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Original Research Article

Morbidity profiling of patients treated at Ayothidoss Pandithar Hospital of the National Institute of Siddha from 2004 to 2023 in Tamil Nadu, India

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ABSTRACT

Background: Understanding the patient flow for health-seeking patterns and utilization of AYUSH care in India has been considered essential for a greater emphasis on mainstreaming and blending into the existing healthcare systems. This study examines the morbidity profiling of patients reporting to Ayothidoss Pandithar Hospital (APH) of the National Institute of Siddha (NIS), Chennai.
Methods: The study included new and old/revisit patients who attended the APH, Outpatient Department (OPD), special OPD, and Inpatient Department (IPD) from October 2004 to December 2023.
Results: Through OPD and IPD, APH has treated 98,94,373 cases and 7,61,754 cases, respectively. The average number of cases treated per day at OPD was 1484, and 115 in IPD. Men were higher in OPD and IPD. The more common diseases treated during 2012-2023 at OPD were *Madhumegam* (diabetes mellitus) 13% and *Azhal keelvayu* (osteoarthritis) 12% whereas, in IPD, it was *Thandagavatham* (lumbar spondylosis) 9.5% and *Pakkavatham* (hemiplegia) 9.4%. At APH, 9 X-ray investigations, 44 Varmam therapies, 37 Thokkanam therapies, 497 pathological, 433 biochemical investigations, and 38 microbiological tests were performed each day.
Conclusions: This study reveals the scope of the Siddha system of Medicine in managing Musculoskeletal disorders. The patient data generated at APH would enhance the National Health Policy (NHP) objective of strengthening and prioritizing health services' importance, promoting good health, and creating guidelines for high-quality care.

Keywords: Ayush care, Morbidity, New patients, Revisit patients, Siddha

INTRODUCTION

The Siddha medical system is an age-old, codified traditional medicine system that is mostly practiced in Tamil-speaking regions, including Tamil Nadu, Kerala, Sri Lanka, Malaysia, Singapore, Mauritius, and a few countries in Southeast Asia. The system prioritizes delivering preventative, promotive, curative, revitalizing, and rehabilitative healthcare utilizing a comprehensive and scientific approach. The root term "Citti," which signifies achievement, perfection, and everlasting delight, is where the name "Siddha" originates.[1]

The four pillars of the Siddha system are Alchemy (Vatham), Treatment (Vaithiyam), Yogic Practices (Yogam), and Wisdom (Gnanam). The foundational principles of the Siddha medical system are the ninety-six thathuvam, which include the physical, physiological, psychological, and intellectual aspects of every human being. Among the 96 thathuvam, the five primordial elements (Panchabhootham) are the fundamental components of the cosmos and the human body. The body's three humors are called Vatham, Pitham, and Kabam. Any vitiations of the three humors are the main causes of illness manifestation, and 4448 human ailments were listed in the literature on Siddha medicine.[2] As per the Siddha system, ailments like Pitham, Kabam, and Vatham illnesses are characterized by a group of similar symptoms that primarily manifest as the afflicted humour. With the aid of the Thegaillakanam Index, one can determine how predisposed a given body's constitution is to specific diseases.[3]

In order to determine the disease burden, evaluate the effectiveness of our health system, and allocate resources where they are most needed, morbidity and mortality data are evaluated.[4] Studies on morbidity across multiple cultures show that illnesses and their trends are generally similar in all individuals.[5] One could understand that a person's state is related to the neighborhood he lives in. This may have a good correlation with seasonal occurrences as indicated in Tholkaappiam, ancient Tamil literature, as well as diseases that may arise in specific areas of Kurinji, Mullai, Marutham, Neithal, and Paalai (five terrains according to Tamil literature).[2]

The growing prevalence of diseases, particularly chronic diseases with many disorders at the same time, is one of the biggest threats to health systems, as well as to economic and social progress in any nation. If appropriate measures are not taken, the epidemic of chronic diseases in the area will persist, spreading dynamically. This substantial information gap is to be bridged by profiling patients' morbidity conditions and their subsequent healthcare needs to support Integrated, person-centered models for long-term disease management", which will, in turn, enable better patient-centered, sustainable healthcare management in practice.[6]

Thus, it is possible to state that variances in the morbidity pattern of a specific group are solely dependent on time, place, and person.[4] The rationale of the study is to highlight the usefulness of the Siddha and to throw light on the treatment-seeking behavior of patients toward this system. This article discusses the burden of diseases and patient demographics for NIS visits between 2004 and 2023. The findings of this study will have a bearing on the enhancement of patient management, therapy administration, and data management services in the future.

