HEALTH AND FAMILY WELFARE DEPARTMENT

2.2 Performance Audit on Provision of Health Care Services and Medical Education through Indian Systems of Medicine

Executive Summary

The policy of the Government is to provide holistic health care by bringing Indian Systems of Medicine (ISM) into the mainstream. Government seeks to achieve its objectives by expanding the existing network of ISM institutions, improving the quality of medical education, etc. The present Performance Audit revealed near absence of a system for management of project funds provided by the Central and the State Governments, chronic shortage of physical and human infrastructure in medical institutions and lack of efforts to further research and development in ISM.

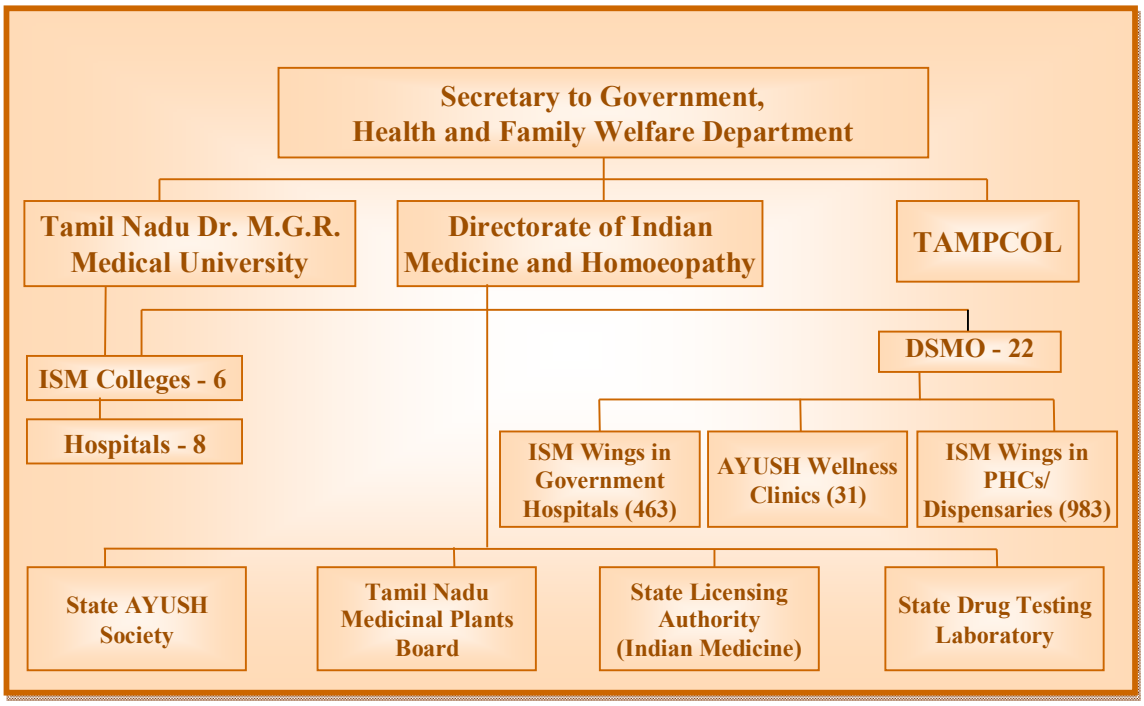
- ***Delays in procurement of equipment resulted in huge sums lying in the bank accounts of Tamil Nadu Medicinal Plant Farms and Herbal Medicine Corporation Ltd., (TAMPCOL) and State AYUSH Society. The Department parked unutilised funds with TAMPCOL.***
- ***The shortage of manpower across various posts ranged from 10 to 38 per cent in regular ISM wings, 48 per cent in ISM wings created under National Rural Health Mission and up to 100 per cent in ISM wings created under AYUSH.***
- ***Out of 297 ISM wings in the sampled districts, 31 stopped functioning and 25 functioned for four days or less per week due to shortage of medical personnel.***
- ***TAMPCOL, the PSU which manufactures and supplies medicines to ISM wings supplied only 47 and 50 per cent of the total quantity of medicines indented by the hospitals/wings during 2016-17 and 2017-18 respectively due to inadequate provision of funds and short production. No medicines were supplied to Unani wings during 2016-17.***
- ***During 2013-18, 82 drugs found to be 'Not of Standard Quality' could not be frozen or recalled immediately from distribution due to delay in drug testing on account of shortage of staff in drug testing laboratory.***
- ***Ayurveda, Unani and Homoeopathy colleges of the Government did not offer Post Graduate courses, hampering expansion of the reach of ISM.***
- ***The Research and Development wing sanctioned by the Government in 2013 at a cost of ₹ 12 crore did not start functioning even as of August 2018 and the assets created were lying idle due to lack of coordinated action in procuring equipment and recruiting staff.***

2.2.1 Introduction

Indian Systems of Medicine (ISM) are an integral part of the health care delivery system in India. It includes Siddha, Ayurveda, Yoga & Naturopathy and Unani. Homoeopathy is also promoted along with ISM. Siddha, being the system native to Tamil Nadu, claims higher patronage among the five systems. They serve as alternatives to the allopathic medical system. In order to look after all matters connected with ISM and to develop them fully, the Government of Tamil Nadu (GoTN) established (May 1970) the Directorate of Indian Medicine and Homoeopathy (DIMH), under the administrative control of the Health and Family Welfare Department. Both the Central and State Governments encourage ISM. The State has six ISM colleges, eight ISM hospitals and 1,477 ISM wings co-located in Allopathic hospitals, dispensaries and Primary Health Centres (PHCs). Government of India (GoI) provides funds under National Rural Health Mission (NRHM) for 475 ISM wings designated as AYUSH clinics and another 31 ISM wings, designated as AYUSH Wellness Centres under National AYUSH Mission (NAM).

2.2.2 Organisational structure

The ISM institutions of the State are organised as under:



TAMPCOL - Tamil Nadu Medicinal Plant Farms & Herbal Medicine Corporation Limited
DSMO - District Siddha Medical Officer

2.2.3 Audit objectives

The objectives of the audit were to assess whether:

- the adequacy and utilisation of funds to meet the normative requirements of physical and human infrastructure;

- the availability of physical and human infrastructure for provision of health care services and education;
- whether ISM hospitals and dispensaries have put in place an efficient system for delivery of medical services; and
- whether ISM medical colleges imparted quality education and leveraged the research and development activities for revival advancement in ISM health care.

2.2.4 Audit criteria

The audit findings were benchmarked against the following sources:

- The Indian Medicine Central Council Act, 1970;
- The Homoeopathy Central Council Act, 1973;
- Affiliation Rules of Tamil Nadu Dr. M.G.R. Medical University, Chennai;
- National and State Policies on Indian Systems of Medicine and Homoeopathy;
- National AYUSH Mission Guidelines;
- Guidelines issued by the National Mission for Manuscripts;
- The Drugs and Cosmetics Act, 1940 and Rules, 1945;
- Operational Guidelines of Central Sector Scheme for Conservation, Development and sustainable management of Medicinal Plants;
- Tamil Nadu Medical Code and orders issued by GoTN;
- The Bio Medical Waste Management Rules, 2016;
- Codes and manuals and orders/guidelines of GoTN; and
- Operational Guidelines for Financial Management, NRHM.

2.2.5 Scope and Methodology

The Performance Audit covered the activities during 2013-18. Audit sampled one college from each system of medicines along with their attached hospitals. Six[35] out of twenty two ISM districts and 100 out of 1,485 ISM units co-located in Government Hospitals (GH) (47) and PHCs (53) were randomly selected using a sampling software. The list of sampled units is given in **Appendix 2.7**. Besides, the Audit covered the Health and Family Welfare Department at the Secretariat, DIMH, State AYUSH Society[36], State Medicinal Plants Board, State Councils for Indian Systems of Medicines and Homoeopathy and TAMPCOL in respect of its role as nodal agency of DIMH for procurement of medicines, equipment, etc.

---

35 Dindigul, Erode, Thanjavur, The Nilgiris, Sivagangai and Vellore.

36 Established for implementation of centrally sponsored AYUSH Scheme.

The Audit was conducted from March to July 2018. The audit objectives and criteria adopted for assessment of performance were discussed with the Principal Secretary to Government, Health and Family Welfare Department, at the Entry Conference held on 14 May 2018. An Exit conference to discuss the audit findings was held on 10 December 2018. The audit methodology included scrutiny of records, eliciting information/views through written audit enquiries, discussions with heads of institutions, joint physical inspections and a postal survey among medical graduates to assess graduation outcome.

2.2.6 Policy and Outcome

Acknowledging the importance of ISM, GoTN *inter alia*, strives to:

(a) bring ISM into the mainstream;

(b) improve the quality of education in ISM and open new ISM medical colleges; and

(c) encourage manufacture of ISM&H drugs and promote Research and Development (R&D) activities.

Although the State has made significant strides in achieving its objectives on ISM, the following major shortfalls in the outcome are discussed in subsequent paragraphs:

(i) The number of patients treated is a measurable indicator of the outcome of inputs through various programmes/schemes on ISM. The absence of any substantial change in the number of patients treated indicated stagnancy in mainstreaming of ISM (**Paragraph 2.2.10.1**).

(ii) The outcome of the measures taken to improve the quality of ISM education was not impressive when viewed from the graduation outcome in terms of employment potential (**Paragraph 2.2.11.3)** and the shortage of physical and human infrastructure (**Paragraph**s **2.2.8** and **2.2.9)**, which have a direct bearing on the quality of education.

(iii) Similarly, more thrust would be required to improve the outcome in respect of manufacturing ISM drugs and promoting research as pointed out in **Paragraphs 2.2.10.3**, **2.2.10.4** and **2.2.11.5**.

Audit Findings

2.2.7 Financial Management

GoTN provides funds through budget for regular activities of the Department and for developmental activities. In addition, GoI also provides funds under NRHM and NAM. The funds for ISM under NRHM are released by GoI to the State Health Society, which in turn release the funds to DIMH. The funds for ISM under NAM are released by GoI to GoTN, which in turn release the same together with its share (40 *per cent*) to the State AYUSH Society, headed by DIMH.

Details of release and utilisation of funds for ISM activities during 2013-18 are given in **Table 2.23**.

Table 2.23: Release and utilisation of funds

(₹ in crore)

Year	GoTN funds		NAM funds		NRHM grant	
	Budget provision	Expenditure	Amount released	Expenditure	Amount released	Expenditure
Opening Balance					25.13	
2013-14	177.01	171.51	Nil	Nil	3.75	20.89
2014-15	218.17	204.74	Nil	Nil	9.12	9.38
2015-16	220.16	215.10	11.45	25.88	19.92	15.17
2016-17	262.55	261.82	34.43		12.79	16.91
2017-18	292.74	273.27	17.87		17.26	18.76
Interest earned on bank balance and miscellaneous receipts during 2013-18					2.84	
Total	**1,170.63**	**1,126.44**	**63.75**	**25.88**	**90.81**	**81.11**

(Source: Details furnished by DIMH and Finance Accounts)

The expenditure reported in **Table 2.23**, includes the funds provided to the nodal agency for various procurements, but not yet utilised in full. There were huge balances lying unspent under NRHM and AYUSH which are discussed in the succeeding paragraphs.

2.2.7.1 Blocking of NRHM funds in bank account

DIMH maintained a bank account for transacting funds received under the erstwhile Centrally Sponsored Scheme for AYUSH. After the launch of NRHM, DIMH started getting funds from the State Health Society, for which a separate bank account was opened in 2009.

The funds kept in the bank account meant for the erstwhile Centrally Sponsored Scheme for AYUSH were gradually utilised till 2014-15. This account with a balance of ₹ 1.55 crore became inoperative from April 2015. As of March 2018, this account had a balance of ₹ 1.74 crore which included the unspent balance in this account as of March 2015 and the interest earned during 2015-18. DIMH did not maintain any books of accounts for this funds and there was no system of reconciliation of the bank balances with component-wise and year-wise expenditure. As a result, the components of the scheme for which these funds were received were also not known and the sum of ₹ 1.74 crore remained idle in bank account.

