# FOURTEENTH KERALA LEGISLATIVE ASSEMBLY

# COMMITTEE ON PUBLIC ACCOUNTS (2019-2021)

# SEVENTY EIGHTH REPORT

(Presented on 21st January, 2021)



SECRETARIAT OF THE KERALA LEGISLATURE
THIRUVANANTHAPURAM
2021

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# SEVENTY EIGHTH REPORT

On

Paragraphs relating to Health and Family Welfare Department contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March, 2014 (General and Social Sector)

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# COMMITTEE ON PUBLIC ACCOUNTS (2019-2021)

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Smt. Manju Varghese, Joint Secretary

Shri R. Venugopal, Deputy Secretary.

#### INTRODUCTION

I, the Chairman, Committee on Public Accounts, having been authorised by the Committee to present this Report, on their behalf present the Seventy Eighth Report on paragraphs relating to Health and Family Welfare Department contained in the Report of the Comptroller and Auditor General of India for the year ended 31<sup>st</sup> March, 2014 (General and Social Sector).

The Report of the Comptroller and Auditor General of India for the year ended  $31^{\rm st}$  March, 2014 (General and Social Sector) was laid on the Table of the House on  $23^{\rm rd}$  March, 2015.

The Committee considered and finalised this Report at the meeting held on  $20^{th}$  January, 2021.

The Committee place on records their appreciation of the assistance rendered to them by the Accountant General in the examination of the Audit Report.

Thiruvananthapuram,
21<sup>St</sup> January, 2021.

Commi

V. D. SATHEESAN,

Chairman,

Committee on Public Accounts.

#### REPORT

#### HEALTH AND FAMILY WELFARE DEPARTMENT

Performance Audit of Indian System of Medicine- Ayurveda

### **Highlights**

Indian Systems of Medicine consists of Ayurveda, Siddha, Unani and Naturopathy. Ayurveda encompasses preventive, promotive and curative components of health care with equal importance. It is widely practiced in the State through an extensive network of hospitals and dispensaries both in government as well as in private sector. A Performance Audit on the Ayurveda component of Indian Systems of Medicine including Ayurveda medical education was conducted covering the period 2009 to 2014. The audit revealed under utilisation of funds, non-formation of full-fledged AYUSH department, shortage of staff, shortage in inspection of drug manufacturing units, deficiencies in diet supplied to patients, deficiencies in infrastructure, non availability of Drug Testing Laboratory for Ayurveda, etc.

Failure to furnish Utilisation Certificates to Government of India (GOI) for funds already received resulted in the State losing GOI assistance of ₹12.75 crore receivable during 2012-2014

(Paragraph 3.6.1)

New departments for Preventive Ayurveda, Yoga, Naturopathy and Vishachikitsa in Government Ayurveda College, Thiruvananthapuram were not setup resulting in refund of GOI assistance of ₹1.50 crore in May 2013.

(Paragraph 3.6.2)

Inadequacies in infrastructure facilities, non-availability of equipment and inadequate number of Medical Officers and Paramedical staff were noticed in the hospitals and dispensaries test checked.

(Paragraphs 3.7.4, 3.8.2 and 3.8.4)

In the Government Ayurveda Hospital, Punnapra due to absence of male Nurses/Therapists and Cook, the hospital neither provided therapy treatment to male patients nor provided diet to its patients. The hospital had the lowest bed occupancy of 33 per cent out of 14 test checked hospitals.

(Paragraph 3.8.1)

In seven test checked hospitals, there was no heating facility in the therapy/treatment rooms forcing patients to bring fuel and stove for heating Thailam for oil massage.

(Paragraph 3.8.5)

Oushadhi, the Government of Kerala Company, did not test the Ayurveda drugs for presence of heavy metals, aflatoxin, toxicity and pesticide residue before supplying to institutions.

(Paragraph 3.9.1)

Indents for purchase of drugs were prepared by the Department of ISM without assessing the consolidated annual requirement resulting in overstocking of drugs.

(Paragraph 3.9.3)

The Patent Cell did not acquire patent rights for any of the 2505 oushadha formulations it deciphered from manuscripts.

(Paragraph 3.12.2)

# Introduction (3.1)

Ayurveda means "the science of life" (in Sanskrit 'ayur' means "life" and 'veda' means "science"). Ayurveda is an ancient and comprehensive system of health care. The system aims to prevent illness, heal the sick and preserve life. Ayurveda has its origins in India and extended its wings to various parts of the world. Ayurveda was divided into eight clinical specialities such as Kayachikitsa (internal medicine), Salya Tantra (surgery), Salakya (disease of supra-clavicular origin)<sup>1</sup>, Kaumarabhrtya (paediatrics, obstetrics and gynaecology), Bhutavidya (psychiatry), AgadaTantra (toxicology), Rasayana Tantra (rejuvenation and geriatrics) and Vajikarana (aphrodisiology and eugenics)<sup>2</sup>. 'Ayurveda Massage' is part of the treatment protocol.

<sup>1</sup> This branch deals with dentistry, disease of ear, nose, throat, head and oral cavity

<sup>2</sup> This branch deals with the means of enhancing sexual vitality and efficiency for producing healthy and ideal progeny.

Kerala's health care system consists of Allopathy, Indian Systems of Medicine (ISM) and Homoeopathy. ISM consists of Ayurveda, Siddha, Unani and Naturopathy of which Ayurveda is widely practiced and has an extensive network of hospitals and dispensaries, both in government and private sector. Ayurveda is an integral part of Kerala's health landscape and encompasses preventive, promotive and curative components of health care with equal importance.

There are 118 Ayurveda hospitals including six speciality hospitals, 782 Ayurveda dispensaries, four visha dispensaries and 20 Ayurveda sub-centres delivering healthcare services in the State. Besides, the State Health and Family Welfare Society of Kerala (SHFWS) also operates 208 Ayurveda dispensaries under National Rural Health Mission (NRHM) in various parts of the State. During the year 2013-14, the hospitals and dispensaries had patient footfall of 2.04 crore which included 93387 in-patients. Medicines required for free distribution to patients in government hospitals/dispensaries were procured from Pharmaceutical Corporation (IM) Kerala Ltd. (Oushadhi), a Government of Kerala undertaking.

# **Organizational Setup (3.2)**

The Secretary to Government, Health & Family Welfare Department (H&FWD) is the overall in-charge of the health services in the State. A Special Secretary in the H&FWD has been exclusively looking after the charge of ISM and Homoeopathy with effect from August 2014. The Director of Indian Systems of Medicine (DISM) and the Director of Ayurveda Medical Education (DAME) exercise overall control over the Ayurveda institutions in the government sector. At the district level, the District Medical Officers (ISM) exercise administrative control over the respective hospitals and dispensaries. The organisational set up of H & FWD relating to Ayurveda is given in Chart 1.

# Chart 1 Organogram of Departments of ISM and Ayurveda Medical Education

# Secretary to Government, Department of Health & Family Welfare

- ◆ *Head of the department*
- ◆ Responsible for the careful observance of rules
- Exercises general supervision of the officers and members of the staff

# Special Secretary to Government, Department of Health & Family Welfare

◆ In charge of ISM and Homoeopathy

# Pharmaceutical Corporation (IM) Kerala Ltd. (Oushadhi)

◆ Manufacture of Ayurveda drugs

# Director, Indian Systems of Medicine

- ◆ Administrative head and Chief Controlling Officer
  - ◆ Advisor to Government
- ◆ Superintendence and control of all medical institutions under him
- ◆ Prepares the budget and controls the expenditure of the Department
- ◆ Due submission of the annual administration report

#### 2 Joint Directors

- ◆ To assist the Director
- ◆ One in charge of Vigilance and the other General duties

# Director, Ayurveda Medical Education

- ◆ Appellate authority in respect of all administrative/academic powers exercised by the Principals of Ayurveda Colleges
- ◆ Supervision and control of admission to the PG courses, BAMS course and all other Para medical Ayurveda courses
- ◆ In charge of Examinations conducted by the Directorate
- ◆ To supervise the teaching and training programmes attached to the Ayurveda Colleges Re-orientation of Ayurveda Medical Education.
- ◆ To deal with all matters connected with technical subjects of Ayurveda Colleges
- ◆ To co-ordinate the Ayurveda courses under universities

# 14 District Medical Officers (ISM)

- ◆ Immediate supervision and control of the institutions in a District
- ◆ Conducts periodical inspection of hospitals and dispensaries
- ◆ 3 Government Ayurveda Colleges
- ◆ 2 Government Aided Ayurveda Colleges

- ◆ 118 Ayurveda Hospitals including speciality hospitals for Panchakarma (1), Mental (1), Marma (1) and Visha (3)
- ◆ 782 Ayurveda Dispensaries and 4 Visha dispensaries
  - ♦ 20 Sub Centres

## **Drugs Controller**

- ◆ To ensure availability of quality drugs and regulate manufacture of drugs
- ◆ To test and analyse quality of drugs

# **Drug Testing Laboratory**

- ◆ To test/analyse drugs including Ayurveda drugs
- ◆ Reporting test of analysis to relevant department/public

# Audit Objectives (3.3)

Performance audit was conducted to assess whether:

- Ayurveda hospitals and dispensaries delivered intended services to the public;
- Ayurveda Medical Colleges in the State were imparting quality medical education:

- Research and Development activities in Ayurveda including standardization of drugs, collection and digitization of ancient literature, conservation and cultivation of medicinal plants were adequate; and
- The activities undertaken by Government for promoting Ayurveda Medical Tourism were effective.

# Audit Criteria (3.4)

Audit findings were benchmarked against the criteria derived from the following documents:

- Acts and Regulations issued by Central Council of Indian Medicine,
- The Clinical Establishment (Registration & Regulation) Act 2010, the Drugs and Cosmetics Act 1940 and relevant Rules and Orders,
- Operational guidelines (September 2008) on National Mission on Medicinal Plants, guidelines on Central scheme for evolving pharmacopoeia standards issued by Department of AYUSH<sup>3</sup> for research activities, guidelines issued by National Mission for Manuscripts and Intellectual Property Rights,
  - National Policy on Indian Systems of Medicine and Homoeopathy 2002, Kerala Indigenous Medicine Departmental Manual,
  - Atomic Energy (Radiation Protection) Rules, 2004 on licensing of X-ray units,
  - The Kerala Ayurveda Health Centres (Issue of licence and Control) Act 2007 and Rules made thereunder (2008).

# Scope and methodology of Audit (3.5)

A mention was made in the Audit Report of C&AG of India, Government of Kerala (Civil) for the year ended 31 March 2004 on the Indian Systems of Medicine and Homoeopathy (paragraph 3.3). PAC discussed the report and made recommendations in its 88<sup>th</sup> Report of 2008-2011 and remedial action is being taken by the Department. The current

<sup>3</sup> Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy.

Performance Audit on 'Indian System of Medicine-Ayurveda' conducted from March to August 2014 covered the Ayurveda health institutions under DISM, Ayurveda colleges and hospitals attached to Ayurveda colleges under the DAME, Oushadhi, the State Medicinal Plants Board, State Horticulture Mission (SHM), the Directorate of Tourism, etc.

The Performance Audit was carried out by test check of records in the Department, Offices of the DISM and DAME, five<sup>4</sup> District Medical Officers (ISM), Oushadhi, 58 Ayurveda health care institutions, three Ayurveda Colleges and attached hospitals selected from five out of 14 districts in the State, selected on the basis of two-tier stratification sampling. Details are given in **Appendix III.** Audit methodology included gathering evidence by conducting joint physical verification along with the department personnel, obtaining photographic evidence wherever possible and conducting patient's survey in selected institutions<sup>5</sup> to assess patient's satisfaction level.

The entry and exit conferences were held with the Secretary to Government, H&FWD in June 2014 and December 2014 respectively, where the audit objectives, audit criteria, audit methodology and audit findings were discussed. Views of the State Government and replies of the departmental officers were taken into consideration while finalising the report.

# **Audit findings**

The audit findings are given in the succeeding paragraphs with separate sections for Ayurveda health care facilities/services, Medical Education, Research and Development activities and Medical Tourism.