Background of the Ayothidoss Pandithar Hospital

The Ayothidoss Pandithar Hospital (APH) under the Ministry of AYUSH, Govt. of India, located on the NIS campus, was initiated on 17 June 2004. It provides vibrant healthcare services to the public and imparts clinical training to Undergraduates, Postgraduates, and Doctoral students.

The Outpatient Department (OPD) is open from eight in the morning until noon every day of the year. NIS extends its outreach OPDs to several nearby locales in its outlying rural and semi-urban regions. The health care treatment services were initiated in a phased manner. Cardiac diseases, bronchial asthma, diabetes, geriatrics, autism, cancer, yogam and kayakalpam, cosmetology, obesity, infertility, renal disorders, and hypertension are the diseases that receive special OPD treatments. The special OPDs are offered during the designated days and times.

The Inpatient Department (IPD) at NIS began operations in June 2005 with 20 beds and currently has a total bed capacity of 200. It is operational all year round the clock.

The hospital offers therapy diagnostic services with the laboratory departments for biochemistry, clinical pathology, microbiology, X-ray, electrocardiogram (ECG), ultrasonography (USG), and spirometry tests. In addition, the Neerkuri and Neikuri tests used in Siddha diagnostics are carried out to diagnose and determine the prognosis (https://nischennai.org/main/hospital/).

From inception to December 2023, the Ayothidoss Pandithar Hospital has provided consultation and treatment to nearly one crore patient cases. Our study objective was to explore the growth in the flow of patients visiting and revisiting and seeking consultation and treatment at OPD and IPD since inception, i.e., from 2004 to 2023, their morbidity conditions, and the diagnostic services provided.

METHODS

Study setting and population

In the initial phase, APH's patient registration and management were done manually in October 2004. Later, in October 2009 (second phase), the data entry

management system came into existence through an institute-developed digital system, and in 2018 (third phase) AYUSH Hospital Management Information System (A-HMIS) was launched to computerize the patient data. The data in the present study was extracted and collated from various available resources, including the published annual reports from 2004-2005 to 2021-2023.[7] The current study included new and old/revisit patients who attended the APH, Chennai, OPD (including special OPD), and IPD from October 2004 to December 2023.

Data quality and confidentiality

All data encoders were given orientation and periodical training for quality data capture in all three phases of data entry and at the third phase as per A-HIMS policy. APH's patient registration and management were done manually from Oct 2004 to Oct 2009. All patient's data are kept in the medical record room and monitored by a medical record officer as per NABH norms. Later, in October 2009, an institute-developed digital system came into existence wherein the in-house electronic data were entered into password-protected computers or files and stored in the NIS server under the control of the Director of NIS.

The data was shared anonymously without any patient identifiers. The Ministry of AYUSH introduced AYUSH Hospital Management (A-HIMS) in 2018, and the data is stored in the NIC Server in New Delhi. It comes under the control of the Director of NIS at NIS and, overall, by the AYUSH Grid team in New Delhi. The software allows the download of only a limited set of variables in the form of metadata for analysis purposes, and none of the variables have identifiers.

Study variables and study tools

The study analyzed socio-demographic variables such as age and gender, the most commonly reported disease conditions, and the investigation services rendered through the hospital. The diagnosis of the cases was documented as reported in the out/inpatient record. Morbidities were categorized according to WHO terminology and standard Siddha terminologies prescribed in the Siddha Maruthuvam (Siddha textbook) and presented in their equivalent modern terminology.[8-10]

Data analysis

A simple descriptive analysis was done. Qualitative variables were presented as frequencies and proportions, and measures of central tendency were calculated for quantitative variables. The Z test for proportions was used to test two proportions. SPSS software for Windows (version 21.0, Chicago, IL, USA) was used for the statistical analysis.

RESULTS

From all available resources, including openly accessible annual reports, we have extracted data for OPD and IPD of NIS from October 2004 to December 2023. About 98,94,373 cases were consulted and treated during the study period at the OPD, with 7,61,754 admitted and treated at the IPD.

Outpatient department

Table 1 shows the new and old patient cases of treatment. It was 20% and 80%, respectively. Among the treated, 51% were male, and 49% were female. The proportion of males (51%) was significantly higher ($p<0.05$) than females (49%). It is evident from Table 1 that, overall, when comparing old new cases and old/revisit cases, males were treated more than females. However, when observing the data from 2017 (data not shown), more women than men received OPD treatment at APH.

Table 1: Sex-wise number of OPD cases at APH, Oct 2004-Dec 2023.