The State Health Society started releasing NRHM funds to DIMH from 2009. The State Health Society released (2010) ₹ 54.90 crore under NRHM to DIMH for establishment and operation of the 300 ISM wings in PHCs and hospitals. These funds were meant for various components, *viz.,* buildings, medicines, equipment, etc. As of March 2018, DIMH held a balance of ₹ 9.12 crore in the bank account, out of the sum of ₹ 54.90 crore received eight years back in 2010. The balance held included unspent balance of ₹ 2.06 crore relating to proposed construction of buildings for 17 ISM wings in PHCs, as commented in **Paragraph 2.2.8.2 (b)**, interest accruals, etc. No accounts were maintained by DIMH for these funds and reconciliations were

not carried out monthly as envisaged in NRHM's 'Operational Guidelines for Financial Management'.

Audit observed that due to lack of systematic accounting, DIMH exposed the system to the risk of fraudulent transactions. Further, blocking of Government funds in bank accounts defeated the purpose for which these funds were sanctioned.

In its reply, GoTN claimed (November 2018) that the Chartered Accountants entrusted with preparation of accounts took care of these and stated that the savings bank accounts will be reconciled and the accounts will be maintained properly in future.

2.2.7.2 Blocking of funds with TAMPCOL

In December 2013, GoTN nominated TAMPCOL as the nodal agency for procurement of drugs, equipment, etc. Funds provided in the budget by GoTN, NRHM funds received from State Health Society and AYUSH funds received from the State AYUSH Society were placed at the disposal of TAMPCOL. The details of funds transferred to TAMPCOL towards procurement of medicines, equipment, etc., actually utilised and closing balance are as given in **Table 2.24**.

Table 2.24: Funds lying idle with TAMPCOL

Year	Funds with TAMPCOL (₹ in crore)			
	Opening balance with TAMPCOL	Released by DIMH to TAMPCOL	Utilised by TAMPCOL	Closing balance with TAMPCOL
2013-14	0.90	12.14	00.93*	12.11
2014-15	12.11	32.56	23.87	20.80
2015-16	20.80	28.81	29.06	20.55
2016-17	20.55	30.13	28.30	22.38
2017-18	22.38	23.71	23.41	22.68
Total		**127.35**	**105.57**	

* Includes ₹ 0.55 crore remitted back to Government account.

(Source: Details furnished by TAMPCOL)

The major reasons for idling of funds with TAMPCOL were:

- Delay in procurement/non-procurement of equipment and non-utilisation of funds for hiring of manpower through outsourcing for a total sanctioned value of ₹ 12.56 crore, inclusive of the items commented in **paragraph 2.2.8.2 (c)**.
- Delay in procurement/non-procurement of medicines for a sanctioned value of ₹ 4.82 crore under NAM and ₹ 5.30 crore under regular budget, inclusive of items commented in **Paragraph 2.2.10.3**.

Audit observed that DIMH used the nodal agency system to park funds with TAMPCOL in order to avoid surrender at the year end. As at the end of

March 2014, 2015 and 2018, DIMH transferred various scheme funds of ₹ 3.37 crore, ₹ 2.50 crore and ₹ 11.07 crore respectively to TAMPCOL, evidently to avoid surrender of funds at the end of financial year.

2.2.7.3 Deficiencies in utilisation of National AYUSH Mission funds

Under the centrally sponsored AYUSH Mission, every year GoI earmarks funds to States and seeks proposals in the form of Project Implementation Plan (PIP). The PIP components approved by GoI are funded by GoI and GoTN in the ratio of 60:40[37] . GoI releases the funds to GoTN, which in turn provides funds through budget for implementation of the approved components. The State AYUSH Society, constituted with DIMH as the Member Secretary, coordinates implementation of the programmes under AYUSH Mission. Receipt and utilisation of AYUSH Mission funds was as detailed in **Table 2.25**.

Table 2.25: Funds lying idle with State AYUSH Society

(₹ in crore)

Year	Funds earmarked by GoI	Project approved based on PIP	GoI share sanctioned	State share sanctioned	GoI share released to GoTN	Funds with AYUSH Society)			
						Opening balance	Released by GoTN to Society	Utilised by Society	Closing balance
2013-14	NA	18.82	14.12	4.70	0	0	0	0	0
2014-15	13.84	0	0	0	0	0	0	0	0
2015-16	12.63	11.45	6.87	4.58	6.87	0	1.46	1.20	38.13
2016-17	22.10	34.43	20.66	13.77	20.66		29.97	20.00	
2017-18	25.07	35.07	21.04	14.03	21.04		32.32	4.42	

NA: Not available

(Source: Details furnished by State AYUSH Society)

Deficiencies in receipt and utilisation of AYUSH Mission funds are discussed below:

- During 2014-15,GoI earmarked ₹ 8.30 crore[38] as central assistance for AYUSH programme in the State. However, due to delay in establishment of State AYUSH Society, the State could not furnish the PIP to avail the earmarked central assistance of ₹ 8.30 crore. This had adversely impacted the expansion of AYUSH services in the State during 2014-15.
- GoI released its share of ₹ 20.66 crore and ₹ 21.04 crore towards the approved PIP of 2016-17 and 2017-18 respectively to GoTN during the respective years. GoTN, however, did not release the funds to the State AYUSH Society in time. An amount of ₹ 14.44 crore

37 The sharing pattern was 75:25 till 2013-14.

38 60 *per cent* of the earmarked annual project cost of ₹ 13.84 crore.

pertaining to 2016-17 was released only in February 2018 and ₹ 17.19 crore relating to 2017-18 was not released till July 2018. Non- release/delayed release of funds to the State AYUSH Society had resulted in non-commencement of several projects, such as (a) upgradation of ISM wings in two district hospitals, (b) imparting training to ASHA/ANM/VHN, etc., which were approved in the State Annual Action Plan (SAAP) of Tamil Nadu under NAM for 2016-17 and 2017-18 respectively. Consequently, this impacted delivery of ISM services to the patients.

The State AYUSH Society also failed to fully utilise the GoI and GoTN funds received by it due to reasons discussed below:

- NAM provides funding for State Project Managing Unit (SPMU). During the period from 2015-18, NAM released a sum of ₹ 1.07 crore towards hiring of personnel for SPMU. As the important posts sanctioned for SPMU, such as Programme Manager, Finance Manager, Accounts Manager, MIS Manager, and one post of Consultant were not filled up, only a sum of ₹ 0.14 crore was incurred on salaries till April 2018, leading to non-utilisation of NAM funds to the tune of ₹ 0.93 crore. Audit observed that the failure to strengthen the SPMU despite availability of funds contributed to the deficiencies in the AYUSH Mission activities as commented in the succeeding sub-paragraphs.

- During 2015-16, NAM approved ₹ 0.61 crore towards carrying out Information, Education and Communication (IEC) activities for Siddha, Ayurveda, Homoeopathy, Yoga & Naturopathy and Unani. DIMH utilised only ₹ 0.06 crore towards IEC activities, leading to idling of ₹ 0.55 crore. Thus, the failure of DIMH to utilise the funds had resulted in the neglect of IEC activities.

- During the year 2016-17, NAM approved ₹ 1.55 crore for public health outreach activities such as conducting health education classes through videos, PowerPoint presentation, etc. Other than releasing ₹ 0.58 crore to Electronics Corporation of Tamil Nadu Limited (ELCOT), the nodal agency for procurement of electronic items, no action was taken by the Department. As such, no outreach activities were carried out till September 2018. The balance of ₹ 0.97 crore, out of the approved budget of ₹ 1.55 crore, was kept unutilised after making advance payment to ELCOT.

In its reply, GoTN accepted (November 2018) that even though GoI released its share of NAM funds in the year 2016-17 and 2017-18, the funds could not be released to State AYUSH Society. No reason was furnished for non-release of funds to the State AYUSH Society.

2.2.8 Physical infrastructure

The Central Council of Indian Medicine (CCIM), New Delhi, created under the Indian Medicine Central Council Act, 1970, is the regulatory body to guide and develop education and medical practice in Ayurveda, Siddha and Unani. Central Council of Homeopathy (CCH), New Delhi, an autonomous body created under The Homoeopathy Central Council Act, 1973 is mandated to guide and develop education and medical practice in Homoeopathy. These bodies have framed standards stipulating minimum requirement of physical and human infrastructure for colleges and attached hospitals. Tamil Nadu Dr. M.G.R. Medical University, Chennai has issued regulations/statutes for the mandatory requirement of various physical and human infrastructures in Yoga & Naturopathy colleges. No such guidelines/norms were prescribed for ISM medical institutions co-located in Government hospitals and PHCs.

2.2.8.1 Deficiencies in physical infrastructure in ISM Colleges

CCIM and CCH undertake annual inspection of the colleges for renewal of recognition of colleges. Wherever, deficiencies were pointed out by the Inspection Team, the Principals of the colleges gave written undertakings to CCIM and CCH for providing all required infrastructure. The deficiencies, however, continued till date (June 2018) despite such undertakings, as discussed in the succeeding sub-paragraphs:

(a) Government Siddha Medical College, Chennai

(i) Among other items, CCIM stipulates a Pathology laboratory and Museum for Siddha Medical Colleges. In May 2013, GoTN accorded administrative approval for construction of an auditorium at Government Siddha Medical College (GSMC), Chennai at a cost of ₹ 75 lakh. The Public Works Department expressed (October 2016) that it would not be technically feasible to construct the proposed auditorium in the first floor of an existing building. DIMH revised (November 2016) the proposal and requested Government sanction to construct a Pathology Laboratory, Museum and class rooms, in place of the auditorium, at a cost of ₹ 1.43 crore. The matter remained under correspondence between DIMH and GoTN, but no decision was arrived at even as of June 2018. The college continued to function without CCIM mandated Pathology Laboratory and Museum, mainly due to non-furnishing of a comprehensive proposal in time by DIMH for mandatory infrastructure and abnormal administrative delays at Government level. It is pertinent to mention that the College has a Post Graduate (PG) course in Pathology and the Undergraduate (UG) course in Siddha has two papers in Pathology and a mandatory two months clinical practice in Pathology for the students. Therefore, Audit observed that the education was incomplete without the Pathology Laboratory as the mandatory practical sessions in a full fledged Pathology Laboratory was not possible.

(ii) CCIM norms stipulate provision of an Animal House in Siddha colleges for keeping laboratory animals used in teaching. In December 2013,

GoTN sanctioned ₹ 1.60 crore for construction of an Animal House at GSMC and the civil works were completed in August 2016. The facility, however, remained idle for two years (June 2018), due to the absence of required staff to commission the animal house. Audit noticed that 19 months after completion of the buildings, the Principal, GSMC sent (March 2018) a proposal for engaging a Veterinarian and three other staff on contract basis. The failure by the Principal to propose staff requirements at the initial stage of construction had resulted in absence of staff to manage the animal house. Consequently, the mandatory facility constructed at a cost of ₹ 1.60 crore remaining idle for two years and the required infrastructure was not made operational. In the absence of Animal House, the students were taken to various colleges for practicals.

(b) Government Homoeopathy Medical College, Thirumangalam

(i) Homoeopathic Repertory is a listing of symptoms and those substances that have been found to cause and cure each symptom. As per CCH norms, the Department of Repertory shall be equipped with five computers with related software packages consisting of different Repertories. In December 2013, GoTN sanctioned ₹ 50 lakh for procurement of various equipment for Government Homoeopathy Medical College (GHMC), Thirumangalam. DIMH transferred the sanctioned amount to TAMPCOL (June 2014) for procurement of equipment. The procurement was not completed as the proposal sent by the Principal, GHMC to DIMH seeking approval for procurement from the two sources identified by him was not approved. Absence of an authorised Repertory and reliance on online resources for teaching carried a risk of being unreliable.