# **Under-utilisation of funds (3.6)**

Details of budget provision and expenditure of the Health and Family Welfare Department vis-a-vis ISM and Ayurveda Medical Education and Government of India (GOI) assistance received through NRHM for AYUSH institutions during 2009-2014 are as shown in Table 1.

<sup>4</sup> Alappuzha, Malappuram, Palakkad, Thiruvananthapuram and Thrissur

<sup>5</sup> Survey conducted in 57 selected institutions except Government Ayurveda Research Institute for Mental Diseases (GARIM), Kottakkal.

Table 1: Budget provision and expenditure

(₹ in crore)

Year	Budget Provision		Expenditure		Grant in aid
Teal	H&FWD	ISM*and Ayurveda Medical Education	H&FWD	ISM* and Ayurveda Medical Education	from AYUSH Department, GOI#
2009-10	1517.45	188.56	1518.82	182.65	13.93
2010-11	1849.23	223.84	1847.63	217.38	32.19
2011-12	2647.23	314.07	2591.44	287.26	14.58
2012-13	2897.66	308.74	2919.77	307.37	0.00
2013-14	3330.89	386.56	3283.68	375.10	0.00
TOTAL	12242.46	1421.77	12161.34	1369.76	60.70

<sup>\*</sup> ISM includes Ayurveda, Siddha, Unani, Yoga and Naturopathy

# Funds released through NRHM

(Source: Information compiled by O/o the PAG (A&E), Kerala and NRHM)

The expenditure of ₹1369.76 crore on ISM constituted 11 per cent of the total expenditure on Health and Family Welfare during 2009-2014 in the State. Besides, Local Self Government Institutions (LSGIs) also released funds to the Ayurveda hospitals and dispensaries for procurement of drugs. Audit findings are discussed below:

# Lapse of GOI assistance (3.6.1)

Department of AYUSH, GOI released ₹54.71 crore out of ₹60.70 crore during 2009-2012 as grant-in–aid to SHFWS under NRHM for upgradation of AYUSH hospitals and dispensaries including procurement of medicines, engagement of personnel and supply of drugs in the State. The State has not received any assistance from GOI since 2012-13 as Government of Kerala

(GOK)/NRHM is yet to furnish UCs for ₹9.38 crore of the ₹54.71 crore received by it due to which the grant of ₹12.75 crore receivable from GOI for the years 2012-14 under this component has lapsed. GOK/NRHM's failure to obtain GOI's share resulted in the non-payment of salary to 68 Ayurveda Medical Officers and 203 Therapists appointed under the scheme, since September 2012. Though the Medical Officers were subsequently redeployed in NRHM dispensaries, contracts of 203 Therapists were not renewed after March 2014.

Audit also noticed that due to failure of SHFWS to submit UCs, ₹0.93 crore sanctioned to VPSV Ayurveda College, Kottakkal under 'Development of AYUSH institutions/colleges' during 2012-13 was also withheld by GOI.

[Audit Paragraph 3.1 to 3.6.1 contained in the Report of the Comptroller and Auditor General of India for the year ended 31<sup>st</sup> March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

- 1. Regarding the audit observation that due to non submission of Utilisation Certificates in time, Central Grant of  $\raiseta12.75$  Cr for upgradation of AYUSH Hospitals and dispensaries for the years 2012-2014 got lapsed and  $\raiseta0.93$  Cr sanctioned during 2012-13 to VPSV Ayurveda College, Kottakal was also withheld, the Committee sought the reason for the same as well as the non furnishing of action taken statements on audit paras.
- 2. The witness, Secretary AYUSH Department then submitted the respective action taken report before the Committee. The Committee expressed its displeasure over the delayed submission of action taken notes. The Committee opined that delay could not be tolerated on any ground and directed that it is mandatory to submit the action taken statements within sixty days of presentation of the Report in the Legislature.

- 3. The Secretary, AYUSH department replying on audit Paras deposed that, Utilisation Certificates pertaining to civil works were delayed due to non completion of work in time by the authorised agencies. Later the issue was rectified as all Utilisation Certificates were submitted on completion of the works and in 2014 all the GOI grant was released. Monitoring mechanism for utilisation of fund has been strengthened in the light of audit findings, he added.
- 4. On enquiry of the Committee about the position of withheld funds, the Secretary, AYUSH department informed that, every grant in aid has been resumed on submission of UC's and now there was no delay in this regard. Then Principal Accountant General deposed that, grant in aid sanctioned during a financial year should be expended in the same year itself and fund can be released in lumpsum or in instalments but utilisation certificate was necessary for releasing funds for the next quarter. He also added that final bill payment was inevitable for issuing utilisation certificate.
- 5. The Committee then observed that, since every centrally sponsored scheme had been sanctioned with the prior approval of state government, failure to furnish UC's in time leading to lapse of grant should be treated as administrative lapse and the officials concerned should be made accountable for the same. The Committee directed the AYUSH department to submit a report specifically on the status of the lapsed grant in aid amount of ₹12.75 Cr receivable from Government of India and withheld grant of ₹0.93 crore sanctioned to VPSV Ayurveda College, Kottakkal.

#### Conclusions/Recommendations

6. The Committee observed that the failure to furnish the Utilisation Certificates in time leading to lapse of grant for Centrally sponsored schemes should be treated as administrative lapse and the officials concerned should be made accountable for the same. The Committee directs the AYUSH department to submit a report specifically on the status of the lapsed amount of ₹12.75 crore receivable from Government of India as grant in aid to SHFWS under NRHM for upgradation of Ayush hospitals and dispensaries and withholding of ₹0.93 crore sanctioned to VPSV Ayurveda college, Kottakkal.

### Lack of Development of AYUSH institutions (3.6.2)

Under the scheme for development of AYUSH institutions/colleges, GOI sanctioned (June 2010) ₹ 2.19 crore to Government Ayurveda College (GAC), Thiruvananthapuram for construction of buildings for establishing additional departments for Preventive Ayurveda, Yoga, Naturopathy and Vishachikitsa and released ₹1.5 crore. Audit noticed that GAC Thiruvananthapuram could not start the work due to which the amount was finally refunded to GOI (May 2013). Government replied (December 2014) that M/s. Habitat Technology Group who were entrusted with the work were not willing to take up the work at the prevailing PWD Schedule of Rates and that the PWD was also not interested in undertaking the work. The reply is an admission of inefficiency of the department to make arrangements for the construction works when funds were available for the purpose and is a matter of concern.

[Audit Paragraph 3.6.2 contained in the Report of the Comptroller and Auditor General of India for the year ended 31<sup>st</sup> March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

- 7. The Committee sought reply for the audit observation that, ₹2.19 crore sanctioned for construction of buildings for establishing additional departments in Government Ayurveda College, Thiruvananthapuram has been lapsed due to non commencement of the construction work.
- 8. Regarding this, the witness, Secretary, AYUSH Department deposed that on releasing ₹1.5 crore out of ₹2.19 crore sanctioned from Government of India M/s Habitat Technology Group, was entrusted with the work at prevailing PWD rates in 2011. But on disagreeing to continue the project at the rates fixed in 2011, M/s Habitat Group withdrew from the project in 2013 and this resulted in recouping of fund by Government of India.

- 9. The Committee expressed its displeasure over the fact that the amount was refunded in 2013 itself without examining the possibilities of completing the construction work. The Committee also expressed its objection in not furnishing the details about the alternative methods to realise the project.
- 10. Then the witness Secretary, AYUSH department informed that, being an approved work agency, the project was given to M/s Habitat Group without tender notification. The Committee was unhappy to note that eventhough the project had been given to an approved agency identified by the department in 2011 itself, it ended up in fund lapse.
- 11. The Committee further observed that if M/s Habitat Group was not ready to take up the construction work, the department should have either given the work to another agency on 'risk and cost basis' or should have revised the rates. But unfortunately there was no such initiative from the department and it caused huge loss to the health care infrastructure of the State. In this context, the Committee directed the Government to submit a detailed report regarding the delay in commencing the sanctioned work and the reasons for not exploring alternate methods by the department to ensure project realisation. The witness, Secretary, AYUSH Department agreed on that.

#### **Conclusions/Recommendations**

12. The Committee understands that M/s Habitat group withdrew from the sanctioned project for the construction of buildings for establishing additional departments in Government Ayurveda College, Thiruvananthapuram in 2013 on disagreeing to take up the work at schedule of rates of PWD fixed in 2011. The Committee is of the view that instead of shelving the project the department should have either given the work of the project to another agency on risk and cost basis or should have revised the rates. The Committee finds that refunding the amount for the work without even considering alternative methods for completing the project has caused huge loss to the health care infrastructure of the State. The Committee directs the Government to submit a detailed report regarding the reasons for the delay in commencing the sanctioned work and the reasons for not exploring alternate methods by the department to ensure project realisation.

## Ayurveda Health care facilities (3.7)

# Lack of formation of full-fledged AYUSH department (3.7.1)

The National Policy on ISM&H 2002 and GOI's directions (March 2011) envisaged formation of a separate AYUSH Department with a full-fledged Secretary in States. The State Government appointed a Special Secretary only in August 2014 exclusively to look after the ISM & Homoeopathy under H&FWD. However, a separate AYUSH department is yet to be established. Government stated (December 2014) that the formation of a separate AYUSH department was under active consideration of the Government.

[Audit Paragraph 3.7.1 contained in the Report of the Comptroller and Auditor General of India for the year ended 31<sup>st</sup> March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

13. When going through the audit observations on the lack of formation of full-fledged AYUSH department, the Committee enquired whether any revenue loss has occurred due to delayed formation of separate AYUSH department in the State. The Secretary AYUSH department, clarified that there was no such reference in the audit observation and the only thing they pointed out was the necessity to establish a separate AYUSH department.

#### **Conclusions/Recommendations**

#### 14. No comments.

# Opening of new dispensaries (3.7.2)

One of the stated objectives of the Department of ISM was to open an Ayurveda dispensary in every Grama Panchayat (GP). However, no time frame was fixed for attainment of the objective. Audit noticed (March 2014) that 65 out of 425 GPs in the test checked districts did not have either a Government Ayurveda Hospital or Dispensary and hence the objective of having Ayurveda dispensary in every GP was not achieved. However, in 63 of the 65 GPs, temporary dispensaries were being operated by NRHM.

Government admitted (December 2014) that 178 panchayats in the State were without Government ISM hospitals and dispensaries and that ₹70 lakh was earmarked during 2014-15 for opening such institutions in uncovered GPs.

[Audit Paragraph 3.7.2 contained in the Report of the Comptroller and Auditor General of India for the year ended 31<sup>st</sup> March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

- 15. The Committee observed that, eventhough the objective of the department of Indian System of Medicine was to establish an ayurveda dispensary in every Grama Panchayat, it has not been achieved yet. The Committee then enquired the reason for non establishment of Ayurveda dispensaries in 65 panchayats out of the 425 test checked by audit.
- 16. When the Committee asked for a clarification on the action taken statement reading "NRHM ayurveda dispensaries are currently functioning in 245 Grama Panchayats where either department dispensaries are functioning or not", an officer from Accountant General clarified that, in certain places both Government and NRHM dispensaries had been operating at the same time.
- 17. The Committee observed that, Government dispensaries were supposed to be sanctioned to those panchayats where NRHM dispensaries were absent and if a dispensary was sanctioned to any panchayat where NRHM dispensary was already functioning, then the former should have been withdrawn. The Committee then asked about the number of panchayats where both NRHM and Government Ayurveda dispensaries were present and expressed its displeasure over the co-existence of both while many Panchayats did not have either of them.
- 18. The Secretary, AYUSH department informed that NRHM dispensaries were usually alloted on request to those panchayats which did not have Government Ayurveda dispensaries and it was mandatory to withdraw one dispensary from those places where both were present. He also added that such dispensaries were not withdrawn yet and the Central scheme (NRHM) still continues in the State. The Committee then decided to recommend that Government Ayurveda dispensaries should be sanctioned to panchayats wherever necessary based on their resolution in this regard.