Gender	New cases	Old cases	All cases
No. of males (%)	1018934 (51.4)	4008119 (50.7)	5027053 (50.8)
No. of females (%)	964173 (48.6)	3903147 (49.3)	4867320 (49.2)
Total (%)	1983107 (20.0)	7911266 (80.0)	9894373 (100.0)

Table 2: Age group wise no. of OPD cases at APH, Oct 2004-Dec 2023.

Age group	New cases	Old cases	All cases
No. of children ≤12 years (%)	1018934 (6.6)	400819 (3.8)	5027053 (4.3)
No. of adults >12 years (%)	964173 (93.4)	3903147 (96.2)	4867320 (95.7)

Overall, 4.3% of the cases were children 12 years or less, and 96% were adult cases more than 12 years (Table 2). New cases of children were more (6.6%) compared to Old cases of children (3.8%). Overall, the average number of cases treated per day at APH was 1484.

Figure 1 shows the average number of patients who sought treatment at OPD per day during the scheduled time. It shows that the average number of cases steadily increased from 67 in 2004 to 2176 in 2018. After that, a reduction in the number of patients visiting OPD was observed due to the COVID-19 pandemic, which started increasing in 2023. On average, for every single minute, six patients sought treatment at OPD.

The month-wise pattern of the average number of OPD cases (Figure 2) shows that it is neither continuously increasing nor decreasing. It starts increasing in February, peaks in March and reaches its lowest in May. From

there, it gradually rises and oscillates until it advances upward in December.

The twenty more prevalent disease conditions treated at APH between 2012-2023 are listed in Table 3. Overall, musculoskeletal ailments account for almost one-third of all ailments treated at OPD, followed by non-communicable disease (12.58%). When observing the individual disease conditions, the top two disease conditions treated at APH during 2012-2023 were *Madhumegam* (12.58%), followed by *Azhal Keel Vayu* (osteoarthritis) (11.85%). It reflects that patient does not only seek treatment for issues specific to solely one illness state but seeks for several disease conditions.

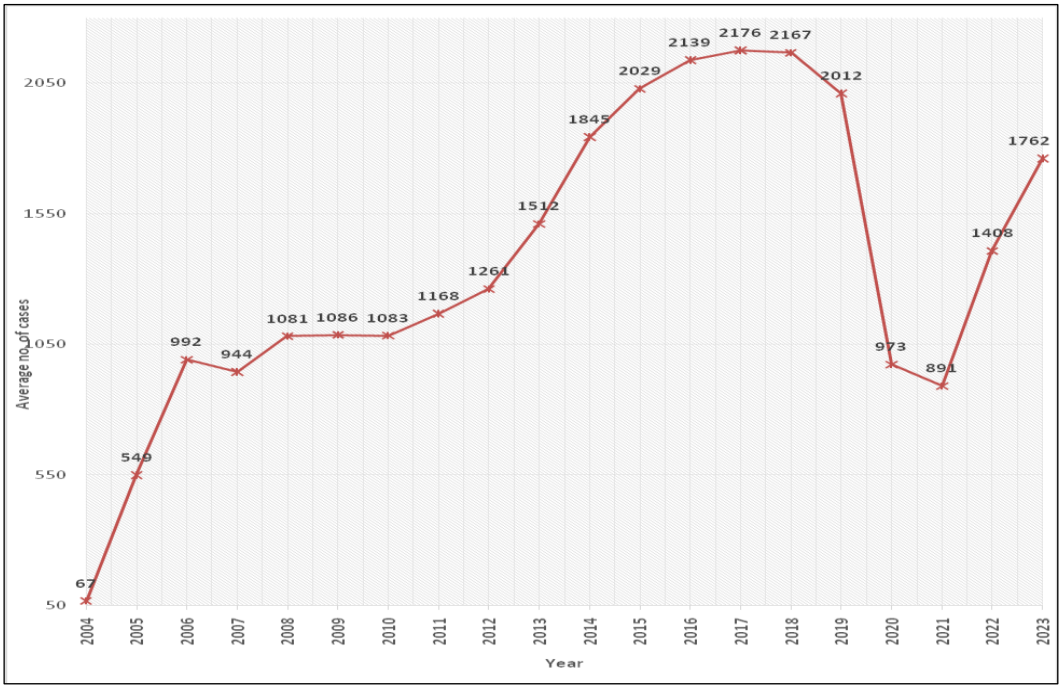

Figure 1: Year-wise average number of cases consulted and treated in OPD during 2004-2023.

