

**Morbidity profile of patients attending Siddha clinics of Primary Health Centres in rural
Puducherry**

Chithra Boovaragasamy¹, Seetharaman N²

Affiliation: ¹Junior Resident,& ²Professor Department of Community Medicine, Mahatma Gandhi Medical College and Research Institute (MGMCRI), Pillayarkuppam, Puducherry.

Date of Submission : 16-03-2019

Date of online Publication : 08-06-2019

Date of Acceptance : 26-05-2019

Date of Print Publication : 30-06-2019

***Author for correspondence:** Dr Seetharaman N, Department of Community Medicine, Mahatma Gandhi Medical College and Research Institute, Pillayarkuppam, Pondicherry-607402. Mail ID- seethahere@gmail.com

ABSTRACT

World Health Organization (WHO) recommends mainstreaming of Complementary and Traditional systems of medicine as it is an affordable and culturally acceptable way of making health care accessible to everyone. India is currently facing shortage of trained health workforce, especially in rural areas. One of the solutions suggested is to integrate the complementary and traditional systems of medicine as part of the Nation's health care system. In fact, AYUSH clinics have been operational in many PHC's in Tamil Nadu and Pondicherry for more than a decade now towards achieving UHC.

Objective: To describe the morbidity profile of patients attending the Siddha clinics of PHCs in rural Puducherry. **Materials and methods:** A facility based cross-sectional study was conducted among the patients who had attended Siddha clinics at the 2 selected PHCs of Puducherry over a period of year. After obtaining necessary permissions, Centre-Based Health Records was accessed for demographic and disease profiling. Data was entered using EpiData Entry v3.1 and analysis was carried out using EpiData Analysis v2.2.2.182 44. Proportions were used to summarize categorical variables. **Results:** Among the 22069 people attending the siddha clinic, 10765 were females and 11299 were males. Majority are from the age group of 36-59(54.2%). There exists a statistical difference in morbidities with age groups and different genders (p value 0.01). **Conclusion:** Among the patients attending selected Siddha centres, the common morbidities were Arthritis, Bronchitis, Neuritis, Acid peptic ulcer and Skin diseases.

Key Words: Siddha, Profiling, AYUSH, Primary health center.

INTRODUCTION

India, with a population of 1.21 billion, has a wide heterogeneity in terms of people's socio-cultural, linguistic and demographic backgrounds.¹ India's epidemiological transition is characterized by a shift from a situation of predominantly infectious diseases to a state of dual burden of diseases where both infectious and chronic non-communicable diseases coexist.²

The changes in disease pattern and burden require the health system to be prepared to handle the crisis of double-burden (CDs+NCDs) of diseases. But the existing health system of the country has not been able to satisfactorily cope up to and cater to the needs of this epidemiological transition. *Inadequate healthcare infrastructure* is part of the problem and *inadequate health workforce* is another problem the country faces. Manpower for health services has been described as the "heart of the health system in any country". As per NHP 2018, the total number of registered Allopathic Doctors (up to 2017) is 10,41,395. The lack of trained health professionals, which is markedly higher in rural areas, is considered the single most important issue hindering the progress towards achievement of Universal Health Coverage (UHC) in the country.³ World Health Organization (WHO) has been

recommending mainstreaming of Complementary and Traditional systems of medicine of the member nations as an affordable and culturally acceptable way of making health care accessible to everyone.⁴

It has been nearly ten years since the initial attempts of integration of AYUSH systems at the PHC level began in India. There has been an evident interest to mainstream AYUSH, but very little research has been carried out regarding mainstreaming AYUSH systems in to the nation's public health care delivery system. For instance, we can cite any number of studies describing the morbidity profile of patients seeking Allopathy services at various levels of care. Yet, when we look at the AYUSH systems, the state is such that, we don't even know the basic demographics or morbidity profiles of patients attending these government-run AYUSH clinics. There is no reliable information regarding the potential reasons for the preference for AYUSH among those who avail services from these AYUSH clinics. Also, we have not systematically explored the satisfaction of patients availing services from AYUSH clinics. All this information is imperative to standardize and improve the care provided through AYUSH clinics, hospitals and facilities. Knowing

these becomes all the more significant as the government is planning to scale up the integration of AYUSH in to the public health care system. Further, before such integration, exploring the AYUSH caregiver's perspectives on the care provided by them will help the implementers to overcome the implementation challenges. Yet again, there has been no such research work carried out till date.

Hence, the current research aims to study the socio-demographic and morbidity profiles of patients attending the AYUSH clinics.

MATERIAL & METHODS

Study design: A cross-sectional descriptive study was conducted among the patients attending Siddha clinics of selected Primary Health Centres in Rural Puducherry. This study is a part of larger study exploring the morbidity profile of all age groups including children and elderly.