(ii) Colorimeter, Electric Potentiser, Electric Triturator and Spectroscope were mandatory equipment under CCH norms for starting post graduate courses in Homoeopathy. Based on a plan to start three PG courses in Homoeopathy at GHMC, Madurai, TAMPCOL, the nodal agency for procurement of medicines and equipment, procured and supplied these four equipment to the College at a cost of ₹ 12.05 lakh in January 2016 by using the sum of ₹ 50 lakh sanctioned in December 2013. The equipment procured were not put into use as the procurement was not synchronised with the commencement of the proposed PG courses. Delay in commencement of the post graduate course resulted in the equipment lying unutilised.

GoTN replied (November 2018) that starting of PG courses in GHMC will be examined afresh in the present context.

2.2.8.2 Deficiencies in physical infrastructure in ISM hospitals and wings

(a) Lack of adequate buildings for ISM wings of allopathic hospitals

According to Government Order (December 1995), each district headquarters (DHQ) hospital with an ISM wing should have a 10 bedded inpatient ward and other hospitals with ISM wings should have a 5 bedded inpatient ward. Out of 19 sampled taluk and non-taluk hospitals, only eight hospitals had

inpatient (IP) services and in the remaining 11 hospitals, only outpatient services were provided, the details are given in **Appendix 2.8**. Non-availability of IP services contributed to the declining trend in treatment of inpatients in ISM units/hospitals as commented in **Paragraph 2.2.10.1**.

DIMH did not have a comprehensive plan to create inpatient facilities in these hospitals. As a result, despite Government order, ISM services with inpatient facilities were not extended to all hospitals, which defeated the objective of expanding this facility. It was further observed that even the existing IP facilities could not be continued with full strength in district headquarters hospitals in two out of the six sampled districts as discussed in the succeeding sub-paragraphs:

(i) A 16-bedded Siddha wing had been functioning in DHQ Hospital, Sivagangai since May 1998. In 2015, the allopathic wing of the hospital was shifted to the newly constructed Medical College Hospital (MCH) at Sivagangai and GH at Karaikudi was made as DHQ hospital. As the ISM wings could not be accommodated either in the newly constructed MCH or DHQ Hospital, Karaikudi for want of space, the Siddha and Homeo wings continued to operate in the erstwhile DHQ building. The inpatient wing stopped functioning after 2015 due to the dilapidated condition of the building and non-availability of diet facilities. Prior to 2015 a total of 1,149 inpatients were treated during 2012-15. The Directorate of Medical Education did not provide space at the planning stage of the new building for location of the Siddha and Homeo wings of the hospital. Though the DSMO addressed (October 2017) DIMH on this issue, DIMH did not take up this issue with the Director of Medical Education to ensure availability of required space for Siddha IP ward and the IP services continued to be adversely affected.

(ii) An ISM wing with 25-bedded IP ward was functioning from 1984 at DHQ, Dindigul. The dilapidated condition of the building necessitated shifting of the inpatient ward thrice to allopathic buildings, resulting in gradual reduction of bed strength to six as of June 2018. Due to reduction of the bed strength, the number of inpatients treated went down from 5,548 in 2005-06 to 1,636 in 2017-18. Although the issue of space constraint was experienced right from 2010-11, DSMO submitted a proposal for a new building for ISM IP ward using National AYUSH Mission funds only during 2017-18. The proposal was still under consideration of DIMH (August 2018).

GoTN replied (November 2018) that the issue of providing sufficient space for ISM wings in the type design for new DHQ and other hospital buildings was under consideration.

(b) Lack of adequate space for ISM wings of PHCs

(i) As per the type design adopted by PWD for ISM wings in PHCs, each wing was to have a space of 76 sq.m. Audit, however, observed that in 32 out of 43 sampled PHCs, the space availability was less than the prescribed norm.

As of March 2018, there were 1,806 PHCs in the State. 927 of them were having ISM wings. Audit scrutiny disclosed that under NRHM, in September 2009, GoTN accorded sanction to establish ISM wings in 300 PHCs during 2009-10 at a cost of ₹ 54.90 crore. The amount sanctioned included ₹ 33.75 crore during 2009-10 for construction of buildings for ISM wings and the balance was for equipment, staff cost and medicine. As of June 2018, construction works were not taken up in 17 PHCs due to various reasons such as non-availability of site, unfavourable soil conditions, non-receipt of tenders for hilly areas, etc. As a result, against ₹ 33.75 crore released for building works, only ₹ 31.69 crore was utilised and ₹ 2.06 crore remained with DIMH.

GoTN replied (November 2018) that buildings could not be constructed at 17 places due to various reasons and taking up construction in new places was explored, but on account of cost escalation they could not be set up. Further, GoTN stated that the central share for these places i.e., ₹ 1.63 crore, would be returned to GoI.

(ii) Similarly, two[39] out of the nine Yoga & Naturopathy Lifestyle Clinics (YNLC) sampled by Audit had less than the stipulated space of 1,500 sq. ft. As a result, at Government Thanjavur Medical College Hospital (GTMCH), Thanjavur, despite posting full complement of staff, therapeutic yoga sessions were not held for multiple patients simultaneously. Further, all equipment for physical workouts were installed in a cramped manner and hydrotherapy equipment like steam bath, etc., were not installed for more than a year for want of space. In District Headquarters Hospital, Karaikudi, the YNLC functioned from a cramped space of 252 sq. ft., wherein all the supplied equipment were stored. Two major equipment *viz*., hip bath with spinal spray and steam bath cabin with revolving stool, purchased in September 2015 and June 2017, were not being utilised from the date of procurement and other equipment like treadmill, exercise cycle etc., were kept within the consultation room itself without effective use for want of space.

(c) Deficiencies in provision and maintenance of essential equipment

Audit of 69 out of the 250 co-located Siddha, Ayurveda and Unani units in the sampled districts disclosed shortage/non-functioning of several essential equipment like treadmill, decoction vending machine, steam bath, exercise cycle, etc., as given in **Table 2.26**, the details are given in **Appendix 2.9**.

Table 2.26: Shortage/non-functioning of equipment in ISM wings in sampled units

Name of the equipment	Sampled units	No. of units without the equipment	Percentage of units without the equipment
Treadmill	69	41	*59*
Steam bath	69	31	*45*
Decoction vending machine	69	43	*62*
Exercise cycle	69	48	*70*

(Source: Data collected from ISM wings)

[39] District Headquarters Hospital, Karaikudi and YNLCs at GTMCH, Thanjavur.

Scrutiny of action taken on procurement of medical equipment and office furniture disclosed non-assessment of requirement, failure to propose the requirement of equipment by medical officers, undue delay in processing of proposals from field units and avoidable delays in procurement as discussed in succeeding paragraphs.

(i) In December 2010, GoTN accorded financial sanction for ₹ 11.25 crore for procurement of furniture and various equipment for establishment of ISM wings in 300 PHCs across the State. DIMH drew the amount, kept in bank account, and utilised only ₹ 2.06 crore towards procurement of furniture and equipment till January 2014. Consequent on nomination (December 2013) of TAMPCOL as nodal agency for procurements, DIMH transferred (January 2014) ₹ 7.50 crore of the remaining ₹ 9.19 crore to TAMPCOL along with the list of furniture. DIMH held the balance of ₹ 1.69 crore in bank account, which formed part of the balance of ₹ 9.12 crore (**Paragraph 2.2.7.1**). Over the next four years, TAMPCOL utilised ₹ 5.57 crore for procurement of part of the furniture and equipment indented by DIMH and held a balance of ₹ 1.93 crore (March 2018). TAMPCOL stated (June 2018) that additional indents for utilising the balance of ₹ 1.93 crore were received from DIMH in September 2017 and action was being taken. Delays by DIMH and TAMPCOL in procurement resulted in ISM units lacking the required equipment. Even as of June 2018, TAMPCOL had not called for tender to procure the required equipment.

(ii) In the test-checked co-located ISM units in Government hospitals and PHCs, several equipment supplied during 2009-15 were lying under disuse/ repair as given in **Table 2.27**.

Table 2.27: Non-commissioning and non-functioning of equipment

Name of the Equipment	Total number supplied	Equipment not functioning	Percentage of unserviceable/ non-functioning equipment
Treadmill	28	18	*64*
Steam bath	38	19	*50*
Decoction vending machine	26	14	*54*
Exercise cycle	21	4	*19*
Total	**113**	**55**	***49***

(Source: Data collected from ISM wings)

As seen from **Table 2.27**, nearly 50 *per cent* of the equipment supplied were found to be non-commissioned/non-functional as the medical officers concerned did not take effective action to commission several equipment for want of space and support staff and the equipment that went out of order were not rectified in time due to the absence of annual maintenance contract. The details of district-wise number of non-functioning equipment are given in **Appendix 2.9**.

(iii) Based on the indents furnished by DIMH, TAMPCOL supplied (2014 to 2017) 13 types of equipment, such as Thokkanam table, examination table, steam bath, treadmill, etc., to 12 ISM wings in PHCs of The Nilgiris District. Audit noticed that nine of these ISM wings had ceased functioning

between March 2011 and September 2013 due to non-posting of doctors. DSMO, The Nilgiris District, did not take any action to transfer the equipment to PHCs with functional ISM wings. The equipment continued to remain idle in PHCs without a functional ISM wing. The value of the equipment lying idle was ₹ 15.48 lakh as given in **Appendix 2.10**.

(d) Non-functioning of computerised system for hospital management

As per CCIM and CCH norms, the ISM Medical College Hospitals (ISM-MCHs) should maintain web-based system for maintaining the records of patients in outpatient (OP) and IP departments. However, none of the four sampled ISM-MCHs had a functional computerised system.

- Using NRHM funds, 24 computers and related networking infrastructure were procured (2015) for computerisation of Arignar Anna Government Hospital of Indian Medicine (AAGHIM), Chennai. Effective action was not taken for developing software leading to non-functioning of the computerised system for patient registration and maintenance of medical records.
- Government Unani Medical College (GUMC), Chennai engaged TAMPCOL in July 2016 for procurement of software for Hospital Work Management System. After a delay of two years, TAMPCOL procured and supplied the software in June 2018 at a cost of ₹ 0.95 lakh. The software was not put into use (August 2018) as the local area network for computers was not ready.
- In Government Ayurvedic Medical College (GAMC), Nagercoil the computers and software procured (August 2016) at a cost of ₹ 10.13 lakh was being used only for registering the patients and the database regarding medical history of the patient, medicines prescribed and issued etc., were not being maintained on the system due to lack of manpower**.**

Thus, despite provision of funds, the Principals of three ISM colleges did not upgrade the facilities to the standards mandated by respective Central Councils. The Principal of GHMC, Thirumangalam did not send any proposal in this regard.

GoTN, replied (November 2018) that possibilities of obtaining software for each ISM college under NAM funds will be explored and on getting grants, software available in the market will be utilised.

2.2.9 Human infrastructure

CCIM and CCH had laid the norms for provision of manpower in ISM medical colleges and attached teaching hospitals. DIMH and GoTN have set standards for provision of manpower in co-located ISM units. Audit scrutiny of action taken towards meeting the set standards disclosed several deficiencies as discussed in the succeeding paragraphs.

2.2.9.1 Shortage of manpower in ISM Medical Colleges and attached Teaching Hospitals

Shortage of teaching staff in the sampled medical colleges with reference to CCIM/CCH norms was as given in **Table 2.28**.

Table 2.28: Shortage of teaching staff

Sl. No.	Medical College	Requirement as per norms	Actual	Shortage	Shortage (Percentage)
1	GHMC, Thirumangalam	32	23	9	*28*
2	GSMC, Chennai	50	69	Nil	-
3	GY&NMC,** Chennai	68	13	55	*81*
4	GUMC, Chennai	30	29	1	*3.3*
5	GAMC, Nagercoil	40*	27	13	*32.5*

* Including 10 Modern/Allopathy teaching staff.