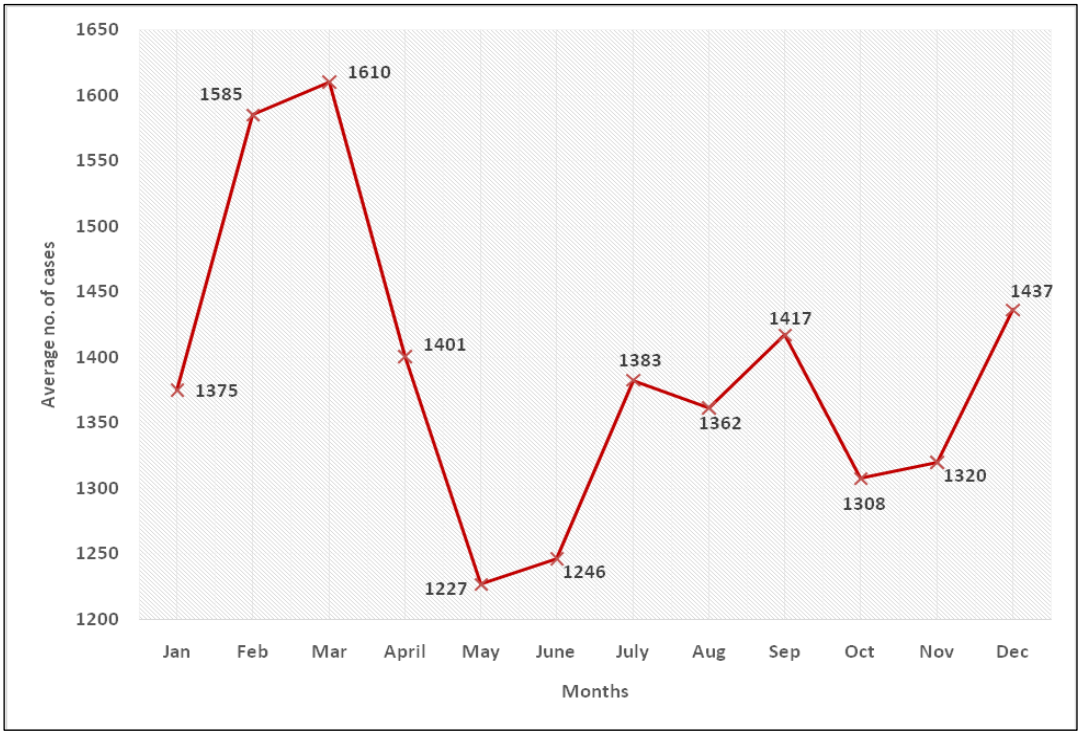

Figure 2: Month-wise average number of cases consulted and treated in OPD during 2004-2023.

Table 3: Twenty more common disease conditions treated in OPD at APH (2012-2023).

More common disease conditions treated in OPD at APH (2012-2023)	WHO Siddha Standard terminology/NAMASTE Portal/ Siddha Maruthuvam textbook	Percentage
Musculoskeletal diseases	(N=2358122; 32.01%)	
Osteoarthritis	*Azhal keelvayu* (ISMT-4.24.66)	11.85
Arthritis (rheumatism)	*Keelvayu* (ISMT-4.24.64)	7.52
Lumbar spondylosis	*Thandavayu* / *Thandagavatham* (ISMT-4.24.76)	6.31
Muscular pain	*Vathasoola*i (ISMT-4.24.50)	2.24
Cervical spondylosis	*Saganavatham* (ISMT-4.24.138)	1.72
Periarthritis	*Kumbavatham* (ISMT-4.24.126)	1.42
Rheumatoid arthritis	*Valiazhal keelvaayu* (ISMT-4.24.69)	0.95
Non-communicable	(N=927023; 12.58%)	
Diabetes mellitus	*Madhumegam* (ISMT-4.11.40)	12.58
Skin diseases	(N=752494; 10.21%)	
Eczema	*Karappan* (ISMT-4.12.73)	4.09
Psoriasis	*Kalanjagapadai* (ISMT-4.12.1)	3.53
Vitiligo	*Venpulli* (ISMT-4.12.71)/ Venpadai (BT)	1.23
Fungal infection	*Padarthamarai* (BSC1.2)	1.36
Respiratory diseases	(N=515376; 7.00%)	
Cough	*Kasam* (ISMT-4.9.1)	2.79
Complicated lower respiratory Infections	*Kanam* (TD)	1.23
Sinusitis	*Peenisam* (ISMT-4.14.18)	2.1
Bronchial asthma	*Eraippirumal* (ISMT-4.9.8)	0.85
Gastrointestinal diseases	(N=298920; 4.06%)	
Acidic peptic disease	*Gunmam* (ISMT-4.10.66)	2.23
Haemorrhoids	*Moolam* (ISMT-4.16.2)	1.83
Neurological disorders	(N=77278; 1.05%)	
Sciatica	*Vathasthambam* (ISMT-4.24.120)	1.05
Unspecified	(N=133665; 1.81%)	
Allergy	*Ovvamai*	1.81