Study setting: The study was conducted in 2 rural PHCs of Puducherry district. The district of Puducherry is one of the four districts of the Union Territory (UT) of Puducherry in south India. With an area of 294 square kilometers, the district consists of 11 non-contiguous enclaves on or near the Bay of Bengal, the compact area being enclosed by the state of Tamil Nadu. According to the 2011 census, the district had a population of 950,289 with 69.16% people living in the urban areas⁴¹. The state-run healthcare service of Puducherry is provided by a total of 4 Community Health Centres (CHC), 27 PHCs and 52 Health Sub Centres (HSC). Out of the 27 PHCs, 12 are in urban areas and 15 in rural areas.

Study population: All patients who had attended the Siddha clinics at the 2 selected rural PHCs of Puducherry for a period of a year.

Ethical approval: The study was approved by the Institutional Human Ethics Committee, Mahatma Gandhi Medical College & Research Institute, Puducherry. Prior to initiation of the study, necessary permissions were obtained from the Directorate of Indian Systems of Medicine and Medical Officers, Puducherry.

Data variables and study tools: Centre-Based Health Records were utilized for demographic and disease profiling. For the study purpose, diagnoses of the patients were recorded as reported in the OPD record by the registered Siddha practitioner. Categorization of the morbidities was done as per the reporting format for Indian Medicine and Homeopathy recommended by Directorate of Indian Medicine and Homeopathy under the Ministry of Health and Family welfare, Puducherry.

Data entry and data analysis: Data was single entered using EpiData Entry v3.1 and all the analyses were carried out using EpiData Analysis v2.2.2.182.44. Proportions were used to summarize categorical variables. Chi square test was used to compare proportions and p value <0.05 was considered as statistically significant.

RESULTS

Among the 22069 people attending the siddha clinic 10765 were female and 11299 were males. Majority are from the age group of 36-59(54.2%). (Table 1) The overall morbidity profile of people attending the siddha clinic has been given in the Table 2.

Table 1: Age-Sex distribution of study population (N=22069)

Age in groups (years)	Male		Female		Transgender		Total	
	n	%	n	%	n	%	n	%
<18	701	6.2	852	7.91	0	0	1553	7.04
18-35	2159	19.11	2866	26.62	2	40	5027	22.78
36-59	6236	55.19	5883	54.65	1	20	12120	54.92
>60	2203	19.5	1164	10.81	2	40	3369	15.27
Total*	11299	100	10765	100	5	100	22069	100

* Percentages in the 'Total' row are row percentage and other rows depict column percentages.

Table 2: Overall Morbidity Profile of patients attending Siddha PHCs (N=22069)

Broad Category/System*	Diseases/ Diagnosis	Total n (%)
Respiratory disorders	Sinusitis	914 (4.14)
	Bronchitis	2834 (12.84)
	Bronchial asthma	429 (1.94)
	Pulmonary tuberculosis	6 (0.02)
Gastro intestinal disorders	Acid peptic ulcer	1476 (6.68)
	Diarrhoea	225 (1.01)
	Food poisoning	3 (0.01)
Joint disorders	Ascites	8 (0.03)
	Arthritis	3308 (14.98)
	Cervical spondylitis	455 (2.01)
	Lumbar spondylitis	182 (0.82)
	Neuritis	2107 (9.54)
	Sciatica	709 (3.21)
Neurological disorders	Epilepsy	1 (0.00)
	Hemiplegia	37 (0.16)
	Facial paralysis	551 (2.49)
	Wrist drop	76 (0.34)
	Leprosy	6 (0.02)
	Leukoderma	428 (1.93)
	Fungal disease	181 (0.82)
Skin disorders	Eczema	720 (3.26)
	Allergy	22 (0.09)
	Psoriasis	278 (1.25)
	Urticarial rashes	155 (0.70)
	Dysmenorrhoea	80 (0.36)
Gynaecological disorders	Menorrhagia	65 (0.29)
	Amenorrhoea	152 (0.68)
	Leucorrhoea	707 (3.20)
	Infertility	36 (0.16)

	Tumours of the uterus	1 (0.16)
	Fibroid uterus	11 (0.04)
	Cancer of uterus	2 (0.00)
Endocrine disorders	Diabetes	1036 (4.69)
	Thyroid	4 (0.01)
	Skin diseases (<i>Karunkarandai</i>)	11 (0.05)
Paediatric diseases	Skin diseases (<i>Senkirandai</i>)	72 (0.33)
	Diarrhoea	386 (1.75)
	Worm infestation	2 (0.01)
	Fever	881 (3.99)
	Hypertension	184 (0.83)
Others	Blood disorders	524 (2.36)
	Anorectal disorders	678(3.06)
	Urogenital disorders	184(0.82)
	Surgery	27(0.12)
	Others	1949 (8.83)
OVERALL	22069 (100)	