** Government Yoga and Naturopathy Medical College.

(Source: Details furnished by respective colleges)

The shortage of teaching staff in medical colleges was most marked in GY&NMC, Chennai (81 *per cent*), GAMC, Nagercoil (33 *per cent*) and GHMC, Thirumangalam (28 *per cent*). Audit observed that:

- GY&NMC, Chennai started functioning from 2000. As of March 2018, 55 out of the 68 required post of teaching staff were vacant. Timely action was not taken for filling up the vacancies. The recruitment rules, for the entry level post of Assistant Lecturer, was approved only in January 2015. Even after approval of the Rules, it took two more years for DIMH to request Tamil Nadu Medical Recruitment Board to start the recruitment process for Assistant Lecturers. The recruitment process was not completed as of June 2018. Thus, delay in framing Recruitment Rules and lack of committed action to fill up the posts had resulted in the college functioning with huge vacancies.

- In an ideal situation, existing vacancies and vacancies arising over a period of time should be assessed and recruitment process initiated periodically. Besides, during 2013-18, recruitment processes for 401 posts were held up due to judicial interventions, non-framing of recruitment rules, etc. All these contributed to the vacancies in these medical colleges with possible repercussions on the quality of education.

GoTN replied (November 2018) that all possible efforts were being taken for filling up of the vacancies in order to fulfill the norms of regulatory/affiliating bodies.

2.2.9.2 Temporary diversion of staff to fulfill CCH and CCIM norms

CCH/CCIM norms require availability of prescribed manpower for continued recognition of ISM medical colleges. In GHMC, Thirumangalam and GAMC, Nagercoil, in order to fulfil the norms during CCH/CCIM inspection, DIMH

temporarily posted staff from other hospitals on deputation basis for a short period of one day to three weeks.

In respect of GHMC, Thirumangalam, DIMH resorted to the temporary shifting of staff from ISM hospital side for periods ranging from one day to three weeks during CCH inspection. In respect of GAMC, Nagercoil, modern medical staff of the Government Allopathic Medical College Hospital were drawn for part-time work on temporary basis. DIMH sent a proposal to GoTN in June 2017 for hiring part-time teaching staff (modern medicine) from the allopathic side on deputation basis. The proposal was under the consideration of GoTN as of June 2018.

Temporarily diverting of part-time teachers from other institutions to fulfil Central Council norms during inspection helped the colleges and institutions from being disqualified by the Central Council by hiding the vacancies.

GoTN replied (November 2018) that DIMH's proposal for the creation of 10 posts of modern medicine doctors to work on part-time basis was under consideration.

2.2.9.3 Deficiencies in human infrastructure for ISM hospitals and wings

The shortage of manpower across various posts ranged from 10 to 38 *per cent* in regular ISM wings, 48 *per cent* in ISM wings created under NRHM scheme and 100 *per cent* in ISM wings created under AYUSH (**Appendix 2.11)**.

Pharmacists: Among paramedical staff, Pharmacist vacancies ranged from 22 *per cent* (Siddha Pharmacist) to 72 *per cent* (Ayurveda Pharmacist). DIMH was in correspondence with GoTN and Medical Recruitment Board for filling up these posts right from 2007. Recruitment was still pending (July 2018).

AYUSH Consultants: Under NRHM, GoTN approved (September 2009 and December 2010) hiring 475 AYUSH Consultants for PHCs on contract basis with hiring charges of ₹ 1,000 per session of six hours per day. DIMH issued (September 2016) a recruitment notice for filling up 99 posts. However, acting on a case filed by persons aggrieved by the selection process, the Hon'ble Madras High Court stayed (November 2016) the recruitment process. DIMH had not filed any counter petition before the Court to vacate the stay. The stay was vacated (February 2018) only in respect of recruitment of Homoeopathy Consultant based on a petition filed by aggrieved candidates. As of July 2018, no recruitment was done.

Dispenser, Therapeutic Assistant and MPW: GoTN permitted DIMH (September 2009 and December 2010) to hire 424 AYUSH Dispensers, 71 Therapeutic Assistants and 475 Multi-Purpose Workers (MPW) on contract basis for ISM wings under NRHM scheme. The recruitment was carried out (2009 and 2011) on Employment Exchange seniority basis. Vacancies arising due to resignation/termination of these contract staff were not filled up due to non-issue of modalities for recruitment in the subsequent years, leading to

68, 94 and 46 *per cent* of the posts of Dispenser, Therapeutic Assistant and MPW respectively lying vacant as of August 2018.

2.2.9.4 Non-functioning and partial functioning of ISM wings

In the six sampled districts, 31 out of the 297 ISM units stopped functioning between 2009 and 2017 due to shortage of doctors (**Appendix 2.12**). Further, the existing doctors were made in charge of more than one ISM Unit due to shortage of ISM doctors. In view of this diversion of doctors, the availability of doctors in ISM units got reduced to the range of two to four days as against six days per week as detailed in the **Table 2.29**.

Table 2.29: Partial functioning of ISM wings

District	Availability of doctors		Total number of Units functioning partially
	Units working 2 days per week	Units working 3 to 4 days per week	
Dindigul	2	1	**3**
Sivagangai	1	0	**1**
Thanjavur	2	6	**8**
The Nilgiris	5	5	**10**
Vellore	3	0	**3**
Total	**13**	**12**	**25**

(Source: Details furnished by respective ISM wings)

Non-functioning and partial functioning of ISM wings resulted in curtailment of services to needy people.

2.2.10 Medical care through ISM hospitals and wings

2.2.10.1 Performance of ISM hospitals/wings

The details of medical care extended by ISM medical institutions during 2013 to 2018 are as given in **Table 2.30**.

Table 2.30: Inpatients and outpatients treated in ISM hospitals and wings

Year	IP/OP	Siddha	Ayurveda	Unani	Homoeo	Y&N	Total
2013*	OP	2,59,81,919	16,23,834	4,08,040	22,86,531	6,02,073	**3,09,02,397**
	IP	2,28,781	36,420	14,050	19,761	0	**2,99,012**
	Total	**2,62,10,700**	**16,60,254**	**4,22,090**	**23,06,292**	**6,02,073**	**3,12,01,409**
2014*	OP	2,66,28,167	17,30,393	4,57,457	6,96,534	22,28,813	**3,17,41,364**
	IP	2,16,803	40,779	10,994	15,246	0	**2,83,822**
	Total	**2,68,44,970**	**17,71,172**	**4,68,451**	**7,11,780**	**22,28,813**	**3,20,25,186**
2015-16	OP	2,74,34,621	18,49,742	6,33,840	22,93,760	19,65,251	**3,41,77,214**
	IP	1,81,133	34,895	15,964	11,396	0	**2,43,388**
	Total	**2,76,15,754**	**18,84,637**	**6,49,804**	**23,05,156**	**19,65,251**	**3,44,20,602**

Year	IP/OP	Siddha	Ayurveda	Unani	Homoeo	Y&N	Total
2016-17	OP	2,81,42,899	20,08,905	7,68,385	25,05,386	24,14,410	**3,58,39,985**
	IP	1,91,589	46,938	16,885	18,179	8,156	**2,81,747**
	Total	**2,83,34,488**	**20,55,843**	**7,85,270**	**25,23,565**	**24,22,566**	**3,61,21,732**
2017-18	OP	2,83,06,427	20,16,471	8,06,228	25,72,081	28,72,349	**3,65,73,556**
	IP	2,09,447	50,191	17,023	17,570	17,575	**3,11,806**
	Total	**2,85,15,874**	**20,66,662**	**8,23,251**	**25,89,651**	**28,89,924**	**3,68,85,362**

* Calendar year

(Source: Details furnished by DIMH)

As could be seen from **Table 2.30**, the outpatients availing medical treatment continued to increase. However, the number of inpatients treated came down sharply from 2.99 lakh in 2013 to 2.43 lakh in 2015-16, a decrease of 19 *per cent*, but registration increased in the subsequent years. The IP strength of the more popular Siddha wing also came down from 2.28 lakh in 2013 to 2.09 lakh in 2017-18. The decrease could be attributed to non-availability of services, non-functioning of IP wards, etc., due to shortage of physical and human infrastructure as commented in **Paragraph 2.2.8**.

2.2.10.2 Deficiencies in rendering medical care

(a) X-ray services

As per the CCIM norms, ISM hospitals attached to an ISM medical college should have a radiology section with X-ray machines and allied accessories. Audit observed hindrance to medical care due to non-functioning of X-ray units.

- In GAMC, Nagercoil, Radiology section was not functioning as the post of Radiographer and Dark Room Attendant were not filled up. As a result, the X-Ray machines and allied accessories purchased between January 2016 and March 2016 at a cost of ₹ 5.90 lakh were unutilised till date (June 2018) and patients were forced to avail the facilities from Kanyakumari Government Allopathy Medical College Hospital, which is at a distance of about 5 kms and thus, the ISM patients are put into hardships. Audit noticed that the procurement of X-ray unit was not synchronised with posting of required staff. The Principal, GAMC, Nagercoil periodically requested DIMH to post X-ray technician and Radiographer sanctioned by GoTN in December 2015, but no action was taken (June 2018).

- As per Atomic Energy (Radiation Protection) Rule, 2004, the approval of Atomic Energy Regulatory Board (AERB) is mandatory for operation of X-ray units in hospitals. GHMC, Thirumangalam and the attached MCH is equipped with an X-ray machine, installed in March1997 at a cost of ₹ 4.25 lakh. The X-ray unit was functioning without the mandatory approval of AERB right from

the date of installation. The Principal, GHMC, Thirumangalam replied that with a view to obtain AERB approval, a proposal was being submitted for a new X-ray room fulfilling AERB norms. In the absence of AERB certification, Audit could not derive assurance, that the safety of the operator and 1,596 patients who underwent diagnosis in this unit, were ensured.

- X-ray services were not functional in AAGHIM, Chennai from March 2017 to May 2018 due to non-filling up of the post of Radiologist and non-supply of X-ray film.

(b) Curtailment of services

(i) Thokkanam/Panchakarma services (medicinal oil massages) are essential part of Siddha/Ayurvedic treatment methods. Paramedical staff (Masseur) render these services to the patients. Masseurs to render these services were not available in 63 of the 64 sampled Siddha/Ayurveda wings.

It was noticed that in 61 of the above ISM Wings, posts of Masseur were not sanctioned and in two ISM Wings, the sanctioned posts were not filled up. In the absence of Masseur, the doctors themselves claimed to administer the treatment. Audit observed that the number of patients treated per doctor was very high making it impractical for the doctors to spare time for rendering Thokkanam/Panchakarma treatment, which is generally rendered by paramedics. In GAMC, Nagercoil, shortage of Masseur had resulted in stoppage of Panchakarma treatment to outpatients.

(ii) As per CCIM norms, Ayurveda Medical College Hospital should have a Physiotherapy unit with one physiotherapist. In GAMC, Nagercoil, physiotherapy services were not provided from 2009 to till date (June 2018) due to non-availability of physiotherapist.

(iii) The treatment regimen of ISM involves strict adherence to prescribed diet. According to a proposal submitted (May 2014) by the Medical Superintendent, AAGHIM, adherence to proper diet was part of the treatment process in ISM. As the standard diet being supplied as per TN medical code was devised for allopathic patients, it was not considered suitable for ISM patients. Therefore, the Medical Superintendent, AAGHIM constituted (March 2014) a Committee and based on the recommendation (June 2014) of the Committee, a proposal for modified improved diet, which included different porridges suitable for ISM, was sent to DIMH in June 2014. DIMH approved (September 2014) the modified improved diet with a condition that the expenditure on the modified diet should be incurred within the budget allotment. The Medical Superintendent, AAGHIM replied (April 2018) to Audit that due to insufficient budget allotment, the modified improved diet could not be provided to patients till date (June 2018) and only the standard diet was continued to the patients.