Inpatient department

The Inpatient Department (IPD) at APH began operations in June 2005 with 20 beds (even though NIS had a capacity of 120 beds) and increased to accommodate up to 54 patients in 2006, 72 patients in 2007, 120 in 2008, 160 patients in 2011, 180 in 2013 and 200 from 2015 to till date.

Overall, the number of cases admitted at the APH hospital from June 2005 to December 2023 was 7,22,795. Among them, 10.6% were children ≤12 years, and 89.4% were adults.

The pattern resembled the OPD, where male patients were more even among children under 12 years. However, the number of children treated in IPD was significantly higher (P<0.05) than that in OPD.

Overall, patients filled an average of 91% of the beds daily before COVID-19; the maximum was 98% in 2013, but that number dropped to 10% in 2021 (due to the occupancy of COVID-19 centers).

Table 4: Ayothidoss Pandithar Hospital, IPD cases year wise cases during June 2005-Dec 2023.

Gender	Children ≤12 years	Adults> 12 years	Total
No. of males (%)	47831 (6.3)	356773 (47.2)	404604 (53.5)
No. of females (%)	33188 (4.3)	323962 (42.2)	357150 (46.5)
Total (%)	81019 (10.6)	680735 (89.4)	761754 (100.0)

Figure 3 depicts the average number of IPD cases treated per day. It began with an average of 18 patient cases in 2005, peaked at 185 in 2016, was lowered to 20 cases in 2021, and increased to 67 cases in 2022 and 107 cases in 2023.

The treatment sought at IPD indicated seasonal variation. Figure 4 depicts the monthly average number of IPD cases. The pattern is not definite. The highest number of cases were admitted in May, followed by March and April, while the lowest was in November.

The twenty more prevalent disease conditions treated at APH between 2012 and 2023 are listed in Table 5. Overall, under the classification of diseases, the top two disease conditions treated at APH in IPD during 2012-2023 were musculoskeletal diseases (22%) followed by neurological disorders (17.3%). When looking at the individual disease conditions, the more common diseases reported and treated at APH in IPD during 2012-2023 were *Thandaga Vatham* (lumbar spondylosis) (9.5%) and *Pakkavatham* (hemiplegia) (9.4%).

The Ayothidoss Pandithar Hospital has provided health care services to cases through various clinical examinations (ECG, Xray, USG, PFT) and external therapies (physio, bone setting, leech, minor ot, varmam, yoga, thokkanam, and other external therapies) and the growth of the service rendered gradually increased in a phased manner. Table 6 shows no pattern observed, either increasing or decreasing. The services were reduced during 2020-21 due to COVID-19 prevailing conditions; hence, fewer cases were tested. On average, the highest number of services (44 per day) of Varmam therapies was given to patients, followed by Thokkanam therapy (37 per day). The x-ray test was the highest number done (9 per day) for treatment in the hospital (OPD and IPD).