#### Conclusions/Recommendations

19. The Committee observes that NRHM dispensaries were usually allotted to those panchayats on their request where Government dispensaries are absent and it is mandatory to withdraw one dispensary from those places where both are present. The Committee points out the co-existence of both Government dispensaries and NRHM dispensaries in many panchayats while many Grama Panchayats lack either of them. The Committee directs to furnish the details regarding panchayats where both dispensaries are functioning. The Committee recommends to sanction Government Ayurveda dispensaries to panchayats wherever necessary.

### Co-location of AYUSH facilities (3.7.3)

GOI introduced a Centrally Sponsored Scheme, during the 10<sup>th</sup> plan (2002-03 to 2006-07), to integrate AYUSH health care services with mainstream health care services. It was envisaged that there should be a cafeteria approach of making AYUSH and allopathic systems available under one roof at Primary Health Centres (PHC)/Community Health Centres (CHC)/District Hospitals (DH). Apart from improving people's access to health care services, it was also intended to provide a choice of treatment to the patients. Under the scheme, GOI made provision for release of grants to State Governments for co-location of AYUSH facilities at PHCs/CHCs/DHs. Audit observed that GOK failed to submit proposals to GOI for co-location of AYUSH facilities with PHCs/CHCs/DHs and thus failed to obtain GOI assistance for the same. In none of the test checked districts, Ayurveda and Allopathy co-existed at PHCs/CHCs/DHs resulting in denial of facility of quality and cost effective health care under a single roof.

Government replied (December 2014) that presently seven Government Ayurveda Dispensaries (GADs) are functioning in the premises of PHCs/CHCs but the policy of co-location of AYUSH facilities at PHC/CHC/DH level could not materialise in the State due to reluctance of professional and service organizations in Allopathic (modern) medicine sector.

The fact, however, remains that Government's failure to address the misplaced concerns of the practitioners of modern medicine has resulted in denying people easy access to health care services of their choice, besides loss of GOI grant.

[Audit Paragraph 3.7.3 contained in the Report of the Comptroller and Auditor General of India for the year ended 31<sup>st</sup> March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

- 20. The Committee considered the audit observation that Government of Kerala failed to submit proposals to integrate AYUSH health care services with mainstream health care services as envisaged by a Centrally Sponsored Scheme introduced by Government of India during 10<sup>th</sup> plan period and thereby lost the Central assistance for the same. Replying to the query of the Committee regarding this, the witness, Secretary AYUSH department deposed that Government of India introduced the Centrally sponsored scheme with a cafeteria approach of making AYUSH and allopathy system available under one roof at PHCs/CHCs/DHs. But in Kerala AYUSH institutions were established long before as compared to other states and therefore the co-location of AYUSH facilities with mainstream would cause additional expense and would be counter productive. Besides that certain, professional issues regarding the integration of different systems of medicine should also be addressed, he added.
- 21. The Committee then observed that, integration of different system of medicine was a national policy initiative and co-location of AYUSH with mainstream was considered to be the first phase of Holistic medicine approach. Therefore the Government might take a policy decision to establish Ayurveda hospitals in the same premise of allopathy institutions by utilising the central scheme in panchayats where Ayurveda hospitals were either not established or were working in rental buildings.
- 22. The Committee also opined that an exclusive list of Ayurveda hospitals operating in rental buildings should be obtained from District Medical officers concerned for the effective implementation of co-location wherever possible. The witness, Secretary AYUSH department responded in the affirmative and opined that co-location was the stepping stone towards holistic approach and land under health department could be utilized for establishing AYUSH facilities.
- 23. The Committee further discussed about the possibility of deputing modern medicine doctors to Ayurveda hospitals for solving casuality issues where the AYUSH system failed to

address and commented that the government could create necessary posts of modern medicine doctors in AYUSH hospitals for achieving the objective. The Witness, Secretary, AYUSH department agreed on the same and supplemented that, there was nothing wrong in creating post of modern medicine doctors in AYUSH institutions. The Secretary also added that in Trivandrum Ayurveda Medical College, the service of a Gynaec surgeon and Anaesthetist was essential but the decision of Indian Medical Association to disassociate with all other systems of medicine made it impossible to realise. No one except other state graduates would turn up even if post creation could be done by the government. In other states, AYUSH institutions has been offering emergency medical care as well. But here we are denying to accept the surgical and gynaec exposure of Ayurveda/Homoeo doctors on certain unscientific reasons. Being a policy issue, the Committee might mention the same in detail to resolve the dilemma, the Secretary urged.

- 24. The Committee then observed that, many hospitals in private sector had already materialised the holistic approach in areas like orthopaedics and they were appointing Ayurveda doctors in modern medicine institutions to serve the purpose. The Committee opined that in this circumstance, the reluctance for colocation in government sector could not be entertained. The Committee also criticized that, the failure of government to address the misplaced concerns of the practitioners of modern medicine resulted in denying the public easy access to health care services of their choice and thereby causing huge loss of central assistance. Therefore the Committee decided to recommend that, being the first phase of materializing the national policy of holistic approach in health care services, the co-location of AYUSH institutions with that of modern medicine should be implemented at the earliest.
- 25. Then the Witness, Joint Director, Indian System of Medicine supplemented that, there has been a direction from the Central Government that IUCD insertions should be done by trained Ayurveda doctors. But it has not been materialised yet since the allopathy wing denied to train Ayurveda doctors in this regard. The Committee agreed on that point and decided to recommend that the government should issue necessary orders to train the Ayurveda doctors in IUCD insertions and to adhere to Central Government directions in this regard.
- 26. On a query about the grant obtained for co-location of AYUSH facilities, the Secretary, AYUSH informed that, the audit observation was just about the non implementation of co-location and there was no mention about the quantum of one time grant which could be

availed only after submitting the co-location proposal. The Committee also noticed that in many other States in India, emergency wing of Allopathic doctors are functioning in Ayush Hospitals and vice versa and the Central Policy for treatment in holistic in nature and co-location of Ayush institutions in the premise of modern medicine hospitals is meant for selection of treatment method at patients' choice. The Committee also view that the co-location of hospitals in the State is not materializing all of a sudden and a pragmatic approach should be explored for allaying the fears and misconceptions of allopathic doctors and as a first step, the post of a gynaec surgeon and anesthetist in Government Ayuderveda Colleges should be filled up from the allopathic doctors.

#### Conclusions/Recommendations

- 27. The Committee observes that the failure of Government to address the misplaced concerns of practitioners of modern medicine resulted in denying the public easy access to health care services of their choice and thereby caused huge loss of central assistance. Therefore the Committee recommends that being the first phase of materializing the national policy of holistic approach in health care services, the co-location of AYUSH institutions with that of modern medicine should be implemented at the earliest.
- 28. The Committee directs the department to urge the Government to take a policy decision to establish Ayurveda hospitals in the same premises of hospitals with allopathy system in panchayats where Ayurveda hospitals are not established or working in rented buildings.
- 29. The Committee recommends that the Government should issue necessary orders to train the Ayurveda doctors in IUCD insertions and to adhere to Central Government directions that IUCD insertions should be done by trained Ayurveda doctors.

# Up-gradation and Standardisation of Ayurveda Hospitals/Dispensaries (3.7.4)

GOK aimed to provide better Ayurveda treatment facilities by upgradation of hospitals in a phased manner under the scheme Upgradation and Standardisation of hospitals after fixing standards for infrastructure facilities and services. GOK had also planned to standardise the facilities in Ayurveda dispensaries in partnership with LSGIs on a project mode under the scheme Strengthening and Improvement of dispensaries. Under the schemes, it was inter alia planned to (i) increase the bed strength from the existing 50 to 100 in 10 District Ayurveda Hospitals (DAH),

(ii) to provide X-ray facilities, Panchakarma and Ksharasutra units in all DAHs (iii) to provide laboratory facilities in all hospitals and (iv) to provide equipments/furniture/utensils/LPG connection and drugs, etc. in dispensaries. During 2009-2014, GOK provided ₹15.75 crore for upgradation of hospitals and ₹4.50 crore for strengthening of dispensaries of which DISM spent ₹ 14.53 crore and ₹3.77 crore respectively.

Audit noticed that the bed strength was increased to 100 only in DAH Kozhikode against 10 DAHs proposed as GOK is yet to accord sanction for other DAHs. While X-ray units were provided in all DAHs except DAH Ernakulam, Panchakarma and Ksharasutra units were not yet provided in three DAHs and 10 DAHs respectively. Laboratories were provided only in 46 hospitals out of the 118 hospitals in the State. Details of poor infrastructure facilities in the test checked hospitals and dispensaries such as hospitals and dispensaries functioning in old/dilapidated/unfit/leaking buildings, space constraints for functioning of wards/therapy room, non-provision of basic amenities like toilet, drinking water, electricity, water connection, etc., non-functioning X-ray units, laboratory units, etc., noticed in Audit are given in **Appendix III**. GOK/Clinical Establishment (Registration & Regulation) Act 2010 specified 39 common items/equipment required in Ayurveda dispensaries. Audit found non-availability of common items/equipment when compared to the above list as shown in **Appendix III**.

DISM had not fixed any standards for infrastructure facilities and services in hospitals/dispensaries. It had also not prepared any evaluation report on implementation of the schemes for each year specifying the physical targets and achievements there against resulting in non-assurance of effective implementation of the schemes.

Government stated (December 2014) that at present there is no provision for standardisation of ISM institutions and a Core Committee would soon be formed for the purpose. It was also stated that presently permission to start X-ray and Laboratory units were granted only to hospitals where adequate space was available.

[Audit Paragraph 3.7.4 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

- 30. The Committee observed that the details furnished by government regarding the audit observation on upgradation and standardisation of Ayurveda hospitals were not specific and comprehensive. The Committee enquired whether the government had fixed any standard for essential infrastructure facilities and health care services to be provided in AYUSH institutions.
- 31. Then the witness Secretary, AYUSH department informed that there was no such standard fixed for AYUSH institutions in Kerala. He also added that, 39 essential items required for health care institutions mentioned in the audit report did not specify whether those institutions were Ayush or not and the source of those items were also not mentioned in the audit report. Then an officer from Accountant General intervened to clarify that the 39 items required for dispensaries were mentioned in the Central Act viz Clinical Establishment (Registration & Regulation) Act 2010. The Committee made it clear that the particular legislation was not made in Kerala and the audit observation was based on the Central Act.
- 32. Further, the Secretary, AYUSH described about the norms for infrastructure standard fixation followed by the department. In every year the hospital in charge would submit a proposal for equipment updation which was prepared by comparing the dispensary equipment list of the State with that possessed by hospitals. But after the establishment of AYUSH ministry, the upgradation and standardisation was based on the essential National Public Health Standard and an indicative list named "KASH" (Kerala Accreditation Standards for Hospitals). NABH accreditation was also considered as a superlative qualification, he added. He also informed that about fourteen institutions were expected to be upgraded to the above mentioned standard in the following year and proposal for budget allocation had already been provided.
- 33. The Committee then enquired whether sources other than funds allotted by Government could be utilised for the effective upgradation of Ayush institutions if a common infrastructure standard for every hospital was fixed. The Committee opined that the objective could only be achieved gradually and only where the basic standard was fixed then only the authorities could check out for alternatives in case of insufficient funding. Therefore the Committee decided to recommend that based on the provisions of Clinical Establishment (Registration and Regulation) Act, 2010, or NABH accreditation norms, infrastructure and service standardisation for AYUSH institutions in the State should be adopted after consulting with the experts and the same communicated to whomsoever concerned at the earliest.

- 34. The Committee further expressed its concern over the audit observation that majority of the basic amenities like Electricity, Water, Laboratory, X-ray, Toilet etc., specified in the Central Act were absent in most of the AYUSH institutions in Kerala. It was also supplemented that, shortage of infrastructure facilities was worse in NRHM institutions.
- 35. The Committee affirmed that fixing a common standard for basic amenities in AYUSH institutions was essential and should be communicated to Local Self Governments inorder to provide those facilities in the transferred institutions as well.
- 36. On a query about the amount sanctioned in plan fund to district hospitals for upgradation, the Secretary AYUSH department clarified that ₹5 lakh each has been allotted to five district hospitals in the financial year 2015-16 and its progress has not been assessed yet.