2.2.10.3 Deficiencies in procurement and supply of medicines

Medicine requirements of ISM hospitals are met primarily through TAMPCOL. The Pharmacy attached to AAGHIM, Chennai is also a supplier. TAMPCOL supplies its own Siddha, Ayurveda and Unani products and also procures from market through tender system and supplies to ISM institutions. Regarding Homoeopathy medicines, as TAMPCOL has no in-house production, the entire requirement is procured from the market through tender system. The Pharmacy at AAGHIM manufactures Siddha and Ayurveda medicines in limited quantity for hospital consumption. It also manufactures Unani medicines, which are supplied to other Unani units as well. Lapses noticed in procurement and supply of medicines manufactured by TAMPCOL as well as the medicines procured by TAMPCOL from market (outsourced medicines) are discussed in the succeeding paragraphs.

Medicine requirements of ISM units are consolidated by DSMOs and sent to TAMPCOL. Scrutiny of medicine indents and actual supply of medicines, which were to be manufactured and supplied by TAMPCOL disclosed failure of TAMPCOL in supplying the indented quantity during 2016-18 as given in **Table 2.31**.

Table 2.31: Details of medicine supplied by TAMPCOL (₹ in crore)

Year	Value of Indent	Supplied by TAMPCOL
2016-17	25.88	12.14 (47 *per cent*)
2017-18	21.90	11.05 (50 *per cent*)

(Source: Details furnished by TAMPCOL)

The **Table 2.31** showed that TAMPCOL was unable to supply the indented quantity as manufacturing plan was not based on the indent received from field units. The General Manager, TAMPCOL stated (September 2018) that sufficient funds were not provided to meet the indents. DIMH, however, did not take effective action to improve medicine supply by TAMPCOL.

During 2016-17, DIMH transferred ₹ 9.11 crore from regular budget (₹ 2 crore) and NRHM funds (₹ 7.11 crore) to TAMPCOL for procurement of outsourced medicines. TAMPCOL floated (November 2016) open tenders for the purchase of Siddha, Ayurveda and Homoeopathy medicines for regular wings as well as for NRHM wings. Rates for procurement of medicines were also finalised. However, it was decided (March 2017) by TAMPCOL to procure only Homoeopathic medicines and the tender in respect of Siddha and Ayurveda medicines were deferred without any specific reason. In respect of Unani medicines, departing from the usual procedure of sourcing medicine from TAMPCOL, DIMH decided to manufacture and supply the medicines through the pharmacy attached to AAGHIM.

As a consequence of non-procurement of outsourced medicines by TAMPCOL during 2016-17, Siddha and Ayurveda wings received only limited stock of TAMPCOL's own manufactured medicines. Outsourced medicines were not supplied. Unani wings of hospitals/PHCs across the State

did not receive any medicines from TAMPCOL during 2016-17. Audit noticed that the sampled Unani wings at PHC, Amoor was running without any medicines for 11 months from July 2017 to May 2018, whereas other sampled Unani wings receiving limited stock from AAGHIM during the year. The Unani Doctor provided only consultation. Medicines were not issued to about 90 patients who attended the Unani unit every day. This indicated disruptions in medicine indenting system.

The failure of TAMPCOL and DIMH in procuring required medicines severely impacted the quality of services as the Unani doctors could only provide consultations.

The Homoeopathic stream also faced shortage of medicines; shortage in GHMCH, Thirumangalam was 84 and 96 *per cent* of the indented medicines during 2014-15 and 2015-16 respectively, despite availability of budget allotment.

GoTN replied (November 2018) that the demands/indents submitted by DSMOs could not always be honoured in full, due to budgetary constraints. TAMPCOL was forced to downsize the indents to ensure fair distribution of drugs to all ISM wings. The reply did not address the concern raised on the shortage of medicines.

2.2.10.4 Functioning of Drug Testing Laboratory

GoTN notified (November 2007) DSMOs as Drug Inspectors (DI) under the Drugs and Cosmetics Act, 1940 and Rules, 1945. DSMOs lift drug samples from manufacturers and retailers and send to the Drug Testing Laboratory. A Drug Testing Laboratory (Indian Medicine), conferred with statutory status, is functioning at AAGHIM Complex to test the quality of statutory samples lifted and sent by the DSMOs.

The Laboratory was to ensure the quality of drugs in terms of identity, purity and strength as per Siddha, Ayurveda and Unani Pharmacopoeias.

Audit noticed shortfall in testing the samples with reference to the targets set by DIMH as given in **Table 2.32** and the details of which are given in **Appendix 2.13**.

Table 2.32: Shortfall in drug testing

Year	No. of drug Inspectors	Drug sample Target	Sample drawn for testing	Shortfall
2013-14	23	966	783	183
2014-15	23	1,449	1,376	73
2015-16	23	2,208	1,800	408
2016-17	23	2,208	1,806	402
2017-18	23	2,208	1,906	302

(Source: Details furnished by Drug testing laboratory)

As per Section 23 of the Act, whenever the Drug Inspector lifts any sample of a drug, he/she shall tender the fair price thereof. Drug Inspectors of two test-checked districts (Vellore and Sivagangai) stated that the shortfall in achievement of target was due to non-availability of funds for paying the cost

of the samples to be lifted by them. Despite fixing the targets, DIMH failed to monitor the achievement and no action was taken to facilitate achievement of targets by providing required facilities/funds.

Delay in issue of drug analytical report

Timely testing of drug samples is necessary to freeze spurious drugs from circulation. Audit noticed that there was a delay of six months to one year in testing and issue of drug analysis report by the Drug Testing Laboratory. During the period 2013-18, 372 out of 6,702 samples tested, were found to be 'Not of Standard Quality (NSQ)'. Audit noticed that out of which, 82 drug analysis reports were issued with a marked delay of six months to one year. Due to delay in issue of drug analysis reports, the DI could not freeze or recall the NSQ drugs from the market immediately.

In reply, it was stated that the delay in issue of drug analysis report was due to shortage of manpower in the Drug Testing Laboratory. Both the sanctioned posts of Scientific Officer of the Laboratory were vacant from June 2013 onwards and the laboratory functioned only with the four sanctioned posts of Assistant Scientific Officers. Further, the proposal (April 2017) of the Government analyst of the Laboratory to DIMH for sanction of 10 additional posts of Scientific Officers to "complete the analysis and report in time" was not agreed to by DIMH.

Provision of adequate funds for lifting samples and adequate staff for the laboratory, are critical requirements for weeding out spurious drugs.

2.2.10.5 Non-obtaining of NABH accreditation

National Accreditation Board for Hospitals and Healthcare (NABH), New Delhi, provides accreditation to hospitals. Accreditation helps to improve the quality of health care services by benchmarking with the best in the field.

In order to obtain NABH accreditation for AAGHIM, Chennai, based on the proposals of DIMH, GoTN sanctioned (October 2013) ₹ 10 crore towards one new block of building, roads, etc., (₹ 7 crore), additional manpower (₹ 1.50 crore), machinery and equipment (₹ 1 crore), consultancy and others (₹ 0.50 crore). Using ₹ 7 crore sanctioned for building and other related infrastructure, during 2014-16, a three storey building was completed and major improvements were carried out for the sewage system. Out of ₹ 1 crore sanctioned for equipment, one boiler for the hospital pharmacy and other equipment were procured (2014-16) at a cost of ₹ 82.74 lakh and the balance amount remained idle with TAMPCOL (July 2018). Audit noticed that:

- Despite completing the building in 2016, only the ground floor was put to use as of July 2018. The proposed IP wards in first and second floors were not commissioned till July 2018. Audit observed that none of the 113 posts proposed under the upgradation project were sanctioned as GoTN considered (July 2017) that the proposal was on the higher side. Further action was not taken by DIMH to revise the proposal.

- The sewage system constructed by Chennai Metropolitan Water Supply and Sewerage Board at a cost of ₹ 1.71 crore was not properly functioning as stagnation of water was noticed during joint physical verification (May 2018) near the IP wards of the hospital due to laying of improper sewerage facilities. The problem with sewage discharge was not fully addressed as the matter was not taken up with CMWSSB (May 2018).
- Among the sanctioned items, the boiler for pharmacy was procured (₹ 38.51 lakh) and installed (2017) but not put to use (July 2018). The hospital did not have personnel for boiler operation and no action was taken to recruit the staff. Equipment proposed for Quality Control Laboratory (QC Lab) at a cost of ₹ 15 lakh were not fully procured till July 2018 and hence, the QC Lab could not be commissioned (July 2018).
- Despite specific sanction of ₹ 0.50 crore for engaging a consultant for technical advice on obtaining accreditation, DIMH had not engaged a consultant and addressed (April 2014) NABH, seeking the modalities for obtaining accreditation. As no reply was received from NABH, no further action was taken to apply for accreditation.

Thus, due to non-commissioning of (i) IP wards, (ii) upgraded pharmacy and (iii) QC Lab due to (a) non-posting of additional personnel, (b) non-engagement of a consultant and (c) delay in procurement of equipment, the proposal to obtain NABH accreditation at an estimated cost of ₹ 10 crore had failed despite incurring the expenditure.

2.2.10.6 Non disposal of bio-medical waste

According to the Bio Medical Waste Management Rules, 2016, the institution generating bio-medical waste shall take all necessary steps to ensure it is handled without any adverse effect to human health and the environment. During the joint physical verification of GAMCH, Nagercoil on 25 May 2018, it was noticed that bio-medical waste such as needles, disposable pipette used in the laboratory, etc., were dumped in cardboard boxes and kept in a separate room. The bio-medical wastes were not being disposed off as the hospital had no tie-up with the agencies for disposal of biomedical wastes.

The Principal, GAMCH, Nagercoil stated (July 2018) that the action was being taken to avail the services of the bio-medical waste disposal agency. The Principal cited inadequate allotment of funds as a reason for not engaging the agency. The reply was not tenable as the Principal had never requested DIMH for funds to organise bio-medical waste disposal.

2.2.11 Education and research in ISM

ISM health services and ISM education are one organic whole and deficiency in one would adversely impact the others as well. In addition to the hospitals and ISM wings, six ISM colleges in the Government fold and 22 other private colleges function in the State.

2.2.11.1 Admissions in ISM colleges

The year wise admissions in GoTN's ISM colleges during 2013-18 were as given in **Table 2.33**.

Table 2.33: Details of intake capacity and Admissions in ISM colleges

Stream	Intake capacity		Admissions				
			2013-14	2014-15	2015-16	2016-17	2017-18
Siddha	UG	Up to 2014-15 - **150**	148	133	155	160	159
		From 2015-16 - **160**					
	PG	**94**	93	93	90	93	94
Yoga & Naturopathy	UG	Up to 2013-14 - **20**	20	59	60	60	60
		From 2014-16 - **60**					
	PG	**15**	-	15	15	15	15
		(Started from 2014-15)					
Ayurveda*	UG	Up to 2014-15 - **50**	49	50	60	60	60
		From 2015-16 - **60**					
Unani*	UG	Up to 2015-16 - **26**	26	26	26	60	60
		From 2016-17 - **60**					
Homoeopathy*	UG	**50**	50	50	50	50	50

* PG courses are not conducted.

(Source: Details furnished by DIMH)

As could be seen from **Table 2.33**, while PG courses were not offered in Ayurveda, Unani and Homoeopathy, the intake capacity of PG programmes in Siddha and Yoga & Naturopathy remained stagnant. Academic research in ISM, despite being one of the policy directives of GoTN, did not receive due importance as none of the colleges offered Ph.D programmes. In terms of intake capacity for UG courses, there were increases except in the Homoeopathy stream.

2.2.11.2 Pass percentage

Pass out percentage is a measure of the performance of educational institutions. The number of students graduating bachelor degree courses within the prescribed duration of study in the test-checked ISM colleges was 82 *per cent*, 69 *per cent*, 74 *per cent*, 67 *per cent* and 88 *per cent* in Siddha, Ayurveda, Homoeopathy**,** Unani and Yoga & Naturopathy streams respectively during 2013- 18.