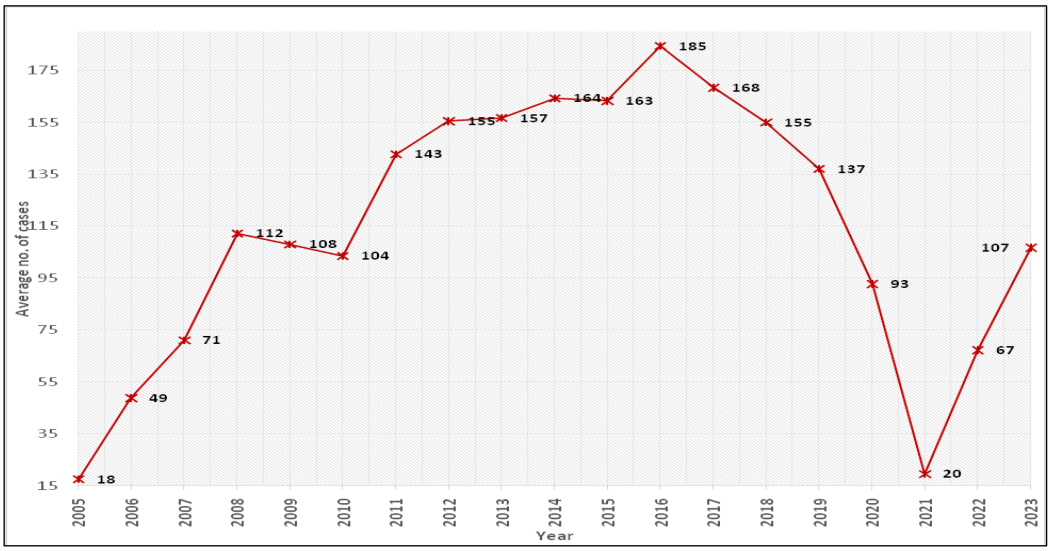

Figure 3: Year-wise average number of cases consulted and treated in IPD during 2005-2023.

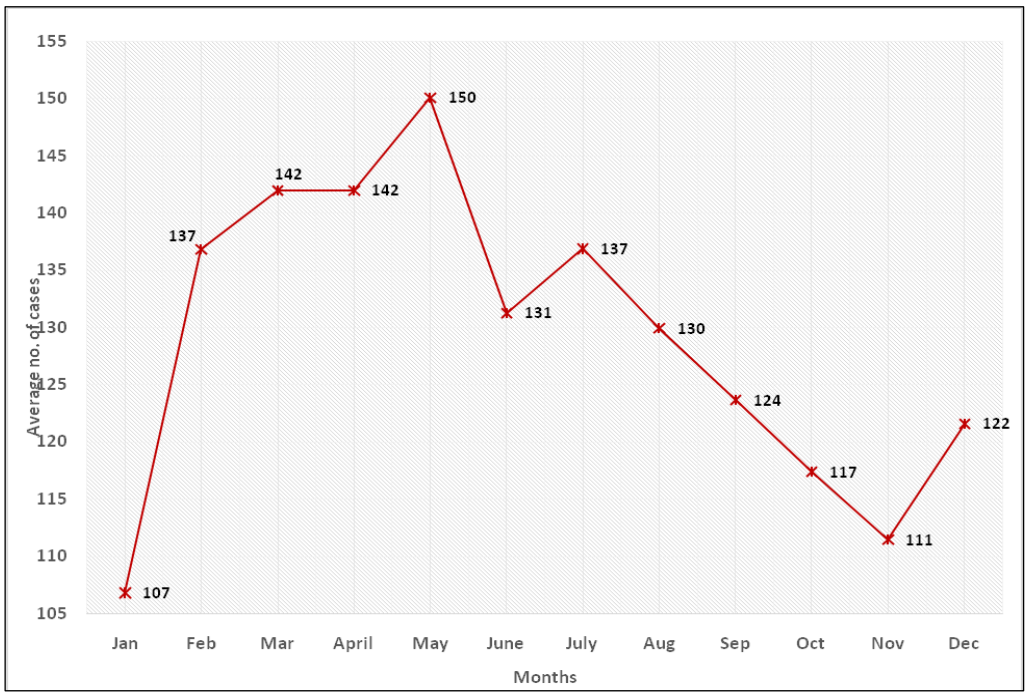

Figure 4: Month-wise average number of cases treated in IPD during 2005-2023.

Table 5: Twenty more commonly treated disease conditions in IPD at APH (2012-2023).

More common disease conditions treated in IPD at APH (2012-2023)	Who siddha standard terminology/ namaste portal/ siddha maruthuvam textbook	Percentage
Musculoskeletal diseases	(n=6187; 22.04%)	
Lumbar spondylosis	Thandavayu / thandagavatham (ISMT-4.24.76)	9.46
Osteoarthritis	Azhal keelvayu (ISMT-4.24.66)	5.16
Rheumatoid arthritis	Valiazhal keelvaayu (ISMT-4.24.69)	2.91
Cervical spondylosis	Saganavatham (ISMT-4.24.138)	1.47
Arthritis (rheumatism)	Keelvayu (ISMT-4.24.64)	1.24
Muscular pain	Vathasoolai (ISMT-4.24.50)	0.63
Periarthritis	Kumbavatham (ISMT-4.24.126)	0.54
Quadriplegia	Muttrudalvatham (ISMT-4.24.145)	0.33
Muscular dystrophy	Thasaivatham	0.30
Neurological disorders	(n=4595; 16.37%)	
Hemiplegia	Patchavatham/pakkavatham (ISMT-4.24.133)	9.39
Cerebral palsy	Sirasthambavatham (z45)	3.55
Sciatica	Vathasthambam (ISMT-4.24.120)	1.41
Paraplegia`	Arunavatham	0.88
Infantile paralysis	Balavatham	0.74
Parkinson's disease	Nadukkuvatham (ISMT-4.24.127)	0.40
Skin diseases	(n=1098; 3.91%)	
Psoriasis	Kalanjagapadai (ISMT-4.12.1)	2.69
Eczema	Karappan (ISMT-4.12.73)	1.22
Gynaecological problem	(n=495; 1.76%)	
Menorrhagia	Perumbadu (ISMT-4.11.1)	1.03
Leucorrhoea	Vellainoi (GG)	0.73
Venous diseases	(n=96; 0.34%)	
Varicose vein	Nalavibatham	0.34