* - The morbidities have been grouped under broad categories in the 'Description' column and the more specific diagnostic terminology has been used in the 'Diseases' column as followed in the PHC registers. # - Some terminology may not mean the same as the corresponding term in Allopathy implies (E.g. "Primary Complex", "Dropsy" etc)

Figure 1: Overall Top 10 Morbidities among patients attending Siddha centres

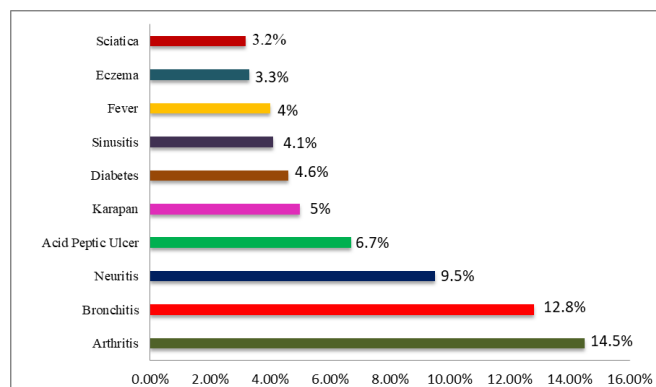


Table 3: Age-wise distribution of the study population as per Siddha system (n=22069)

Order of ranking	Diagnosis	<15	15-35	36-59	>60	Chi-square (p-value)
1	Arthritis	2 (0.3%)	82 (3.9%)	2225 (37.7%)	886 (43.7%)	3.553
2	Bronchitis	570 (81.2%)	852 (40.9%)	1123 (19%)	289 (14.2%)	(<0.01)
3	Neuritis	7(1%)	147 (7.1%)	1223 (20.7%)	730 (36%)	
4	Skin diseases (<i>Karapan</i>)	98 (14%)	394 (18.9%)	534 (9%)	78 (3.8%)	
5	Acid peptic ulcer	25 (3.6%)	608 (29.2%)	797 (13.5%)	46 (2.3%)	

Figure 1 illustrates the Top ten morbidities for which people were seeking care in siddha clinic and Arthritis was the top most morbidity for which nearly 14.9% of the people were seeking care followed by Bronchitis (12.8%) and Neuritis (9.5%).

In the Age-wise distribution of morbidities over the various age groups, it was found in age group of more than 60 years, Arthritis (43.7%) was the commonest morbidity for which people are seeking care and among children of less than 15 years, Bronchitis (81.2%) was the commonest morbidity and the distribution was found statistically significant. (Table 3)

Table 4: Type of case distribution of the study population as per Siddha system (n=22069)

Order of ranking	Diagnosis	New case	Old case	Chi-square (p-value)
1	Arthritis	1673(31.1%)	1522(28.5%)	1.65
2	Bronchitis	1154(21.5%)	1680(31.4%)	(<0.01)
3	Neuritis	1229(22.9%)	878(16.4%)	
4	Skin disease (<i>Karapan</i>)	554(10.3%)	550(10.3%)	
5	Acid peptic ulcer	764 (14.2%)	712(13.3%)	

Table 5: Gender distribution of the study population as per Siddha system (n=22069)

Order of ranking	Diagnosis	Male	Female	Transgender	Chi-square (p-value)
1	Arthritis	1477 (26.6%)	1717 (33.2%)	1 (33.3%)	1.395
2	Bronchitis	1680 (30.3%)	1153 (22.3%)	1 (33.3%)	(<0.01)
3	Neuritis	1005 (18.1%)	1101 (21.3%)	1 (33.3%)	
4	Skin disease (<i>Karapan</i>)	539 (9.7%)	565 (10.9%)	0	
5	Acid peptic ulcer	844 (15.2%)	632 (12.2%)	0	

Type of case distribution of the study population shows Arthritis (31.1%) being the commonest morbidity in New cases and Bronchitis (31.4%) being common in the Old cases and the differences were found to be statistically significant. (Table 4)There is a statistical significance between genders as evidenced by chi-square test. (Table 5)

DISCUSSION

Although morbidity profiling studies at allopathic primary care facilities are fairly common, the literature on Siddha centres is much limited. Hence, we have extended the comparison of patient profiling to those done in allopathic primary care settings also when comparable data on Siddha patients are not available.