In addition to the shortage of infrastructure and manpower in ISM medical colleges, as commented in **Paragraphs 2.2.8** and **2.2.9,** other issues which had a bearing on the quality of education are discussed in the succeeding paragraphs.

2.2.11.3 Graduation outcome

In order to assess the graduation outcome in terms of securing employment, job satisfaction of ISM graduates etc., Audit undertook a postal survey among 352 graduates who graduated between 2015 and 2017. Out of 352 graduates, 65 graduates (18 *per cent*) responded to the survey, which revealed that:

- 34 out of 65 ISM graduates (52 *per cent*) remained unemployed after more than one year of graduation.
- Out of 31 graduates employed, 19 graduates (61 *per cent)* earned income less than ₹ 15,000 pm.
- 35 graduates (54 *per cent)* stated that they were not able to start their own practice due to financial difficulties.
- 15 graduates (23 *per cent)* expressed their opinion that the course did not prepare them adequately for employment and 28 graduates (43 *per cent)* opined that the course did not fulfill their expectations.
- 22 graduates (34 *per cent)* who were not satisfied with the course expressed the reason as lack of employment opportunities.

The graduation outcome as discussed above indicated that the ISM graduates had limited career options despite spending five years. Audit also observed that the Government did not undertake any assessment of requirement of ISM medicos and creation of job opportunities and self-employment to the ISM graduates.

2.2.11.4 Non-commencement of PG courses

GoTN started PG courses in Siddha from 1998-99 and PG courses in Yoga & Naturopathy from 2014-15. The initiative taken (2008) to commence PG courses in Homoeopathy did not materialise.

In 2008, the Principal, GHMC, Thirumangalam, proposed for starting of Post-Graduation MD courses in three specialities in Homoeopathy with a total intake of nine seats. GoTN approved (May 2008) the proposal and sanctioned ₹ 6 lakh, the fee payable to CCH, New Delhi. GoTN also sanctioned (September 2008) creation of 23 additional posts to fulfil the requirement as per the CCH norms. GoTN replied (September 2018) to Audit that due to administrative reasons, these posts could not be filled up. The Tamil Nadu Dr. M.G.R. Medical University, Chennai, issued (November 2008) a Letter of Consent of Affiliation for starting the MD courses with an annual intake of nine seats with three seats each. CCH conducted inspection of the college in November 2009, but did not accord approval for starting the PG courses. The Inspection Team pointed out inadequate teaching staff for starting PG courses.

In reply, the Principal, GHMC, Thirumangalam stated that a detailed proposal for starting the PG courses was sent again to DIMH in June 2014. The Principal, GHMC, Thirumangalam also requested DIMH to fill up the vacant posts as per the CCH norms for starting the PG courses. Action taken by DIMH was not on record. And the proposal of 2008 to start PG courses in Homoeopathy did not materialise (July 2018).

2.2.11.5 Non-establishment of research and development wing

Government of India published (2011-16) pharmacopeia specifications for raw drugs and prepared medicines of Siddha, Ayurveda and Unani systems of medicine. In order to enforce standard manufacture of these medicines, standardisation of drugs and medicines and for further research of herbs, GoTN sanctioned (December 2013) ₹ 12 crore for establishment of a research and development wing at AAGHIM campus, Chennai (**Exhibit 2.9**). The sanction included ₹ 6 crore for buildings, ₹ 4.02 crore for equipment and ₹ 1.69 crore for staff salaries and for other items of expenditure.

Exhibit 2.9: Newly constructed building for R&D wing lying idle

Exterior view of R&D building at AAGHIM, Chennai

Furniture purchased for R&D building at AAGHIM, Chennai

(Source: Photograph by Audit team during joint physical verification on 04 July 2018)

The PWD completed the construction of the new building and handed over the completed building to DIMH in June 2017. Audit, however, noticed that the R&D activities did not commence even as of June 2018 due to the following reasons.

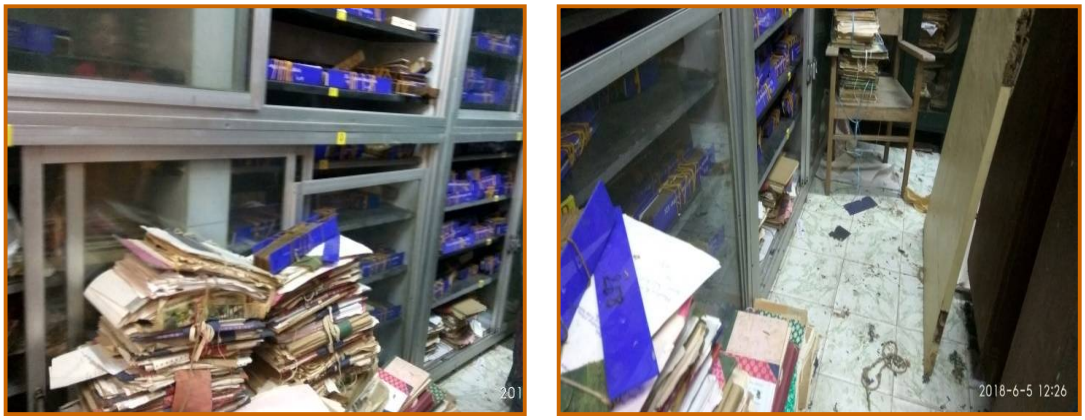
DIMH released (July 2014) the entire sanctioned amount of ₹ 4.02 crore to TAMPCOL for procurement of medical equipment. The details of specifications of equipment to be procured, however, were given by DIMH to TAMPCOL only in May 2017, i.e. about three years after sanctioning. TAMPCOL floated the tenders for purchase of the equipment on 01 August 2017 and found that the total cost of procurement would exceed the sanctioned amount by ₹ 0.56 crore. The request (February 2018) of TAMPCOL for additional sanction was not processed by DIMH (June 2018). As a result, the equipment were not procured. Further, in respect of human resources, out of 49 posts sanctioned, only two posts were filled-up. DIMH did not take steps to recruit staff. Thus, due to non-synchronising the equipment procurement with civil works for the buildings and recruiting the required staff, the R&D building constructed at a cost of ₹ 6 crore was kept vacant for more than one year and the objective of furthering R&D was not achieved.

2.2.11.6 Non-realisation of the benefits of ancient knowledge in Siddha system

Over a period of time, DIMH collected 1,068 manuscripts from various sources. These manuscripts, originally written long back in palm leaves and other media were to be deciphered by transcribers with command over ancient Tamil script and language. Out of the 1,068 manuscripts collected by the Department, only 450 manuscripts (42 *per cent*) were deciphered so far and 20 books were published based on the manuscripts deciphered. Audit noticed that the posts of Tamil Pandits[40] and four out of five posts of Transcribers in the Manuscript Department of DIMH, Chennai were lying vacant for three to ten years. Remaining one Transcriber was also transferred to central library and thus all the five posts of Transcribers are lying vacant (July 2018). As a result, no action was underway to decipher and transcribe from palm leaf manuscripts to harvest the ancient knowledge on Siddha system.

The National Mission for Manuscripts had stipulated minimum requirements for conservation of manuscripts, which included climate control and other facilities to prevent degradation of manuscripts. Audit, however, noticed during inspection on 05 June 2018 that the original palm leaf manuscripts were dumped in a dusty and unventilated room along with other office documents and records (**Exhibit 2.10**). The air-conditioner installed at the room was not in working condition and there was no quarantine room available separately for the manuscripts, as stipulated in the National Policy.

Exhibit 2.10: Storage of manuscripts



(Source: Photograph by Audit team during joint physical verification on 05 June 2018)

The Department not only failed to harness the ancient knowledge on Siddha medicine by transcribing from palm leaf, it had put the palm leaves to danger by dumping them in rooms without environmental control which could result in their degradation.

GoTN replied (November 2018) that the International Institute of Tamil Studies, Chennai has acceded to the request of DIMH to store the manuscripts at their centre after the process of its digitalisation is over. The ownership of manuscripts will continue to be retained by DIMH.

[40] One with expert knowledge.

2.2.11.7 Insufficient System to detect quacks

GoTN enacted Tamil Nadu Private Clinical Establishments (Regulation) Act, 1997 to regulate clinical establishments in the State. The Act envisages maintenance of database of clinical establishment (ISM) by DIMH. However, DIMH neither developed the database of clinical establishments (ISM) nor issued any guidelines for identifying quacks practising as doctors in the field of ISM as the rules under the Act was framed only in March 2018.

It was replied that as and when complaints were received, action was taken by Quack Eradication Committee. DIMH lacked a comprehensive procedure to curb the menace of quacks cheating the general public by spurious drugs and treatment.

2.2.12 System to detect and prevent errors/omissions

The errors/omissions pointed out are on the basis of a test audit. The Department/Government may, therefore, undertake a thorough review of all units to check whether similar errors/omissions have taken place elsewhere, and if so, to rectify them; and to put a system in place that would prevent such errors/omissions.

2.2.13 Conclusion

The major objective set forth by GoTN to bring ISM into the mainstream was not fully achieved. Large scale shortages of physical and human infrastructure disrupted services delivery of ISM institutions. Delivery of services in ISM wings of PHC and ISM wings of the District hospitals were impacted due to constraints of space and shortage of working equipment. Lack of coordinated action between DSMOs, DIMH and the Medical Recruitment Board resulted in non-filling up of vacancies. Non-synchronising construction of buildings, procurement of equipment and posting of staff had rendered investments on several projects idle. There was chronic shortage of medicines in ISM institutions due to TAMPCOL's failure to link medicine production and procurement with the medicine indents. DIMH failed to address the issue of substandard ISM drugs due to delays in drug test results. ISM colleges did not meet several of the mandatory minimum standards stipulated by standard setting bodies. Post graduate courses were not started in three of the medical colleges due to lack of planning and concerted efforts. Delays in procurements resulted in huge sums lying in the bank accounts of DIMH, TAMPCOL and State AYUSH Society. In the absence of systematic accounting of project funds routed through bank account, the financial management system was exposed to the risk of fraudulent transactions. Research and Development did not receive due importance and casual handling of centuries old palm leaf manuscripts on Siddha medicine is potentially harming the objective of mainstreaming ancient knowledge on Siddha.

2.2.14 Recommendations

- Accounting for funds routed through bank account needs to be streamlined to ensure proper utilisation.
- DIMH may prepare and regularly update a computerised database of physical and human infrastructure in order to facilitate proper planning and resource utilisation.
- A proper mechanism may be put in place to link the indent raised by ISM institutions with the budget release by DIMH and production planning by TAMPCOL.
- Government may concentrate on starting post graduate courses in Ayurveda, Homoeopathy and Unani.
- Implementation of programmes under National AYUSH Mission needs acceleration, by providing for the necessary human and physical infrastructure.