Table 6: Hospital services provided to OPD and IPD (on an average per day) through diagnosis and treatment activities 2012-2023.

	Clinical examination				Minor operation theatre procedures	External therapies								
Year	**ECG**	**X-ray**	**USG**	**PFT**		**Physio**	**Bone setting therapy**	**Varmam**	**Yoga therapy**	**Leech therapy**	**Thokkanam therapy**	**Suttigai**	**Karnool**	**Others**
2012	6	10	-	-	1	-	-	51	4	-	41	0	-	17
2013	5	10	-	-	2	25	-	46	3	1	53	2	-	19
2014	5	12	-	-	15	25	0	28	3	1	69	2	-	22
2015	4	10	-	-	26	20	3	23	6	1	58	0	-	22
2016	4	14	-	-	28	25	8	38	12	1	55	0	3	2
2017	6	13	-	-	22	39	15	58	17	1	46	0	8	14
2018	5	10	5	1	21	43	17	82	29	1	40	0	12	13
2019	4	9	7	1	17	37	17	77	31	1	37	1	21	7
2020	1	2	2	1	4	7	3	18	7	1	5	0	7	3
2021	2	1	4	1	2	2	1	5	1	1	0	0	18	4
2022	4	5	7	1	9	19	4	43	8	1	4	1	17	17
2023	7	10	8	1	18	31	5	60	17	1	31	1	20	15
Average per day	4	9	6	1	14	25	7	44	11	1	37	1	13	13

USG-Ultrasonography; PFT- Pulmonary Function Test; Physio-Physiotherapy
Others include Pugai or Fumigation, Pattru or medical pack application, Ottradam or Fomentation, etc.
Treatment services were initiated in a phased manner; hence, data are shown as per availability

Table 7: Hospital services provided to OPD and IPD patients (on an average per day) through laboratory investigations 2012-2023.

Year	Microbiology tests	Biochemistry test	Pathology test
2012	37	476	481
2013	44	425	473
2014	45	563	706
2015	51	532	709
2016	54	672	810
2017	58	707	811
2018	59	653	730
2019	56	593	579
2020	8	170	182
2021	9	94	121
2022	11	90	131
2023	18	218	225
Average per day	38	433	497

Pathological tests were used in most investigations from 2012 to 2023. The average number of investigations done per day through pathological laboratory investigations was 497, biochemistry 433, and microbiology 38, as shown in Table 7.

DISCUSSION

Understanding the trends of the utilization of Siddha treatment in India has been a crucial need for greater emphasis on streamlining and blending with the existing mainstream of medical systems. According to the current study, patients increasingly seek Siddha treatment at the Ayothidoss Pandithar Hospital. The hospital statistics showed that the average number of cases per day at OPD steadily increased from 67 in 2004 to 2176 in 2018. In 2021, it declined to 891 due to COVID-19 pandemic constraints and slowly regaining its flow. The statistics showed that even during the COVID pandemic, many patients utilized the facility at APH. The OPD at forenoon and IPD (with their 200-bed strength round the clock) function on all 365 days of the year. Overall, considering all years, on average, the number of cases treated per day at OPD was 1484; in IPD, it was 122. The new-to-old case ratio was one to four at OPD. i.e., for every 5 cases that sought treatment at OPD, 4 cases are revisiting cases seeking treatment. Studies have shown that revisits to a healthcare facility correlate more closely with service quality, patient satisfaction, and easy accessibility.[11,12] More men than women were seeking treatment at APH. They were 2% higher in OPD, whereas in IPD, it was 7% higher. In the OPD, the highest numbers of cases were treated in March, followed by December, and the lowest in May. Considering IPD, the highest was in May (the patient opted for IPD rather than OPD for treatment), followed by March, and the lowest was in November. This may be due to seasonal variations and vacations; generally, March is when temperatures in India begin to climb before the blazing heat of summer in May.