#### Conclusions/Recommendations

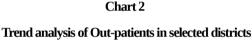
- 37. The Committee recommends that after the establishment of Ayush ministry the upgradation and standardisation of different levels of Ayurvedic institutions in the State must be done in line with the essential National Public Health Standards with the indicative list named KASH (Kerala Accreditation Standards for Hospitals) to the advanced NABH guidelines. An Expert Committee may be formed to frame the guidelines suited for each level of institutions and LSGD may also be involved for assisting its implementation. The Committee recommends that infrastructure and service standardisation for AYUSH institutions in the State should be adopted after discussing with the experts either based on the provisions of Clinical Establishment (Registration and Regulation) Act, 2010, or NABH accreditation norms and communicated to whomsoever concerned at the earliest.
- 38. The Committee expresses its concern over the audit observation that majority of the basic amenities like Electricity, Water, Laboratory, X-ray, Toilet etc., specified in the Central Act were absent in most of the AYUSH institutions in Kerala. Therefore the Committee recommends to fix a common standard for basic amenities and infrastructure facilities in AYUSH institutions and to communicate the same to Local Self Governments inorder to provide those facilities in the transferred institutions as well.

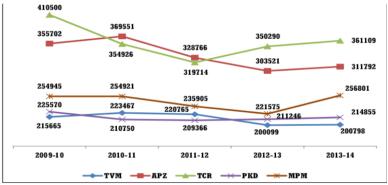
### Health care services (3.8)

### Out-patient and In-patient services (3.8.1)

Out-patient services were offered by both hospitals and dispensaries while In-patient services were offered only by hospitals. During the year 2013-14, Government Ayurveda Hospitals (GAH) and dispensaries in the State had patient footfall of 2.04 crore which included 93,387 in-patients. Footfall of out-patients and bed occupancy in respect of test-checked hospitals/dispensaries are discussed below.

Audit analysed the footfall of out-patients in test-checked hospitals and dispensaries under DISM in five selected districts. It was seen that the number of out-patients declined in all test checked districts when compared to the footfalls in the year 2009-10 except in Malappuram where an upward trend was noticed in year 2013-14 as shown in Chart 2





Audit also noticed that the average bed occupancy against the available bed strength during the period 2009-2014 in 10 out of 14 test checked hospitals ranged between 33 and 90 per cent as detailed in **Appendix III**. The lowest bed occupancy of 33 per cent was noticed at GAH, Punnapra. It was noticed that due to the absence of male Nurses/Therapists and Cook, the hospital neither provided therapy treatment to male patients nor provided diet to its patients, which could explain the very low bed occupancy in the hospital. Non-availability of Specialist doctors, Therapists and also the isolated location of the hospitals were cited as reasons for the

lower bed occupancy by the Medical Officers of two hospitals (GAH Thiruvali and DAH Valavannur). Government confirmed (December 2014) these reasons. Government however, did not mention about the measures taken to improve the bed occupancy.

[Audit Paragraph 3.8.1 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

39. On a query about the audit observation on the decrease in footfall of out patients and inpatients in government Ayurveda hospitals, the Secretary AYUSH department deposed that there was no such decrease in the number of patients. But individual hospitals were experiencing declining patient footfall due to increase in number of Ayurveda healthcare institutions.

#### Conclusions/Recommendations

#### 40. No Comments

# Shortage of Medical Officers and paramedical staff (3.8.2)

Audit noticed inadequate number of Medical Officers and Paramedical staff in position against sanctioned strength in hospitals/dispensaries under the control of DISM (status as on 1 October 2014) as given in Table 2.

Name of post	Sanctioned	Actual	Shortage
Medical Officers/Specialists	1136	1062	74
Nurses	401	389	12
Therapists	30	19	11
Pharmacists	931	853	78
Lab Technicians	15	5	10
Radiographers	2	0	2
Nursing Assistants/ Attenders/ Pharmacy Attenders	1223	1051	172

Table 2: Shortage of staff

Staff pattern for Avurveda hospitals under the DISM with reference to the bed strength was fixed as early as in May 1978. Audit noticed shortage/excess in the number of posts sanctioned when compared with the number of posts required against the average bed occupancy in hospitals test checked. It was seen that in Government Avurveda Marma Hospital (GAMH), Kanjiramkulam and Government Visha Vaidya Hospital (GVVH), Wadakkanchery, the average bed occupancy during 2009-2014 was more than the sanctioned bed strength. However, there was shortage in the sanctioned posts of Medical Officers/ Pharmacists/Nurses, In GAMH, Kanjiramkulam, against sanctioned bed strength of 10, average bed occupancy was 45 indicating that a large number of patients were availing the facilities in the hospital. However, against the required staff strength of three Medical Officers, two Pharmacists and five Nurses, there was a shortage of one Medical Officer, one Pharmacist and three Nurses. Similarly, in the GVVH, Wadakkanchery, there was shortage of two Nurses, while at GAH Nedumangad, the shortage of nurses was three. In view of the fact that certain hospitals with lesser average bed occupancy had the full complement of sanctioned staff strength and in some cases even excess staff (Appendix III), failure of GOK to rationalize the staff strength has resulted in hospitals with higher number of patients having to function with lesser number of staff.

Shortage of manpower significantly affected service delivery in hospitals/dispensaries as elucidated below:

- In Government Ayurveda Research Institute for Mental Diseases (GARIM), Kottakkal in Malappuram district, the post of Hospital Superintendent remained vacant since April 2010 and against three sanctioned posts of Specialists, two posts were vacant from November 2012.
- It was noticed that though sanctioned strength of Nurses were filled up in 13 out of 14 hospitals test checked, no male Nurses were appointed in eight of these hospitals.
- The post of Therapist was essential for carrying out the Kriyakarmam i.e., panchakarma procedures. Therapists/Masseurs were assigned the responsibility of application of various massages to the patients on the direction of the physician concerned. Ten out of 14 hospitals test checked did not have sanctioned posts of Therapists. While Hospital Management Committees (HMCs) in five<sup>6</sup> hospitals had engaged Therapists for attending to patients, in five<sup>7</sup> other hospitals test checked, these services were delivered by Nurses/Nursing Assistants/Attenders who were not trained in Therapy.

<sup>6</sup> DAH Alappuzha, DAH Palakkad, GAH Guruvayur, GAH Irinjalakuda and GAH Palode.

<sup>7</sup> DAH Valavannur, GAH Punnapra, GAH Thiruvali, GVVH Wadakkanchery and RVDAH Thrissur.

- ullet In GAH Punnapra, only female Nurses were available and consequently, the male patients were denied therapy.
- $\bullet$  In the absence of sanctioned posts of Pharmacists in two<sup>8</sup> of 36 Government dispensaries test checked, Attenders were dispensing the medicines.
- Despite nine of the 14 hospitals test checked having laboratories, the post of Laboratory Technician was not sanctioned for four hospitals. Laboratory Technicians were appointed by Government in two hospitals and laboratories in six hospitals were functioning with technicians appointed by HMC on daily wage basis. In GAH Nedumangad, laboratory was yet to be made operational.

Government stated (December 2014) that DISM had informed that the vacant posts of Medical Officers and paramedical staff were not filled up since advice for appointment from Kerala Public Service Commission (KPSC) was yet to be received and that the posts of Attenders, which were to be filled up by promotion were not done due to shortage of staff in the lower categories. The reply is not acceptable in view of the fact that Government/HMC could have engaged these personnel on temporary basis to address the shortfall in manpower till permanent filling up of these posts.

[Audit Paragraph 3.8.2 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

 $\label{thm:excerpts} \textit{Excerpts from Committee's discussion with department officials.}$ 

41. The Committee discussed about the inadequate staff strength in AYUSH department as reported by the audit. The Secretary, Ayush informed that subsequent to the audit findings several posts were created in Ayush department. The Committee directed to submit an updated report on staff strength.

<sup>8</sup> GAD Choondal and GAD Kandasankadavu

<sup>9</sup> GAH Guruvayur, GAH Irinjalakuda, GAMH Kanjiramkulam and GAH Nedumangad

<sup>10</sup> GARIM Kottakkal and RVDAH Thrissur

<sup>11</sup> DAH Alappuzha, DAH Palakkad, DAH Valavannur, GAH Guruvayur, GAH Irinjalakuda and GAMH Kanjiramkulam.

- 42. The Committee further enquired about the sanctioned strength of Ayurveda Nurses and the institutions which were offering such nursing courses. Then the witness Joint Director, Indian System of Medicine informed that the Nursing course has been offered by Ayurveda colleges. The Secretary, AYUSH department supplemented that the sanctioned strength of Ayurveda nurses is 401 at present.
- 43. On a query about the ratio of therapists appointed in AYUSH hospitals, the witness Joint Director, Indian System of Medicine deposed that, the sanctioned strength of Therapists are not at all enough as compared to the requirement. Eventhough a number of posts has been created in health department, the required staff strength was not yet achieved, he added.
- 44. The Committee further asked about the reason for the shortage in number of male nurses in Ayurveda sector eventhough the Female-Male nurse ratio has been fixed as 5:1 in 1967 itself. The Committee observed that, the private institutions hesitated to appoint male nurses after the agitation for minimum wages in nursing sector. The Secretary, AYUSH department then admitted that there was shortage of male nurses in Ayurveda sector.
- 45. Further, the Committee deliberated about the adverse effects in Ayurveda health care due to shortage of qualified male therapists. The Secretary, AYUSH department detailed that 41 new posts were created recently but it needs more male therapists. He added that only 30 students were admitted in Government Ayurveda Colleges for this course in every year and many of the private institutions were interested in offering the course. Since university recognition is not necessary for diploma course with less than one year duration, a proposal in this regard had been submitted to government but has not been sanctioned yet, he added.
- 46. Then the Committee observed that shortage of qualified male therapists in Ayurveda sector will result in the induction of unqualified persons as therapists and opined that this might cause serious problems in Ayurveda health care. Therefore the Committee decided to recommend that, Ayurveda therapists course should be sanctioned to more institutions which possess necessary infrastructure.

#### Conclusions/Recommendations

47. The Committee understands that the newly formed AYUSH department is going through tethering problems and so a comprehensive study must be conducted to record the details of staff and equipments in present form to assess the number of institutions to be created/upgraded and number of posts in each category to be created, assessing financial

implications. Any Central assistance may also be sought for the above purpose. Committee urges to furnish the comprehensive study report without delay. The Committee also directs to submit an updated report on the staff strength in Ayush Department with respect to the creation of posts subsequent to audit findings.

48. The Committee observes that there is shortage of qualified male therapists in Ayurvedic sector. The Committee points out shortage of male therapists may result in the induction of unqualified persons as therapists ultimately causing serious problem in Ayurveda health care. Therefore Committee recommends that Ayurveda therapists course including diploma course should be sanctioned to more institutions which possess necessary infrastructure so that qualified therapists are brought out.

# Diet (3.8.3)

The Kerala Indigenous Medicine Departmental Manual and subsequent orders of Government prescribed various food items and their quantity to be distributed as diet to patients. The DISM enhanced (August 2013) the cost of diet to in-patients from the existing ₹25 to ₹30 per day per patient, with direction to limit the cost to the prescribed rate of ₹30. Audit noticed (July 2014) that the food items and the quantity supplied in test checked hospitals viz., bread & milk in the morning, rice & green gram at noon and evening were not as prescribed<sup>12</sup> in the Manual and Government orders. Even though 13 out of 14 test checked hospitals provided Kanji diet to its patients, it was seen that GAMH Kanjiramkulam did not include bread and milk in its diet. Three hospitals (DAH Valavannur, GAH Guruvayur and Panchakarma Hospital, Alappuzha) failed to supply bread to its patients. Even the hospitals which distributed bread to its patients distributed only 100-200 gms against the stipulated 400 gms. Against the stipulated requirement of 500 ml milk, all the hospitals which distributed milk, supplied only 200 ml to 250 ml to its patients. Audit noticed that out of 14 Ayurveda hospitals, the GAH Punnapra did not provide diet to in-patients as there was no cook in the hospital. The diet was not able to provide nutritive food to injured sports persons admitted in the Sports unit of GAH Nedumangad and Rama Varma District Ayurveda Hospital (RVDAH), Thrissur.