The study by Boopathiraj et al at the National Institute of Siddha, Tambaram, Chennai showed that patients sought consultation mainly for diseases related to the field of rheumatology (33%) followed by dermatology (19.2%), respiratory system (9.1%), neurology (7.7%), gastroenterology (6.5%), ENT (6.1%) and endocrinology (4.2%). The study reported that the mean (SD) age of patients attending Siddha OPD was 39.5 (14) years and 38.3 (13) years among males and females respectively,

while the current study population had a mean age of 45.6 (18.5) years.⁵

A similar study conducted by Duraisamy et al reported that, arthritis (21%), neuritis (10%), fungal diseases (7%) were the top morbidities among the adults.⁶ Another study done by Kalaiselvi et al among the elderly population attending Siddha facilities, Arthritis (45.2%), neuritis (8.8%), diabetes (6.6%), bronchial asthma (5.2%), hemiplegia (3.7%) were the top five morbidities they sought for.⁷ In the present study, among the elderly (>60 years) arthritis (43.7%), neuritis (36%), bronchitis (14.2%) were the common morbidities. Kishore and Garg in their study in a rural western India reported that the commonest morbidities among elderly were cataract (30%), arthritis & arthralgia (15.6%), refractory error (13.6%), anaemia (13.3%), chronic bronchitis (7.3%), dental caries (7%), hypertension (5.2%) and impaired hearing (5%).⁸

In general, visual problems, arthritis/joint pains, respiratory problems and hearing problems were the common morbidities among majority of the studies.⁹⁻¹¹ Though vision and hearing problems were the commonest geriatric problems, in the present study, we did not observe a similar pattern. This might probably be because elderly patients in the study population with these 'expected' elderly health issues were seeking care in Allopathy clinics for these complaints and hence are not listed as the 'presenting complaint' in our study in AYUSH clinics.

Different findings have been reported by many studies in India and abroad in health facilities practicing allopathic system of medicine. The difference in findings across the studies may be due to the preference of patients with a particular type of illness towards a particular system of medicine, differences in methodology of diagnosis of illness and differences in operational definition / terminology of the illness.

REFERENCES

1. Ministry of Home Affairs, India. Census of India 2011. New Delhi: Office of the Registrar General & Census Commissioner; 2011. Available from: http://www.censusindia.gov.in/2011census/PCA/PCA_Highlights/pca_highlights_file/India/4Executive_Summary.pdf. Accessed 04.10.16.
2. Statistics Division, Ministry of Health and Family Welfare. Rural Health Statistics in India in 2012; 2012. Available from: <http://nrhm.gov.in/images/pdf/publication/RHS-2012.pdf>. Accessed 03.10.16.
3. Central Bureau of Health Intelligence, Ministry of Health & Family Welfare. National Health Profile (NHP) of India - 2018 [Internet]. Government of India; 2018 [cited 2018 Aug 15]. Available from: <http://cbhidghs.nic.in/index8.php?>
4. WHO traditional medicine strategy: 2014-2023 [Internet]. World Health Organization. 2016[cited 5 October 2016]. Available

from: http://www.who.int/medicines/publications/traditional/trm_strategy14_23/en/

5. Boopathiraj S, Subramanian M, Selva shunmugam P. Profile of patients reporting at OPD of National Institute of Siddha, Chennai-47. *Journal of Siddha*. 2008 July-Dec;1(1):1-13.
6. Duraisamy V. Profile of patients attending Siddha OPD and their perceptions regarding quality of services at Government Hospitals in Erode District, TamilNadu[DPHM]. Puducherry, Qld: Jawaharlal Institute of Postgraduate Medical Education and Research; 2015.
7. Selvaraj K, Srinivasan M, Duraisamy V, Ramaswamy G, Venugopal V, Chinnakali P. Morbidity profile of elderly outpatients attending selected sub-district Siddha health facilities in Tamil Nadu, India. *Ancient Sci Life* 2016;35:212-6.
8. Kishore S, Garg BS. Sociomedical problems of aged population in a rural of Wardha district. *Indian J Public Health* 1997; 41:43-48.
9. Purty AJ, Bazroy J, Kar M, Vasudevan K, Veliath A, Panda P. Morbidity Pattern Among the Elderly Population in the Rural Area of Tamil Nadu, India. *Turkish J Med Sci* 2006; 36:45-50.
10. Bharati DR, Pal R, Rekha R, Yamuna TV, Kar S, Radjou AN. Ageing in Puducherry, South India: An overview of morbidity profile. *J Pharm BioallSci* 2011;3:537-42
11. Elango S. A study of health and health related social problems in the geriatric population in a rural area of Tamil Nadu. *Indian J Public Health* 1998; 42:7-8.

Conflict of Interest : None

Source of funding support: NIL

How to cite this article: Chithra Boovaragasamy, Seetharaman N. Morbidity profile of patients attending Siddha clinics of Primary Health Centres in rural Puducherry. *Nat J Res Community Med* 2019;8(2): 163-166

© Community Medicine Faculties Association-2019

NJRCM: www.commedjournal.in

