Siddha system of medicine, which underscores the need for strengthening the Siddha health care delivery system in Tamilnadu. The same finding was found in the study by Yadav et al. (2005) in West Bengal that the respondents suggested of opening new dispensaries.

When respondents were asked what type of Siddha doctor they would prefer to visit most persons (280, 73%) replied that they would go to graduate medical practitioners if necessity arises instead of going to Registered Medical practitioner and Hereditary Medical practitioner. This finding is different in the study done by Yadav et al. (2005) in West Bengal i.e. 39% sought treatment from traditional healers.

5. Conclusion

Siddha medicine is widely sought by residents of Chennai metropolis. The awareness about siddha medicine is very less. The commonest reason cited for the discontinuation of the treatment is distance of the Siddha care giver. This indicates that there is an unmet need for Siddha system in Tamilnadu which underlines awareness to be increased and the policy makers have to streamline the health care delivery systems.

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Conflict of Interest

None, Declared.

References

- Uthamaryan, S. 2003. *Siddha Maruthuvanga Surukkam (Tamil) Indian Medicine and Homeopathy*, Third Edition.
- Ramesh, A., Hyma, B. and Srinivasan, N. 1989. Utilisation behaviour patterns of Siddha clinic in Salem, Tamilnadu. *Geogr Med.*, 19, pp.151-161.

Singh, P., Yadav, R.J. and Pandey, A. 2007. Utilization of indigenous systems of medicine & homoeopathy in India, Institute for Research in Medical Statistics (ICMR), New Delhi, India. *Indian Journal of Medical Research*, 122, pp.137-142.

Bhalerao, M.S., Bolshete, P.M., Swar, B.D., Bangera, T.A. and Kolhe, V.R. 2013. Use of and satisfaction with complementary and alternative medicine in four chronic diseases: A cross-sectional study from India. *National Medical Journal of India*, 26(2), pp.75-78.

Yadav, R.J., Pandey, A. and Singh, P. 2005. A study on acceptability of Indian system of medicine and homeopathy in India: results from the state of West Bengal. *Indian Journal of Public Health*, 51(1), pp.47-49.