Milk Diet: Milk 750 ml, Bread 400 gm, Butter 20 gm., Biscuit 40 gm., Egg 1 no., Kanji Diet: Rice 200 gm., Green gram 60gm., Milk 500ml., Bread 400gm., Butter 25 gm.

During survey, 66 per cent of the in-patients expressed that diet provided was sufficient, 10.38 per cent opined that it was not sufficient, while others either did not respond or were subjected to restricted diet as part of the treatment.

Government replied (December 2014) that the diet charges of  $\mathbb{T}$ 30 per day were grossly insufficient to give quality food to patients and enhancement of diet charges is under its consideration.

[Audit Paragraph 3.8.3 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

49. The Committee considered the audit finding that the diet provided as part of treatment was neither sufficient nor up to the quality prescribed. The Committee observed that 13 out of 14 hospitals test checked served rice soup only and didn't provide milk diet. The Committee opined that the diet charge of  $\stackrel{<}{\phantom{}^{\sim}}$  30/day per patient was insufficient to provide adequate diet. Therefore the Committee decided to recommend that diet charges should be enhanced so as to serve food items in prescribed quantities as laid out in the Kerala Indigenous Medicine Departmental Manual.

#### Conclusions/Recommendations

50. The committee finds that the diet provided to patients in Ayurveda hospitals was neither sufficient nor up to the quality prescribed. The Committee opines that the diet charge of ₹30/day per patient was insufficient to provide adequate diet. Therefore the Committee recommends to enhance the diet charges and to serve food item in prescribed quantity in Kerala Indigenous Medicine Departmental Manual.

# X-ray services (3.8.4)

Atomic Energy (Radiation Protection) Rules, 2004 on licensing of X-ray units provide for issuing of licence for operating radiation installations after inspecting the working practices being followed to ensure adherence to prescribed safety standards, availability of appropriate radiation monitors and dosimetry devices for purposes of radiation surveillance, etc. The Director of Radiation Safety (DRS) is the authorised agency in Kerala to issue licences on behalf of Atomic Energy Regulatory Board.

Five of the 14 hospitals test-checked were provided with X-ray units. Out of these, three hospitals (DAH Alappuzha, RVDAH Thrissur and DAH Valavannur) offered X-ray services and in two hospitals (GAMH Kanjiramkulam and DAH Palakkad), the units were not made functional. Audit noticed that X-Ray machines were operated in DAH Alappuzha from May 2012 and in RVDAH Thrissur from December 2011 without obtaining Certification of Safety from the DRS. The technician handling the X-ray unit in DAH Alappuzha was not provided with TLD<sup>13</sup> film badges to indicate levels of exposure to radiation. In the absence of TLD badges and safety certification from the DRS, Audit could not obtain reasonable assurance that patients and technicians were not being exposed to more than permissible radiation levels.

Government replied (December 2014) that action has been initiated to obtain safety certificates from DRS.

[Audit Paragraph 3.8.4 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

51. On a query about the audit observation on X-ray facility, it was clarified that the department had already taken steps to obtain certification of the Director of Radiation Safety for X-ray unit installation. The Committee accepted the same.

#### Conclusions/Recommendations

52. No comments.

# Oil massage (3.8.5)

Oil massages play a major role in the treatment protocol under Ayurveda. 'Thailam¹¹' used in therapy requires to be heated prior to application on the patients. Audit noticed that in DAH Valavannur in Malappuram district, Panchakarma Hospital, Alappuzha, GAH Nedumangad, GAH Punnapra, GAH Palode, GVVH Wadakkanchery and GAH Thiruvali there was no heating facility in the therapy/treatment room. Failure of the hospitals to make provision for heating Thailam resulted in patients being forced to bring stoves and fuel for warming the Thailam, which is a matter of concern.

<sup>13</sup> Thermo Luminescent Dosimeter.

<sup>14</sup> Thailam – Medicated oil.

The inpatient survey showed that 30.19 per cent of patients had to bring fuel and stove for heating Thailam and 64.15 per cent of patients had to bring the raw herbal materials required for the treatment.

CMO, DAH Valavannur stated that the facility was not provided as sanction was not received for LPG installation.

Government replied (December 2014) that majority of in-patients in hospitals have to undergo various treatment procedures and accepted that the allocation for fuel was meagre. It also stated that DISM had since issued directions to District Medical Officers in this regard.

The reply is not acceptable in view of the immense hardships being caused to patients. In the circumstances, the Government/DISM is required to provide these basic facilities.

[Audit Paragraph 3.8.5 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

53. Regarding the audit observation on failure of hospitals to make provision for heating facility in the therapy/treatment room, the Committee observed that, with the initiative of concerned Medical Officers, certain hospitals had already established fullfledged physiotherapy units by channelising local aid. The Committee opined that it could be adopted in all Ayurveda Hospitals and clinics if the Medical Officers take initiative in time to utilise the allotted fund. The Committee directed that the concerned authorities should ensure a local alternative if there was any lack of facilities in the newly established physiotherapy units.

#### Conclusions/Recommendations

54. The Committee observes that due to initiative of concerned Medical Officer, certain Ayurveda hospitals have full fledged physiotherapy units. The Committee opines that the Medical Officers in all Ayurveda Hospitals and Clinics should take initiative in time to utilise the allotted fund. The Committee observe that the administrative system in AYUSH institutions is completely lethargic and it should be revamped by prioritising the urgent needs and also by constant monitoring. The Committee directs that the concerned authorities should make sure that heating facility is available in therapy treatment rooms and local aid could be sought for providing the facility.

### Distribution of Ayurveda drugs to patients (3.8.6)

Government Ayurveda Hospitals and Dispensaries supply free drugs to all patients obtaining treatment from these institutions. Audit noticed following deficiencies in this regard:

- The survey conducted among in-patients and out-patients indicated that 33.02 per cent of in-patients and 58.51 per cent of out-patients were getting all drugs from Pharmacy, 64.15 per cent of in-patients and 35.33 per cent of out-patients purchased some drugs from the market due to non- availability of drugs in Pharmacy. Others did not respond. Further, 1.89 per cent of in-patients were purchasing drugs from market due to difficulty in coming to the hospitals as drugs were supplied from Pharmacy on alternate days only during treatment period. Moreover, 1.09 per cent of out-patients were skipping the treatment as cost of drugs was not affordable.
- GOI had introduced (October 2009) shelf life for Ayurveda medicines with effect from 1 April 2010 and directed that medicines should not be in circulation after their expiry date. In the test checked hospitals and dispensaries, Audit noticed several items of time expired medicines in main stock and pharmacy and administration of such drugs to patients. The CMO, DAH Valavannur stated that they were not aware of the introduction of expiry dates for Ayurveda drugs as the information was not communicated to them. Audit also noticed that time expired medicines were administered to patients in GAD Mundathikode in Thrissur district, even after having been pointed out about such defects by Audit.

Government stated that DISM have cautioned CMO, DAH Valavannur and GAD Mundathikode about their ignorance on the subject. However, Audit observed that the DISM had not issued any directions to DMOs regarding introduction of shelf life of Ayurveda drugs.

[Audit Paragraph 3.8.6 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

55. Regarding the audit observation that Ayurveda medicines have been administered after its expiry dates in many hospitals, the committee enquired how it happened since medicines prepared in hospitals itself were stored only for two days and the other drugs have been supplied by Oushadhi as per indent. Then the witness, Joint Director, Indian System of Medicine clarified that it might have happened due to the supply of medicines nearing expiry to hospitals.

- 56. The Secretary, AYUSH department detailed that those medicines procured by Local Self Institutions were suggested by doctors, of which some of them might not be fast moving and resulted in shelf life expiry. Since procurement had been done as per the quality certification of doctors, shelf life expired medicines could be send back at the time of certification, he added.
- 57. On a query about the intending of medicine, officer from AG intervened to inform that, Local bodies and Government were giving separate intend for procurement. The witness Secretary, AYUSH department further added that DISM had not issued any directions for DMO's regarding introduction of shelflife of Ayurveda drugs. Then officer from AG supported the same and said that, though Government of India introduced the norms on 1st April 2010, no circular in this regard had been issued by the Director yet.
- 58. Then the Committee decided to recommend that Government should issue a circular regarding the introduction of shelflife of Ayurveda drugs. The Committee also recommended that norms should be fixed for further intending of medicine from general fund and local fund based on the actual annual requirement of medicine in every LSGIs and the same should be issued as a circular.

#### Conclusions/Recommendations

- 59. The Committee is astonished to observe that the medicines, after the date of expiry, are being used for treatment in Ayush hospitals, dispensaries and DISM has not yet issued any instruction regarding the shelf life period of Ayurveda drugs as per the norms of Government of India issued in  $1^{\alpha}$  April 2010. The Committee directs to issue a circular regarding the shelf life of Ayurveda drugs.
- 60. The Committee recommends to fix norms for intending of medicine from general fund and local fund on the actual requirement of medicine in every LSGI and the same should be issued as circular.

## Production and distribution of Ayurveda drugs (3.9)

Good Manufacturing Practices (GMP) for Ayurveda, Siddha and Unani medicines prescribed in the Drugs and Cosmetics Rules, 1945 required manufacturers to evolve methodology and procedures to ensure that:

- Raw materials used in manufacture of drugs are authentic, of prescribed quality and free from contamination;
- Adequate quality control measures were adopted in manufacture of drugs and
- Manufactured drugs released for sale are of acceptable quality.

The Rules also prescribe regular inspection of Ayurveda drug manufacturing units. Audit observations on the above are discussed below:

### Non-adherence of stipulated standards by Oushadhi (3.9.1)

DISM procured Ayurveda drugs from Oushadhi, a GOK undertaking for free distribution to patients in government hospitals. As part of our audit exercise for assessing the quality of drugs procured by GOK for free distribution among patients, we conducted (July 2014) physical verification of the manufacturing facility of Oushadhi, jointly with its officials which revealed that stipulated standards were not being adhered to by Oushadhi.

 We noticed during audit that 'chumam' manufactured in the factory was piled on the floor of the factory and the possibility of the drug being contaminated with dirt and sand cannot be ruled out.

• There were no sterile manufacturing areas with bacterial retaining filters, etc. in the factory essential to manufacture sterile drugs like 'Elaneerkuzhambu', an eye ointment. Routine microbial count of the manufacturing area during operations was also not carried out. Oushadhi admitted that there was no separate area for manufacturing sterile 'Elaneerkuzhambu' and stated that they have now planned to shift its production to a separate area.

- Ayurvedic Pharmacopeia of India (API) emphasised that all Ayurveda drugs must comply with the limits for heavy metals prescribed in individual Monograph and wherever limits were not stipulated, compliance with the limits given in World Health Organisation publications was stipulated. It was noticed that the products manufactured by Oushadhi were not tested for presence of heavy-metals, aflatoxins, toxicity and pesticide residue. Oushadhi admitted its inability to conduct tests about heavy-metals, aflatoxins, toxicity and pesticide residue and stated that facilities were available for testing only microbial load and physico-chemical parameters.
- Audit noticed reported instances (February 2014) of patients complaining about numbness in the tongue and general fatigue on administration of Suryaprabha<sup>15</sup> tablets (Batch No P50-9) in three<sup>16</sup> GADs. Despite receiving several complaints from institutions, the reported batch of the drug was not withdrawn from hospitals/dispensaries. Oushadhi, however, conducted Microbial tests of the returned medicine with reference to the control sample and found no variations. It stated that mode of administration, media of intake and quantity prescribed by the doctors vary from patients to patients and therefore, it was not necessary to withdraw the whole of the batch. However, in view of Oushadhi admitting its inability to test for heavy- metals, aflatoxins, toxicity and pesticide residue, the presence of these elements in the products and resultant patient discomfort cannot be ruled out. Audit, therefore, could not obtain assurance that the drugs supplied by Oushadhi conformed to stipulated safety standards.