The three more common diseases treated at APH OPD during 2012-2023 were *Madhumegam* (diabetes mellitus) (12.6%), *Azhal Keelvayu* (osteoarthritis) (11.9%), and *Keelvayu* (arthritis) (7.5%), whereas in IPD, it was *Thandavayu/thandagavatham* (lumbar spondylosis) (9.5%), *Patchavatham/pakkavatham* (hemiplegia) (9.4%), and (Azhal keelvayu) osteoarthritis (5.2%). According to the system-wise classification of diseases, Musculo-skeletal diseases were majorly reported in OPD (32%) and IPD (22.4%). Patients at APH not only seek Siddha treatment for illnesses related to limited specific disease conditions but also seek a wide range of disease conditions. There were over 1500 disease/multiple conditions for which the treatment was sought at APH.

The hospital services were provided more by investigation through X-ray followed by ECG, and through external therapy treatment was Varmam and Thokkanam. It was evident from the study that patients seek Siddha treatment, preferably for chronic ailments and more revisits. Siddha treatment was preferred for musculoskeletal disorders such as Osteoarthritis, as evidenced by the use of medical imaging services such as X-rays. ECG is commonly used for screening purposes, such as primary care and rapid referral. It is also used to determine whether the illness is worsening and to monitor the therapeutic effects of the treatment.

The patient treated at NIS has undergone more pathology and biochemical investigations than microbiological investigations. For every 100 cases seeking treatment, including OPD and IPD, 26 pathological and 21 biochemical diagnostic procedures were carried out on average per day.

The COVID-19 outbreak in early 2020 profoundly impacted hospital outpatient and inpatient visits. Even as of Dec 2023, monthly outpatient visits have not returned to pre-COVID-19 outbreak levels. Nearly 58%, 63%, 43%, and 30% have not turned up for health-seeking

treatment at APH in the years 2020, 2021, 2022, and 2023 as per the ARIMA model (unpublished result).

This study has some limitations. The data analysis was based on collating data from different sources, such as hospital records and annual reports, and the data generated by the institute-developed software and A-HMIS. Also, the APH developed treatment facilities and hospital services in a phased manner and need-based. Hence, the data was available for varying periods, and the analysis was performed depending on availability. The inflow of patients and the statistics presented may be lower due to the COVID-19 pandemic's temporary closure of IPD, which also served as a COVID care center, and closures brought on by heavy downpours in November and December 2015. Also, the data does not include COVID cases or cases from APH COVID centers.

CONCLUSION

The Ayothidoss Pandithar Hospital at NIS has treated nearly one crore patient cases. It is evident from the data that the number of patients seeking treatment has been increasing over the years. The present study of morbidity profiling of patients highlights the patient's inclination for alternate Medicine of Siddha and rapid growth over the years.

The long-term morbidity profile of Siddha medicine-treated cases at APH will be useful for early intervention and timely management of disease conditions, which would also help to develop treatment planning to improve a patient's health and quality of life. The metadata seeks to generate evidence and could serve as a baseline for future assessments. The disease caseload can assist public health planners in planning healthcare services and implementing effective disease prevention programs. It would also improve the existing healthcare system, policy formulation, and day-to-day decision-making about priority disease conditions and direct the resources and drug procurements in Siddha treatment.

In summary, patient data generated at APH would enhance the National Health Policy (NHP) objective of strengthening and prioritizing the importance of health services, disease prevention, and promotion of good health and creating guidelines for high-quality care. Moreover, it would help improve human resource development, health infrastructure, and availability of free drugs, diagnostics, and basic medical services in the hospital. It would move towards the goal of affordable healthcare for all in India through significant progress made in the healthcare sector through NHP interventions.

Recommendations

Analyzing APH data provides a rough sketch of medical operations such as drug procurement and patient management, and it identifies the current additional requirements of specializations in Siddha as well as at APH. In line with building the capacity of AYUSH services universally, the National AYUSH Mission also needs to plan to strengthen the data management system. The digitization of health services would result in shorter patient wait times, more time for clinicians, and ease of referring at any time, adding to more research activities. AYUSH's widely used software, A-HIMIS, must be updated with suitable patient-treatment linkage, laboratory investigations, external treatment therapies, follow-up information, and patient satisfaction data. Additionally, Mera Aspataal, an initiative by the Government of India to capture patient feedback, would be a valuable addition. Furthermore, these data should be collected under one umbrella of "AYUSH Data Bank," which would allow easy access and better utility for researchers and move towards the system of Medicine.

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