Appendix 2.7
(Reference: Paragraph 2.2.5; Page 57)
Sampled ISM Institutions

Sl. No.	Name of the Institution	Number of institutions		Names of the sampled ISM institutions
		Available	Sampled	
1	Medical Colleges and attached Hospitals	6	5	Government Siddha MCH, Chennai Government Ayurvedic MCH, Nagercoil Government Yoga and Naturopathy MCH, Chennai Government Unani MCH, Chennai. Government Homoeopathy MCH, Thirumangalam
2	District Siddha Medical Officers (DSMO)	22	6	Dindigul, Erode, Thanjavur, The Nilgiris, Sivagangai and Vellore districts
3	ISM Wings in Govt. Hospitals (Medical College Hospitals (MCH), District Hqrs Hospitals (DHQH), Taluk/ Non-Taluk Hospitals (TK/NTK)	471	47	Dindigul - 09 Erode - 05 Thanjavur - 10 The Nilgiris - 04 Sivagangai - 08 Vellore - 11
4	ISM Wings in PHCs/ Dispensaries and AYUSH Wellness centres	1,014	53	Dindigul - 10 Erode - 09 Thanjavur - 07 The Nilgiris - 07 Sivagangai - 08 Vellore - 12

Appendix 2.8
(Reference: Paragraph 2.2.8.2(a); Page 65)
Non-provision of In-patient facilities in test-checked ISM wings

Sl.No.	Name of the Wing	System	District	Availability of IP facilities
1	TK Hospital, Anthiyur	Siddha	Erode	No
2	NTK Hospital, Kavindampadi	Siddha	Erode	No
3	TK. Hospital, Kodaikanal	Siddha	Dindigul	No
4	TK Hospital, Oddanchatram	Siddha	Dindigul	No
5	TK Hospital, Vedasandur	Siddha	Dindigul	No
6	NTK Hospital, Thandikudi	Siddha	Dindigul	No
7	TK Hospital, Ilayangudi	Siddha	Sivagangai	Yes
8	TK Hospital, Thirupuvanam	Siddha	Sivagangai	No
9	NTK Hospital, Poolankurichi	Siddha	Sivagangai	No
10	TK Hospital, Orathanadu	Siddha	Thanjavur	Yes
11	TK Hospital, Pattukottai	Y&N	Thanjavur	No
12	NTK Hospital, Adiramapattinam	Unani	Thanjavur	Yes
13	NTK Hospital, Tirupanandal	Siddha	Thanjavur	Yes
14	TK Hospital, Manjoor	Siddha	The Nilgiris	Yes
15	TK Hospital, Ambur	Siddha	Vellore	Yes
16	TK Hospital, Arakkonam	Homoeo	Vellore	Yes
17	TK Hospital, Arakkonam	Siddha	Vellore	Yes
18	TK Hospital, Arakkonam	Y&N	Vellore	No
19	NTK Hospital, Kalavai	Siddha	Vellore	No

TK: Taluk NTK: Non-Taluk

Appendix 2.9

(Reference: Paragraph 2.2.8.2(c)(ii); Pages 66 and 67)

Details of equipment supplied/not-supplied/non-functioning in Siddha, Ayurveda and Unani Wings

District	Sl. No.	Name of the ISM wing			Treadmill		Decoction Vending machine		Steam Bath		Exercise Cycle	
					Supplied	Not functioning	Supplied	Not functioning	Supplied	Not functioning	Supplied	Not functioning
Dindigul	1	Ammaiyanaickanur	GPHC	Siddha	0	0	0	0	0	0	0	0
	2	Thadikombu	GPHC	Siddha	0	0	0	0	0	0	0	0
	3	Kosavapatti	GPHC	Siddha	0	0	0	0	0	0	0	0
	4	K. Pudukottai	NRHM PHC	Siddha	0	0	0	0	0	0	0	0
	5	Kallimanthayam	NRHM PHC	Siddha	0	0	1	1	1	0	1	0
	6	Poolathur	NRHM PHC	Siddha	0	0	1	1	1	1	1	1
	7	Sirunaickenpatti	NRHM PHC	Siddha	0	0	1	0	1	0	1	0
	8	Pilathu	NRHM PHC	Siddha	0	0	1	0	1	0	1	0
	9	Thandikudi	NTK.Hpl.	Siddha	0	0	0	0	0	0	0	0
	10	Kodaikanal	TK.Hpl.	Siddha	1	0	0	0	1	0	0	0
	11	Oddanchatram	TK.Hpl.	Siddha	1	1	0	0	1	0	1	0
	12	Vedasandur	TK.Hpl.	Siddha	1	1	0	0	1	1	1	0
	13	Dindigul	DHQH	Siddha	1	1	1	0	1	1	0	0
	14	Dindigul	DHQH	Ayurveda	0	0	0	0	0	0	0	0
		Total (A)	**14**		**4**	**3**	**5**	**2**	**8**	**3**	**6**	**1**
Erode	15	Muthur	GPHC	Ayurveda	1	1	1	0	1	1	0	0
	16	Kunnathur	GPHC	Siddha	0	0	0	0	0	0	0	0
	17	Siruvalur	GPHC	Siddha	0	0	0	0	0	0	0	0
	18	Chavadipalayam	GPHC	Siddha	0	0	0	0	0	0	0	0
	19	Modakurichi	GPHC	Siddha	0	0	0	0	0	0	0	0
	20	Nasiyanur	NRHM PHC	Siddha	0	0	1	0	1	0	1	0
	21	Vellode	NRHM PHC	Siddha	1	0	1	0	1	0	1	0
	22	Athani	NRHM PHC	Siddha	0	0	1	1	1	0	1	0
	23	Kavindapadi	NTK.Hpl.	Siddha	1	0	0	0	1	0	0	0
	24	Anthiyur	TK.Hpl.	Siddha	0	0	0	0	0	0	0	0
	25	Erode	DHQH	Siddha	1	0	0	0	1	0	1	0
		Total (B)	**11**		**4**	**1**	**4**	**1**	**6**	**1**	**4**	**0**

District	Sl. No.	Name of the ISM wing			Treadmill		Decoction Vending machine		Steam Bath		Exercise Cycle	
					Supplied	Not functioning	Supplied	Not functioning	Supplied	Not functioning	Supplied	Not functioning
Sivaganga	26	Idayamelur	NRHM PHC	Ayurveda	0	0	1	0	1	0	1	0
	27	Thiruvegampet	GPHC	Siddha	1	0	1	1	1	1	0	0
	28	Muthanendal	GPHC	Siddha	1	1	1	0	1	1	0	0
	29	Mallakottai	GPHC	Siddha	1	1	1	1	1	0	0	0
	30	Karuppur	G.S.Rl.Dy.	Siddha	0	0	0	0	0	0	0	0
	31	Sooranam	NRHM PHC	Siddha	0	0	1	1	1	1	1	0
	32	Poolankurichi	NTK.Hpl.	Siddha	0	0	0	0	0	0	0	0
	33	Ilayangudi	TK.Hpl.	Siddha	1	1	0	0	1	1	1	0
	34	Thirupuvanam	TK.Hpl.	Siddha	1	0	1	1	1	0	0	0
	35	Sivagangai	MCH	Siddha	1	1	1	1	1	1	0	0
	36	Karaikudi	DHQH	Siddha	1	1	0	0	1	1	1	1
		Total (C)	**11**		**7**	**5**	**7**	**5**	**9**	**6**	**4**	**1**
Thanjavur	37	Adiramapattinam	NTK.Hpl.	Unani	0	0	0	0	0	0	0	0
	38	Solapuram	NRHM PHC	Ayurveda	0	0	1	1	0	0	0	0
	39	Kabisthalam	GPHC	Siddha	1	1	1	1	1	1	0	0
	40	Murukkangudi	GPHC	Siddha	0	0	0	0	0	0	0	0
	41	Patteeswaram	GPHC	Siddha	1	1	1	0	1	0	0	0
	42	Pappanadu	GPHC	Siddha	1	1	1	1	1	1	0	0
	43	Madukkur	NRHM PHC	Siddha	0	0	1	0	0	0	0	0
	44	Tirupanandal	NTK.Hpl.	Siddha	0	0	0	0	0	0	0	0
	45	Orathanadu	TK.Hpl.	Siddha	0	0	0	0	0	0	0	0
	46	Thanjavur	MCH	Siddha	0	0	0	0	0	0	0	0
	47	Kumbakonam	DHQH	Siddha	1	1	0	0	1	1	0	0
	48	Kumbakonam	DHQH	Ayurveda	0	0	0	0	0	0	0	0
		Total (D)	**12**		**4**	**4**	**5**	**3**	**4**	**3**	**0**	**0**
The Nilgiris	49	Naduvattam	GPHC	Siddha	1	0	0	0	1	1	1	0
	50	Ketti	GPHC	Siddha	0	0	0	0	0	0	0	0
	51	Keradamattam	GPHC	Siddha	0	0	0	0	0	0	0	0
	52	Kinnakorai	G.S.Rl.Dy.	Siddha	0	0	0	0	0	0	0	0
	53	Manjoor	TK.Hpl.	Siddha	0	0	0	0	0	0	0	0
	54	Udhagamandalam	DHQH	Siddha	1	0	0	0	1	0	1	0
		Total (E)	**6**		**2**	**0**	**0**	**0**	**2**	**1**	**2**	**0**

District	Sl. No.	Name of the ISM wing			Treadmill		Decoction Vending machine		Steam Bath		Exercise Cycle	
					Supplied	Not functioning	Supplied	Not functioning	Supplied	Not functioning	Supplied	Not functioning
Vellore	55	Melkalathur	NRHM PHC	Ayurveda	0	0	0	0	0	0	0	0
	56	Lalapet	GPHC	Siddha	1	0	1	0	1	0	0	0
	57	Andiyappanur	GPHC	Siddha	1	1	1	1	1	1	0	0
	58	Banavaram	GPHC	Siddha	1	1	1	1	1	1	0	0
	59	Pudurnadu	Tribal Dy.	Siddha	0	0	0	0	0	0	0	0
	60	Patchur	NRHM PHC	Siddha	0	0	1	1	1	0	1	0
	61	Ponnai	NRHM PHC	Siddha	0	0	1	0	1	0	1	0
	62	Kalavai	NTK.Hpl.	Siddha	0	0	0	0	1	1	0	0
	63	Ambur	TK.Hpl.	Siddha	1	0	0	0	1	0	1	1
	64	Arakonam	TK.Hpl.	Siddha	1	1	0	0	1	1	1	1
	65	Kaveripakkam	GPHC	Unani	0	0	0	0	0	0	0	0
	66	Ammoor	NRHM PHC	Unani	0	0	0	0	0	0	0	0
	67	Vellore	MCH	Siddha	1	1	0	0	1	1	0	0
	68	Vellore	MCH	Unani	0	0	0	0	0	0	0	0
	69	Walaja	DHQH	Siddha	1	1	0	0	0	0	1	0
		Total (F)	**15**		**7**	**5**	**5**	**3**	**9**	**5**	**5**	**2**
		Grand Total (A+B+C+D+E+F)	**69**		**28**	**18**	**26**	**14**	**38**	**19**	**21**	**4**

Appendix 2.10
(Reference: Paragraph 2.2.8.2 (c) (iii); Page 68)
Equipment supplied to non-functioning ISM Units in The Nilgiris District

Sl. No.	Name of the equipment	Name of the wings	Date of supply	Rate in ₹ and number	Total cost in ₹
1	Thokkanam Table with SS foot stepper	Kolacombai , Ambalamoola, Kattabettu, Kollappalli, Srimadurai, Nelakottai, Melurhosatty	30-11-2014	20,486 x 7	1,43,402
2	Examination table	Kolacombai , Melurhosatty , Kattbettu, Srimadurai, Kolappally, Ambalamoola ,Nelakottai, Kookalthorai.	30-11-2014	7,256 x 8	58,048
3	Decoction vending machine	Kolacombai, Melurhosatti, Kattbettu, Srimadurai, Kolappally, Ambalamoola	26-03-2014	58,905 x 6	3,53,430
4	Dhorni pot	Kolacombai, Melurhosatti, Kattbettu, Srimadurai, Kolappally, Ambalamoola	10-01-2015	5,040 x 6	30,240
5	Steam Bath sitting type (single person) and steam generator	Kolacombai, Melurhosatti, Kattbettu, Srimadurai, Kolappally, Ambalamoola	10-01-2015	56,385 x 6	3,38,310
6	Stethoscope, Thermometer, Infraphill lamp set, medicated steam inhaler	Kolacombai, Melurhosatty, Kattbettu, Srimadurai, Kolappally, Ambalamoola, Nelakottai, Kookalthorai.	19-02-2016	2,164.40 x 8	17,315
7	Computer /UPS	Kolacombai, Melurhosatty ,Kattabettu, Srimadurai, Kolappally, Ambalamoola, Kookalthorai, Nelakottai.	17-06-2015	49,316 x 8	3,94,528
8	R.O Plant	Kolacombai, Melurhosatti, Kattbettu,Srimadurai, Kolappally, Ambalamoola, Nelakottai	28-06-2017	30,450 x 7	2,13,150
	Total cost				**15,48,423**