Government replied (December 2014) that steps are being taken by Oushadhi to collect churnam in a trolley directly from the machine instead of transferring to the floor, the manufacturing of Elaneerkuzhambu will be shifted to a sterilised area where microbial count will be kept minimum and to ensure the hygiene of the

<sup>15</sup> A drug containing heavy metals.

<sup>16 (1)</sup> GAD Chettivilakom, Thiruvananthapuram (2) GAD Karimba, Palakkad and (3) GAD Chazur, Kannur.

production unit and that the installation of new machine procured for testing heavy metals is in progress and machines for testing aflatoxins, etc. would be procured in the next year.

[Audit Paragraph 3.9 and 3.9.1 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

- 61. The Committee enquired about the failure of Oushadhi in supplying the required amount of medicine to government hospitals. Then the witness Secretary, AYUSH department informed that, being a cent percent Government owned public enterprise, Oushadhi has 5% tax preference and they were obtaining extension every year. But they failed to meet the demand. Procurement of medicine from open market might reduce the price, he added.
- 62. On a query about the audit observation that stipulated standards were not being adhered to by Oushadhi for the manufacturing of 'Chumam', ' Elaneerkuzhambu', 'Suryaprabha tablet' etc., the Secretary, AYUSH said that the department was helpless as it had only the administrative control of Oushadhi.

#### Conclusions/Recommendations

- 63. The Committee was dismayed to know that stipulated standard in drug manufacturing was not being adhered by Oushadhi. The Committee was disturbed to notice that Oushadhi lacks sterile manufacturing areas for production of drugs. Also products were rolled out from the factory without conducting tests for presence of heavy metals, toxins and pesticide residue which may cause undesired effects upon consumption. Committee emphasize the need for adhering to stipulated standards in drug manufacturing even if it involves procurement of new machines which may cause rise in the cost of production.
- 64. Therefore Committee recommends that sterile manufacturing areas should be created so as to ensure the hygiene of production unit. Also, proper machinery should be installed for testing drugs for heavy metals, aflatoxins, toxicity and pesticide residue and thus ensuring that the presence of those is within prescribed limits. Thus every measures should be taken as so as ensure that drugs manufactured by Oushadhi strictly adheres to stipulated standard of quality.

### Drug production at GAC Thiruvananthapuram (3.9.2)

manufactured the Avurveda drugs are at Pharmacv GAC Thiruvananthapuram for use of patients in the three hospitals attached viz., GAC Hospital, Women and Children (W&C) Hospital and Panchakarma hospital in Thiruvananthapuram. Audit noticed that the Pharmacy did not possess a licence under D&C Act, though it manufactured drugs on a large scale. A Commission appointed by the Principal to examine the deficiencies and to suggest steps to improve the functioning of the pharmacy recommended (August 2012) setting up of a Pharmacy Advisory Board for overseeing all the activities of pharmacy attached to the GAC Thiruvananthapuram. The report also suggested constituting a Pharmacy Production Committee for scientific production of Ayuryeda drugs, laid down procedures for storing of raw materials/finished products, etc. Audit however, noticed that the College was yet to take remedial action on the recommendations. Government replied (December 2014) that license was not essential since the drugs were manufactured at the Pharmacy for free distribution to the patients and was not intended for sale. The reply is not acceptable in view of the fact that the National Research Institute for Panchakarma, Cheruthuruthy, Thrissur district, a GOI institution manufacturing only three drugs for free distribution to patients in the hospital had obtained manufacturing license. Moreover, possessing a licence under the D & C Act would also have ensured adherence to provisions of the Act and resultant production and distribution of quality drugs to the patients.

[Audit Paragraph 3.9.2 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

65. The Committee asked about the reason for the audit observation that, the Pharmacy in Government Ayurveda College, Thiruvananthapuram did not posses a licence under Drugs and Cosmetics Act, though it manufactured drugs on a large scale. The Secretary, AYUSH clarified that those drugs produced in GAC, Thiruvananthapuram were used only for domestic

administration and not for sale. That was why they had not obtained the licence. Directions would be issued to obtain the manufacturing licence if necessary, he added. The Committee accepted the explanation.

#### Conclusions/Recommendations

66. No comments.

### Procurement process of drugs under DISM (3.9.3)

The Directorate of Indian System of Medicine procures medicines once in four months subject to annual monetary ceiling<sup>17</sup> according to the category of institutions. Indents prepared by Medical Officers of institutions were approved by the DMOs concerned and forwarded to Oushadhi for supply of drugs directly to the institutions. The DISM procured drugs directly for implementation of various State Plan Schemes<sup>18</sup> to provide Ayurveda oriented health care services through health care institutions. Besides, funds were also provided by LSGIs for procurement of medicines from Oushadhi and Ayurdhara<sup>19</sup> for use by hospitals/ dispensaries under their control. Audit noticed shortcomings in procurement and distribution of medicines as brought out below:

 As per GOI guidelines, the procurement agencies are to decide about the required medicines out of the medicines listed in Essential Drug List (EDL) as per the prevalence and needs of patients. However, DISM had not prepared a list of medicines in conformity with EDL. Government stated (December 2014) that an expert committee for formulating EDL in the State would be constituted immediately.

<sup>17 ₹ 0.66</sup> lakh for dispensaries, ₹ 6.05 lakh for 100 bedded hospitals, ₹ 3 lakh for 50 bedded hospitals, ₹ 1.45 lakh for 30 bedded hospitals, ₹ 1.32 lakh for 25 bedded hospitals, ₹ 1.05 lakh for 20 bedded hospitals, ₹ 0.84 lakh for 10 bedded hospitals, ₹ 0.78 lakh for six bedded hospitals, ₹ 0.73 lakh for four bedded hospitals

<sup>(1)</sup> Control of Communicable Diseases-a scheme implemented during 2009-2014 aimed at control of epidemics like Cholera, Jaundice etc. (expenditure ₹ 1.71crore) (2) Balamukulam-a School Health Programme implemented in selected schools in the districts of Wayanad, Kasaragode and Palakkad during the years 2012-2014 (expenditure ₹1.35 crore) and (3) Six other schemes with a total expenditure of ₹1.05crore implemented in 2013-14

<sup>19</sup> An Ayurveda drug manufacturing unit functioning under the control of SC/ST development Co-operative Federation

There is no system in place at the DISM to assess centrally the annual requirement of drugs of field units after reckoning the stock available and trend in consumption. In the hospitals/dispensaries visited, Audit noticed that indents for departmental/scheme supply and LSGI supply are prepared without assessing the consolidated annual requirement. Audit further noticed large quantities of medicines stocked in four<sup>20</sup> hospitals/ dispensaries in two districts due to procurement in excess of actual requirement. In Malappuram District, three<sup>21</sup> hospitals held huge stock of drugs procured during 2012-14. Audit compared (July 2014) the itemwise stock of drugs available at the DAH Valavannur with that consumed during the years 2012-14 and noticed that the hospital had sufficient stock of drugs supplied by LSGIs to cater to the entire needs of the hospital for the next two to 14 years. The CMO of the hospital attributed the bulk stock to the delayed supply of medicines for the year 2012-13. Audit also noticed during physical verification damage to 10000 numbers of 'Vilwadi Gulika' amounting to ₹13400 (at the rate of ₹134 per 100 numbers) received during 2012-13 in GAH Manjeri.

Government replied (December 2014) that explanation from DMO concerned has been sought for the lapses and implementation of an Inventory Management System for ISM was being seriously looked into.

[Audit Paragraph 3.9.3 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

67. The Committee was informed that, DISM procured medicines once in every four months. Indents prepared by medical officers of institutions were approved by the DMO's concerned and forwarded to Oushadhi for supply of drugs directly to the institutions.

<sup>20</sup> GAH Irinjalakuda, GADs Anakayam, Edakkara in Malappuram and Kandasankadavu in Thrissur districts.

<sup>21</sup> DAH Malappuram, GAH Manjeri and DAH Valavannur.

68. On a query about the direct procurement of medicine by DISM, the Joint Director ISM acknowledged that medicines coming under certain schemes had been procured directly by DISM. He also added that the expert Committee for formulating EDL (Essential Drugs List) in the state is very much in function now. The Committee decided to recommend that perfect norms should be issued for the procurement of medicines through DISM and Local bodies at the earliest.

#### Conclusions/Recommendations

69. The Committee recommends to formulate perfect norms for the procurement of medicines through DISM and local bodies.

### Inspection of manufacturing units (3.9.4)

Quality of drugs procured and distributed to patients in the State can be ensured only by regular inspection of manufacturing units to check the manufacturing processes and testing of products manufactured by them for stipulated quality.

As per the Drugs and Cosmetic Rules, 1945, the Drug Inspectors (DI) are required to inspect all premises licensed to manufacture Ayurveda drugs, not less than twice a year to ensure that the conditions specified in the licence and the statutory provisions were being observed. The number of licensed Ayurveda manufacturers during 2009 to 2013 was 980, 937, 870, 774 and 890 respectively. It was noticed that there was shortfall ranging from 63 to 81 per cent in conducting inspection of the Units. GOI insists one DI for every 100 manufacturing units. Minimum number of DIs required for inspection of 890 units (in year 2013) will be eight. However, there were only three DIs and in respect of the four new posts sanctioned in September 2012, appointments were made temporarily from January 2014 and these posts remained vacant from October 2014. The shortage of DIs hampered the inspection process.

Government replied (December 2014) that the shortages in conducting inspections were due to insufficient DIs and also non-availability of vehicles and assured conduct of inspections as stipulated on filling up the four vacant posts by regular hands, for which the recruitment process is in progress.

[Audit Paragraph 3.9.4 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

70. The Committee enquired whether any officers had been deployed provisionally for inspection of manufacturing units in AYUSH sector. Then Secretary AYUSH department answered in affirmative and stated that the number of posts created for this purpose was insufficient to cover all the units even after the inspection was conducted on all days. Committee opined that quality of drugs procured and distributed to patients could be ensured only by regular inspections of manufacturing units to check the manufacturing process and testing of products. Therefore Committee decided to recommend to appoint sufficient Drug inspectors in the department.

#### Conclusions/Recommendations

71. The Committee observes that quality of the drugs procured and its proper distribution to patients can be ensured only by regular inspection of manufacturing units. The Committee recommends to appoint sufficient number of Drug Inspectors in the department for regular inspections of manufacturing units to check the manufacturing process as well as testing of the products.

### Ayurveda Drug Testing Laboratory (3.9.5)

In the state, Ayurveda drugs are tested for statutory quality control in a division functioning within the State Drug Testing Laboratory (DTL) for allopathic medicines under the administrative control of State Drugs Controller. Quality Council of India during the gap study (June 2009) of DTL recommended (April 2011) to separate the Ayurveda, Siddha and Unani (ASU) testing laboratory from the rest of DTL, which mainly caters to testing of allopathic drugs. But it was noticed that the same was not implemented (December 2014) and the State still does not have a separate State DTL for testing samples of ASU drugs (December 2014).

Audit noticed that under the GOI scheme for strengthening DTL for quality control of ASU drugs in the State, the Drug Standardisation Unit (DSU) attached to the Government Ayurveda College, Thiruvananthapuram obtained ₹1.50 crore. The DSU, despite having spent ₹1.43 crore of GOI grant continues to function as a research unit for supplementing academic activities and not as a DTL for ASU drugs in the State.

Government stated (December 2014) that strict directions were issued to the Principal, GAC Thiruvananthapuram to conduct drug testing at DSU in consultation with DDC (Ayurveda), and that directions of Government (January 2013) to shift the DSU and its employees to the control of DDC (Ayurveda) was kept in abeyance due to strong protest from students/staff.

The reply is not tenable in view of the fact that only the DDC (Ayurveda) is the licensing authority for Ayurveda manufacturing units in the State with powers to initiate action as per provisions of the D&C Act, 1940. Results of drugs tests were also to be authenticated by a notified officer (Government Analyst). No powers were vested with the DAME/Principal in this regard. Hence the direction of Government to DAME/Principal to conduct drug testing was not practical and against legal provisions. Non-availability of an exclusive DTL for testing statutory samples of ASU drugs even after availing GOI grant of ₹1.5 crore is a matter of concern.

[Audit Paragraph 3.9.5 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

72. The Committee further deliberated about the quality assuring mechanism for Ayurveda drugs as large number of drugs had been introduced in the market and certain magical remedy drugs are also being administered as Ayurveda medicines. The Committee expressed its concern over the audit observation that drug testing lab was not established for testing statutory samples of ASU (Ayurveda, Sidha & Unani) drugs even after availing Government of India grant of ₹ 1.5 crore.

73. Then the witness Secretary AYUSH department deposed that prevailing D&C Act is not competent to counter circulation of magical remedy drugs. Eventhough an expert committee was formulated in Government Ayurveda College, Thiruvananthapuram to examine the chemical toxicity of licenced Ayurveda drugs, even a single trial had not been conducted in any of the three Ayurveda Colleges since then. As per the latest instruction from NABH, chemical toxicity examination should be conducted in every accredited hospitals for

analysing basic toxicity succession in patients. The proposal was under the consideration of government but not implemented yet. He also added that if the government strictly insisted for D&C norms, manufacturers would prefer to obtain licence from other states like Tamilnadu or they would not apply under the medicine list and took it as non therapeutic cosmetics or any other supplement.

74. The Secretary, AYUSH department further supplemented that most of the Ayurvedic products available in the market were incompetent and the production and administration of which were punishable under Drugs and Magic Remedies (Objectionable Advertisements) Act. But unfortunately department do not have a laboratory to prove toxicity or inefficacy. Being a key sector, it was needed immediately to establish an AYUSH regulator to handle all these aspects.

75. Then the Committee observed that about 90% of products marketed as Ayurvedic were worthless and there was no laboratory mechanism to prove their inefficacy. Therefore the Committee decided to recommend that exclusive laboratories for analysing the ingredients, toxicity and efficacy of Ayurveda drugs should be established in government sector at the earliest. The Committee also decided to recommend that an AYUSH regulating authority should be established in the State to regulate and standardise AYUSH products and health care services in the State.

76. An Officer from AG informed that DDC Ayurveda was the licenced authority for the production of drug under the Central Act. The Secretary, AYUSH then explained that Government Ayurveda College had been producing medicine even before the enforcement of laws in this regard. It was not necessary that the Principal should possess licence for drug production as government could notify any qualified person as analyst in laboratories under the executive control of DDC. Anyway the department would look into the legal issues with special emphasis to licencing and made corrections if necessary, he assured.

77. The Committee observed that, majority of the offenders beat the rap by exploiting the ineffective implementation and loopholes in the D & C Act and Drugs and Magic Remedies (Objectionable Advertisement) Act. Therefore the Committee recommended that adequate legislation with fool proof provisions to control and monitor the AYUSH health care sector should be made at the earliest.

#### Conclusions/Recommendations

- 78. The Committee expresses its concern that drug testing lab was not established for testing statutory samples of Ayurveda, Siddha and Unani drugs. The Committee observes that 90% of products marketed as Ayurvedic were incompetent and that there was no laboratory mechanism to prove the inefficacy. The Committee recommends to establish exclusive laboratories in Government sector for analysing the ingredients, toxicity and efficacy of Ayurveda drugs.
- 79. The Committee recommends to establish an AYUSH regulating authority in the State to regulate and standardize AYUSH products and related health care services in the State.
- 80. The Committee observes that, majority of the offenders beat the rap by exploiting the ineffective implementation and loopholes in the D&C Act and Drugs and Magic Remedies (Objectionable Advertisement) Act.. Therefore the Committee recommends that adequate legislation with fool proof provisions should be made to control and monitor the AYUSH health care sector.

### Licensing of Ayurveda Health Centres (3.9.6)

The Kerala Ayurveda Health Centres (Issue of Licence and Control) Act, 2007 and Rules made thereunder (2008) provided for categorizing Ayurveda health centres into 'A', 'B' and 'C' on the basis of facilities available like infrastructure, trained manpower and equipment. The Act also stipulated that Ayurveda Health Centres<sup>22</sup> should possess a valid license issued by the DISM after an inspection and certification by a three member committee<sup>23</sup> with a view to ensure that the provisions of the Act are being complied with. The licenses were to be renewed after every three years. Audit noticed that the DISM had not issued a single license (December 2014) to any such Centre. The DISM also did not possess data on the

<sup>22 &#</sup>x27;Ayurveda Health Centre' means an establishment or premises by whatever name be known to provide Ayurveda treatment but does not include the establishments under the direct ownership or management of the Government and the dispensaries conducted by the Ayurveda Medical Practitioner only for the mere diagnosis and distribution of medicines or the agencies selling the medicine.

<sup>23</sup> A three member committee consisting of the District Ayurveda Medical Officer of the district in which the establishment is situated, a senior Ayurveda Medical officer of the district as suggested by the Director and a Doctor in the department of Kayachikitsa - Panchakarma of any Government Ayurveda College as suggested by the Director of Ayurveda medical Education.

number of Ayurveda Health Centres operating in the State. Failure of DISM to discharge responsibilities entrusted by the Act is significant when viewed in the light of the fact that criminal cases were registered against six illegal Ayurveda health centres in the State during 2013-14 alone.

Government replied (December 2014) that the present Kerala Ayurveda Health Centres (Issue of Licence and Control) Act would be repealed when the Kerala Clinical Establishment (Registration & Regulations) Bill 2013 would be enacted by the Legislature. However, the reply fails to explain why the DISM did not enforce provisions of an Act which was passed by the Legislature and for which rules were also framed for implementation. Besides, there were also no directions from Government restricting the DISM from enforcing the provisions of the Act.

[Audit Paragraph 3.9.6 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2014 (General and Social Sector)

Notes furnished by the government on the above audit paragraph is included as Appendix II.]

Excerpts from Committee's discussion with department officials.

- 81. Regarding the audit observation on Licencing of Ayurveda Healthcare Centres, the Committee observed that licencing and classification of Ayurveda Healthcare should be done as per the Kerala Ayurveda Health Centres (issue of Licence and control) Act, 2007 and rules made thereunder (2008), on the basis of facilities available like infrastructure, trained manpower and equipment. The Act also stipulated that Ayurveda Health Centres should possess a valid licence issued by DISM after the inspection and certification by a three member committee. The licences were to be renewed after every three years. But the most unfortunate thing was that DISM had not issued a single licence to any such centres and didn't have adequate data about the Ayurveda Health Centres operating in the State.
- 82. The Secretary, AYUSH clarified that there was no classification or licencing provision enforced by law at present. The Kerala Ayurveda Health Centre (Issue of Licence and Control) Act, 2007 had not been notified by the government in the gazette for its enforcement. In the meantime government decided to enact the Kerala Clinical Establishment Bill, 2013 which includes the provisions pertaining to Indian System of Medicine, but the bill was lapsed on the dissolution of 13th KLA.

83. Then the Committee observed it as a grave situation that many unauthorised ill-equipped and incompetent healthcare centres were operating in the Ayurvedic sector of the State which caused heavy risk to the healthcare system but no laws had been enforced to control the same. Therefore the committee decided to direct the government to enact the Clinical Establishment (Registration and Regulation) Act at the earliest and to notify and enforce the previously passed Kerala Ayurveda Health Centres (Issue of Licence and Control) Act, 2007 till the enactment of the above said Legislation.

#### Conclusions/Recommendations

84. The Committee understands that DISM has not issued a single license to any of the Ayurveda Health Centres and didn't have adequate data about the Ayurveda Health Centres operating in the State. The Committee observes that many unauthorised ill-equipped and incompetent healthcare centres were operating in the Ayurvedic sector of the State which caused heavy risk to the healthcare system. The Committee hopes that by the introduction of Kerala Clinical Establishment (Registration and Regulation) Act, 2018 which came into force in 2019 all clinical establishments will be regularised and monitored.

### **MEDICAL EDUCATION (3.10)**

The Directorate of Ayurveda Medical Education (DAME) was established (November 2000) for the effective administration of matters relating to Ayurveda medical education in the State.

## Admission of students (3.10.1)

The UG course in Bachelor of Ayurvedic Medicine and Surgery (BAMS) was available in all 16 Government/Aided/Self-financing colleges in the State with an intake capacity of 910 students. Post Graduate (PG) courses were available only in six Government/Aided/Self-financing colleges as of March 2014 with ability to admit only 130 students. Audit noticed that during 2012-13, the CCIM<sup>24</sup> refused permission to GAC Thiruvananthapuram to admit students to the PG course in Kaumarabhritya (5 seats) and also reduced the number of seats for Agadatantra from five to three. Thus, as against 10 admissible seats for these two PG courses, permission was granted to operate only three seats since the college did not fulfill the eligibility conditions of CCIM in terms of adequacy of qualified Teachers for conducting these PG courses.

<sup>24</sup> Central Council of Indian Medicine.

GOK replied (December 2014) that the GAC sought time to fulfill the shortcomings noticed by CCIM during inspection but they denied and reduced the PG seats. However GOK did not clarify why GAC failed to explain inadequacy of teachers.

[Audit paragraph 3.10 to 3.10.1 contained in the Report of C&AG of India for the year ended 31st March 2014 (General and Social Sector)

Notes furnished by the government in this regard is included as Appendix II] Excerpts from Committee's discussion with department officials.

- 85. At the outset the Committee considered the audit observation that during 2012-13, the CCIM refused permission to Government Ayurveda College (GAC) Thiruvananthapuram to admit students to the PG course in Kaumarabhritya and also reduced the number of seats for Agadatantra from five to three, as the college had failed to fulfil the eligibility conditions of CCIM in terms of adequacy of qualified teachers for conducting the PG Courses.
- 86. Regarding the inadequacy of qualified teachers for conducting PG courses, the committee was informed that, eventhough the department tried its best to provide adequate teaching staff by reappointing a qualified and experienced retired Professor to Kaumarabhritya department CCIM did not approve the same. The request for extending the time period to settle the shortcomings pointed out during their inspection was also denied by CCIM and reduced the number of PG seats.
- 87. On a query about the prescribed qualification of teachers stipulated by CCIM, the witness, Additional Secretary, AYUSH department clarified that, the teaching experience after acquiring PG in concerned subject or allied subject is the qualification where as the special rules stipulates only teaching experience and PG for the post. It did not specifically state that the teaching experience should be the one after acquiring PG. He also admitted that the qualification mentioned in the RMT statement as 'teaching experience after acquiring PhD in concerned Subject' is a mistake.

- 88. On a query about the present status of appointing teachers to the PG courses, the witness, Additional Secretary, AYUSH department deposed that, at present qualified teachers are appointed for every PG courses and the issue raised by audit is now settled.
- 89. Then the witness, Director, Ayurveda Medical Education supplemented that, the non availability of Professors for PG courses was the reason for audit observation. Every Professor, Associate Professor and Assistant professor can guide respectively 3, 2 and 1 student for PG Course. In Government Ayurveda College, Thiruvananthapuram, on the retirement of the Professor in Kaumarabhritya the authorities failed to promote his juniors as they were not having the prescribed qualification. To overcome this reappointment had been given to the retired Professor in Kaumarabhritya department but CCIM did not approve the same. Later, it has been resolved by appointing qualified faculties. In the department of Agadatantra, on retirement of a Professor, his qualified junior succeeded and now six students each had been doing PG in both departments under the guideship of qualified teachers, she added.
- 90. The Committee observed that, being a globally practiced and emerging system of medicine, Ayurveda education Sector should be provided with well qualified experienced faculties and adequate infrastructure. Otherwise the system will fail to produce globally competent doctors and health care services.
- 91. The Committee accepted the explanation and commented that, the failure of the department to submit these facts about the inadequacy of teachers to the Accountant General during audit period results in such an audit observation. Since Comptroller and Auditor General reports had been tabling about an year after the audit period, the departments should be more conscious in future to avoid such remarks.