Appendix 2.11
(Reference: Paragraph 2.2.9.3; Page 70)
Shortage of manpower in ISM hospitals and ISM Wings (AMO/MO)

Sl. No.	Name of the Post	System	Regular/ Contract Pay	Number of posts		
				Sanctioned	Positioned	Vacant
1	Superintendent (AAGHIM)	Siddha	Regular	1	0	1
2	Hospital Superintendent (A)	Ayurveda	Regular	1	0	1
3	Medical Officer (S)	Siddha	Regular	15	1	14
4	Scrutinising Medical Officer (Siddha)	Siddha	Regular	1	0	1
5	RMO (A)	Ayurveda	Regular	1	1	0
6	Medical Officer (A)	Ayurveda	Regular	6	4	2
7	Medical Officer (U)	Unani	Regular	3	1	2
8	Scrutinising Medical Officer (Unani)	Unani	Regular	1	1	0
9	Medical Officer / RMO (Y & N)	Y & N	Regular	2	0	2
10	MO (Modern Medicine)		Regular	1	0	1
11	Clinical Pathologist		Regular	1	1	0
12	Bio-Chemist		Regular	1	1	0
13	Pathologist		Regular	2	0	2
14	Radiologist		Regular	2	2	0
15	AMO (S/A/U/H)*		Regular	965	941	24
16	Asst. Superintendent (H)	Homoeo	Regular	1	1	0
17	AMO (Y & N)	Y & N	Regular	90	39	51
18	DSMO	Siddha	Regular	22	13	9
	Total			**1,116**	**1,006**	**110 (10 *per cent*)**

* S/A/U/H - Siddha/Ayurveda/Unani/Homoeopathy

Para medical & others in regular wings

Sl. No.	Name of the Post	Regular/ Contract Pay	Number of posts		
			Sanctioned	Positioned	Vacant
1	Nursing Superintendent Gr.II	Regular	7	7	0
2	Nurses	Regular	96	92	4
3	Nurses	Con.Pay	4	4	0
4	Chief Pharmacist (Siddha)	Regular	2	0	2
5	Pharmacy Supervisor (S/A/U)	Regular	5	0	5
6	Asst. in Pharmacy	Regular	4	0	4
7	Pharmacist** (S/A/U/H)	Regular	892	644	248
8	Nursing Therapist (Y & N)	Regular	4	4	0

** Vacancy percentage: Pharmacist (Siddha) - 22.1; Pharmacy (Ayurveda) - 71.7

Sl. No.	Name of the Post	Regular/ Contract Pay	Number of posts		
			Sanctioned	Positioned	Vacant
9	Nursing Assistant (Male/Female)	Regular	80	8	72
10	Attendant/Attender/Women Servant	Regular	8	5	3
11	Anatomy Bearer/Stretcher Bearer	Regular	5	2	3
12	Waterman	Regular	5	3	2
13	Gate Peon	Regular	1	1	0
14	Barber	Regular	1	1	0
15	Sweeper/ Sweeper cum Water Women/ Sweeper cum Waterman	Regular	26	13	13
16	Gardener	Regular	2	1	1
17	Watchman	Regular	21	8	13
18	Sanitary Worker	Regular	52	20	32
19	Office Assistant	Regular	40	8	32
20	Lascar	Regular	14	6	8
21	Cook / Cook Matty/ Cook Attendant	Regular	14	6	8
22	Dhobi	Regular	7	5	2
23	Hospital Servant / Hospital Worker / Multipurpose Worker	Regular	639	400	239
24	Mortuary Attendant	Regular	2	1	1
25	Packer	Regular	1	1	0
26	Sweeper for Cleaning Vessels	Regular	4	0	4
27	Cleaner	Regular	3	1	2
28	Duffedar	Regular	1	0	1
29	Ambulance Van Attendant	Regular	2	1	1
30	Peon cum Waterman	Regular	1	0	1
31	Dispensary Attender		2	1	1
32	Hospital Worker (OS)	Out Sourcing	2	2	0
33	Watchman / Sweeper (OS)	at Texco	2	1	1
34	Sweeper	(Con. Pay)	5	5	0
35	Hospital Worker / Sanitary Worker	(Con. Pay)	11	10	1
36	Gardener	(Con. Pay)	4	4	0
37	Watchman	(Con. Pay)	2	2	0
38	Dhobi	(Con. Pay)	3	3	0
39	Cook	(Con. Pay)	2	2	0
40	Masseur (Male / Female)	(Con. Pay)	5	0	5
41	Lab Attendant / Attender	(Con. Pay)	5	5	0
42	Multipurpose Worker	Out Sourcing	9	9	0
	Others—Hospital				
43	Scientific Officer (DTL)	Regular	2	0	2
44	Computer System Analyst cum Programmer	Regular	1	0	1

Sl. No.	Name of the Post	Regular/ Contract Pay	Number of posts		
			Sanctioned	Positioned	Vacant
45	Pharmacy Attendant	Regular	74	26	48
46	Plaster Technician	Regular	1	0	1
47	Therapeutic Assistant	Regular	203	115	88
48	A.N.M.	Regular	5	3	2
49	Radiographer	Regular	4	1	3
50	Masseur	Regular	32	20	12
51	Dark Room Assistant	Regular	3	0	3
52	X-Ray Attendant	Regular	2	0	2
53	Dispensary Servant (Con. Pay)	(Con. Pay)	19	2	17
54	Multipurpose Worker	(Con. Pay)	11	0	11
	Total		**2,352**	**1,453**	**899 (38 *per cent*)**

Shortage of man power in NRHM Wings

Sl. No.	Name of the Post	Number of posts		
		Sanctioned	Positioned	Vacant
1	Consultant (S/A/H/Y&N)	475	354	121
2	Dispenser (S/A/U/H)	424	134	290
3	Therapeutic Assistant (M/F) (Y & N)	71	4	67
4	Multipurpose Worker	475	258	217
	Total	**1,445**	**750**	**695 (48 *per cent*)**

Shortage of manpower in AYUSH Wellness clinic

Sl. No.	Name of the Post	Number of posts		
		Sanctioned	Positioned	Vacant
1	Doctor/Consultant (S/A/U/H/Y&N)	31	0	31
2	Therapeutic Assistant	34	0	34
3	Attender	26	0	26
	Total	**91**	**0**	**91 (Cent *per cent*)**

Appendix 2.12

(Reference: Paragraph 2.2.9.4; Page 71)

Non-functioning of ISM Wings in test-checked districts due to non-posting of doctors

Sl.No	Name of the Wing	Wing	Date from which not functioning
The Nilgiris			
1	NRHM, C, Ambalmoola	Siddha	September 2013
2	NRHM, PHC, Kolapalli	Siddha	March 2011
3	NRHM, PHC, Kolacombai	Siddha	March 2011
4	NRHM, PHC, Melurhosatty	Siddha	March 2011
5	NRHM, PHC, Kottabettu	Siddha	March 2011
6	NRHM, PHC, Srimadurai	Siddha	March 2011
7	NRHM, PHC, Nedugula	Siddha	July 2011
8	NRHM, PHC, T.Oranalli	Siddha	September 2013
9	NRHM, PHC,Nilakottai	Unani	March 2011
10	NRHM, PHC , Kookalthurai	Homoeo	May 2011
11	NRHM, PHC, Bikkatty	Homoeo	July 2014
Thanjavur			
12	NRHM, PHC, Kuruvikarambai	Homoeo	March 2011
13	NRHM, PHC, Pandaravadai	Unani	May 2012
14	NRHM, PHC, Sillathur	Siddha	March 2012
DSMO, Vellore			
15	NRHM,PHC, Kallapadi	Siddha	November 2013
16	NRHM,PHC, Vilapakkam	Siddha	August 2015
17	NRHM,PHC, Ussoor	Unani	May 2017
18	NRHM,PHC, Minnal	Unani	September 2017
19	NRHM,PHC, Nowlack	Unani	August 2016
DSMO, Dindigul			
20	GPHC, Mannavanur	Siddha	February 2017
21	GPHC, Siluvathur	Ayurveda	October 2013
22	GPHC, Ayyalur	Ayurveda	March 2017
23	GPHC, Kosukurichi	Unani	May 2011
24	GPHC, Narasingapuram	Unani	2009
25	GPHC, Keeranur	Unani	2009
26	GPHC, Viralipatti	Unani	2009
27	Dt. Hqrs. Hospital, Dindigul	Unani	2010
DSMO, Sivaganga			
28	Govt.Taluk Hospital, Devakottai	Y&N	May 2017
29	NRHM PHC, Puzhuthipatti	Unani	April 2011
30	NRHM PHC, Idayamelur	Ayurveda	March 2016
31	NRHM PHC, Keelasevalpatti	Ayurveda	January 2013

Appendix 2.13
(Reference: Paragraph 2.2.10.4; Page 75)
Shortfall in drawing samples

Sl.No.	District	2013-14			2014-15			2015-16			2016-17			2017-18		
		Target	Samples drawn	Shortfall	Target	Samples drawn	Shortfall	Target	Samples drawn	Shortfall	Target	Samples drawn	Shortfall	Target	Samples drawn	Shortfall
1	Chennai	42	42	0	63	63	0	96	60	36	96	85	11	96	112	0
2	Cuddalore	42	33	9	63	63	0	96	82	14	96	64	32	96	84	12
3	Erode	42	42	0	63	65	0	96	79	17	96	96	0	96	110	0
4	Tiruppur	42	42	0	63	66	0	96	74	22	96	89	7	96	83	13
5	Kancheepuram	42	36	6	63	71	0	96	68	28	96	94	2	96	63	33
6	Tiruvannamalai	42	43	0	63	62	1	96	80	16	96	98	0	96	96	0
7	Tirunelveli	42	27	15	63	82	0	96	68	28	96	13	83	96	67	29
8	Vellore	42	36	6	63	75	0	96	48	48	96	83	13	96	55	41
9	Nilgiris	42	41	1	63	68	0	96	96	0	96	99	0	96	96	0
10	Dharmapuri	42	39	3	63	64	0	96	88	8	96	96	0	96	80	16
11	Nagapattinam	42	27	15	63	60	3	96	71	25	96	96	0	96	100	0
12	Virudhunagar	42	20	22	63	73	0	96	94	2	96	104	0	96	66	30
13	Pudukottai	42	27	15	63	61	2	96	82	14	96	25	71	96	47	49
14	Dindigul	42	37	5	63	68	0	96	96	0	96	96	0	96	93	3
15	Nagercoil	42	33	9	63	45	18	96	106	0	96	69	27	96	80	16
16	Periyakulam	42	34	8	63	54	9	96	84	12	96	32	64	96	98	0
17	Ramanathapuram	42	44	0	63	66	0	96	81	15	96	104	0	96	86	10
18	Salem	42	27	15	63	68	0	96	72	24	96	44	52	96	72	24
19	Sivagangai	42	39	3	63	36	27	96	108	0	96	91	5	96	99	0
20	Thanjavur	42	29	13	63	60	3	96	70	26	96	95	1	96	96	0
21	Thoothukudi	42	20	22	63	63	0	96	49	47	96	81	15	96	92	4
22	Trichy	42	27	15	63	53	10	96	104	0	96	87	9	96	89	7
23	Villupuram	42	41	1	63	68	0	96	40	56	96	86	10	96	81	15
	Total	**966**	**786***	**183**	**1,449**	**1,454***	**73**	**2,208**	**1,800**	**438***	**2,208**	**1,827***	**402**	**2,208**	**1,945***	**302**

* Samples drawn differs from Table 2.32 at Page 75 due to drawal of multiple samples of same batch of product