#### **Conclusions/Recommendations**

92. The Committee observe that as Ayurveda is a globally practised and emerging system of medicine, the education in this sector should be provided with well qualified experienced faculties and adequate infrastructure to produce globally competent doctors and health care services.

### Training in Surgery and Gynaecology (3.10.2)

As per the syllabus for BAMS course, students are required to be trained in Surgery and Gynaecology. Since adequate facilities were not available for imparting such training in Ayurveda Colleges, Government directed (1984 and later) the Directorate of Health Services to provide facilities in Government Allopathy hospitals for imparting training in Surgery and Gynaecology. Government also issued orders (1988) to continue the arrangement till the Ayurveda colleges were equipped with the required facilities. During test check, it was however, noticed that the Ayurveda colleges continued to lack facilities for providing training in Surgery and Gynaecology to their students. Failure to provide requisite facilities in Ayurveda colleges for such training even after a lapse of 30 years, is a matter of concern.

Government replied (December 2014) that DAME had reported that some Allopathy doctors were reluctant to obey Government orders and BAMS students were not well treated in Allopathic hospitals and to overcome the situations, the required facilities for training of BAMS students are to be provided in Ayurveda colleges only. Government also stated that orders were again issued (December 2014) facilitating training in selected Allopathic hospitals in the State.

Failure of Government to enforce its own orders is cause for concern.

[Audit paragraph 3.10.2 contained in the Report of C&AG of India for the year ended 31<sup>st</sup> March 2014 (General and Social Sector)

Notes furnished by the government in this regard is included as Appendix II] Excerpts from Committee's discussion with department officials.

93. The Committee considered the audit observation that, the Government Ayurveda college failed to provide training in surgery and Gynaecology to their BAMS students due to the lack of infrastructure. Regarding this, the Committee was informed that, since adequate facilities were not available for imparting training in Ayurveda colleges, Government in 1984 had directed the DHS to provide facilities in Government Allopathy hospitals for imparting training in surgery and Gynaecology. Government also issued orders in 1988 to continue the arrangement till the Government Ayurveda Colleges were equipped with required facilities. But even after decades, it failed to provide training to students.

- 94. On a query about this, the witness, Director (in-charge) Ayurveda Medical Education deposed that, since allopathy doctors were reluctant to train BAMS students and the students were ill-treated in allopathic hospitals, Government decided to provide the required facilities for training in Ayurveda Colleges itself. She also added that orders were issued again in 2014 to continue the system of training in allopathic hospitals till the Ayurveda colleges were equipped with the required facilities.
- 95. On a query about the current status of training programme, the Director (in charge), Ayurveda Medical Education submitted that an allopathy wing having two Gynaecologists, one paediatrician and a General Surgeon had been there in Government Ayurveda College, Thiruvananthapuram where students from other colleges were also admitted for training in Gynaecology and Surgery. Being an old hospital with limited infrastructure, the allopathy doctors with their unfortunate reluctance to Ayurveda had not taken any initatives to improve the system and as a result the number of cases decreased considerably. The new operation theatre and labour room are functional at present, she added.
- 96. The witness continued that, the construction of hospital for Women and Children in Kannur Ayurveda college is in progress and the students of Ayurveda college, Kannur has been inducted for training in Pariyaram Co-operative medical college for which a separate Government order was issued. Students of Thripunithura Government Ayurveda College were admitted for training in General Hospital, Ernakulam where as some students from Government Ayurveda college, Thiruvananthapuram were admitted in Government Hospital, Peroorkada and Women and Children Hospital, Thycaud as well. Since the self financing colleges have a tie up with other modern medicine Hospitals in private sector, their students get the exposure to surgery and Gynaecology.
- 97. On realising the fact that Ayurveda Colleges were still ill equipped to provide the training, the committee enquired whether adequate surgery and Gyaneic training could be ensured to all students through allopathic hospitals or other establishments. Then the witness, Director, AYUSH department affirmed that eventhough some posts in surgery still remains vacant in Government Ayurveda Colleges, training exposure is ensured to all students at present.

- 98. The witness, Principal Secretary AYUSH further added that, every Ayurveda College could possess Operation theatre, Gynaeic facilities, Labour room and other appropriate facilities on its own to enhance the efficiency of the system. Direction had already been given to Medical Education Director to submit a proposal for post creation in this regard. But for infrastructure upgradation, strong budget support is inevitable, he added.
- 99. The Committee observed that, since the general concept about a doctor is supposed to be one who can successfully address both physical and mental challenges of a person and if they are found to be not trained at the deserved academic level it might end up in trouble. The committee observing that the existing arrangements were not permanent, decided to recommend that for ensuring adequate training and practical exposure to the BAMS students, proper infrastructure, and qualified faculties should be established permanently in both Gynaecology and surgery departments of every Government Ayurveda Colleges with immediate effect.

#### **Conclusions / Recommendations**

100. The Committee is of the view that a doctor should possess the desired expertise and should be properly trained in order to successfully address the medical needs of a patient. The Committee is disturbed to note that though the BAMS syllabus includes training in Surgery and Gynaecology, the Government Ayurveda Colleges in the State still lack appropriate facilities for imparting such training for BAMS students and the existing arrangements for imparting such training in Government Allopathy hospitals were not effective. The Committee recommends that the Government should take necessary steps to establish proper infrastructure and to appoint qualified faculties in both Gynaecology and Surgery departments of every Govt. Ayurveda Colleges with immediate effect for ensuring adequate training and practical exposure to these BAMS students.

## Ayurveda Paramedical Certificate Course on Therapy (3.10.3)

Qualified Ayurveda Therapists play a major role in providing Ayurveda treatment and were in demand both in Government and private sector. DAME was the sole authority in the State to regulate paramedical certificate courses in

Ayurveda Therapist and Ayurveda Pharmacy. Admission to these courses in Government/Government Aided/Self-financing Ayurveda Colleges/Institutions was made on the directions issued by DAME. Audit, however, noticed that during the period 2009-2014, certificate course in Ayurveda Therapist was conducted only twice in 2009-10 and 2012-13. Records produced to Audit did not indicate any initiatives taken by the department to conduct such certificate courses in Government sector despite demand. Failure of DAME to conduct sufficient number of Paramedical certificate courses on Therapy led to students depending on unrecognised private institutions for such courses. Government stated (December 2014) that DAME had reported that it is difficult to conduct the paramedical certificate courses regularly with the existing staff strength and due to inadequacy of other faculties. However, Government did not offer comment on the conduct of paramedical certificate courses by unrecognised private institutions.

[Audit paragraph 3.10.3 contained in the Report of C&AG of India for the year ended 31st March 2014 (General and Social Sector)

Notes furnished by the government in this regard is included as Appendix II] Excerpts from Committee's discussion with department officials.

- 101. While considering the audit observation that as the Directorate of Ayurveda Medical Education failed to conduct sufficient number of paramedical certificate courses on Therapy, the students led to depend on unrecognised private institutions for such courses which in turn adversely affected the quality of Ayurveda health care services in Kerala. The Committee enquired about the possibilities to conduct the therapy courses in Government sector.
- 102. The witness, Principal Secretary, AYUSH department informed that by utilizing the service of four temporary employees deployed in the directorate of Ayurveda Medical Education, a course on Therapy was conducted in 2015-16 and another batch is going on now. An additional employee could be deployed in near future to start Naturopathy and Yoga Courses as well. The witness, Director (in-charge) Ayurveda Medical Education supplemented that Government sanction had already been obtained to start the Yoga and Naturopathy Technician course but still having the service of four temporary employees to materialize the same.

- 103. On a query about the feasibility to conduct regular paramedical courses in Government sector, the Principal Secretary, AYUSH was optimistic to submit that they can offer therapy course on a regular basis with the help of the fifth staff proposed to be appointed.
- 104. The Committee then opined that unfortunately it happened to be a lucrative business since the unregistered and under equipped private sector Institutions had been conducting Ayurveda Therapy Courses by collecting huge fee. Eventhough Ayurveda paramedical courses have immense job potential, the courses offered in this sector are unrecognised and inefficient, at the moment. Many petitions against inefficient therapists are also registering now a days. This adversely affects the Ayurveda healthcare sector of the State and thereby its tourism potential. Therefore the committee decided to recommend that a separate 'school of paramedical courses' should be established under directorate of Ayurveda Medical Education to conduct and regulate Ayurveda Paramedical courses in public and Co-operative sectors subject to standards prescribed by Government and to accredit the quality of the course and infrastructure facilities.

105. The Committee also expressed its concern over the non-enforcement of existing rules to regulate AYUSH institutions and directed the department to enforce the existing rules effectively to ensure quality healthcare service in AYUSH sector.

#### Conclusions/Recommendations

106. The Committee opines that eventhough Ayurveda Paramedical courses have immense job potential, the courses offered by unregistered private sector institutions are unrecognised and inefficient. The Committee observes that many petitions against inefficient therapists are increasing day by day which in turn is affecting the Ayurveda health care Sector and tourism potential of the State. Therefore the Committee recommends that a separate 'school of paramedical courses' should be established under Directorate of Ayurveda Medical Education to conduct and regulate Ayurveda paramedical courses in Public and Co-operative sectors subject to standards prescribed by the Government and to accredit the quality of the course and infrastructure facilities.

107. The Committee expresses its concern over the non enforcement of existing rules to regulate AYUSH institutions. Therefore it directs the department to enforce the existing rules effectively to ensure quality healthcare service in AYUSH sector.

### Availability of Teachers in Ayurveda Colleges (3.10.4)

As per Indian Medicine Central Council (Minimum Standards of Education in Indian Medicine) (Amendment) Regulations 1989 and notifications issued subsequently, for appointment of teachers in Ayurveda Colleges with effect from 01 July 1989, a PG qualification in the subject/speciality or in allied subject concerned as notified by CCIM is required. However, Audit noticed that seven<sup>25</sup> out of 167 faculties in the three<sup>26</sup> test checked Ayurveda colleges who were appointed after 01 July 1989 did not possess the required PG qualification. One of the seven faculty (Assistant Professor in Ayurveda college, Ollur) has since been declared (November 2014) by CCIM as ineligible for appointment as faculty.

Government (December 2014) stated that teachers were appointed in accordance with the Special Rules for Kerala State Ayurveda Medical Education (Teaching Services)<sup>27</sup> and hence there will be differences as per the Rules of CCIM. During Exit Conference (December 2014) the Secretary assured that the Special Rules would be amended suitably in line with CCIM norms.

[Audit paragraph 3.10.4 contained in the Report of C&AG of India for the year ended 31<sup>st</sup> March 2014 (General and Social Sector)

Notes furnished by the government in this regard is included as Appendix II] Excerpts from Committee's discussion with department officials.

One Assistant Professor without any PG in Rachanasharir department, one Assistant Professor in Kriyasarir department with PG in Rasasastra and one Assistant Professor in Dravyaguna with PG in Kayachikitsa (GAC Thiruvananthapuram), one Professor in Prasuthitantra department with PG in Kayachikitsa and one Professor in Basic Principles department with PG in Kayachikitsa (VPSV Ayurveda college, Kottakkal) and one Assistant Professor in Panchakarma department with PG in Manovigyan and one Assistant Professor in Roganidana department without any PG (Ayurveda college, Ollur)

<sup>26</sup> GAC Thiruvananthapuram, VAC Ollur and VPSVAC Kottakkal

<sup>27</sup> As per Special Rules, for appointment of Lecturer by direct recruitment in the absence of person with Postgraduate Degree in the concerned subject, person with Graduation will be considered.

- 108. The Committee noticed the audit observation that, as per Indian Medicine Central Council (Minimum standards of Education in Indian Medicine) (Amendment) Regulations, 1989 for appointment of teachers in Ayurveda colleges with effect from 1-7-1989, a PG qualification in the subject/speciality or in allied subject concerned as notified by CCIM is required. But some faculties appointed in Government Ayurveda colleges did not have the prescribed qualification as per CCIM norms and one among them had been declared ineligible for appointment by CCIM. The Committee also observed that since those teachers were appointed in accordance with the special rules for Kerala State Ayurveda Medical Edcuation (Teaching Service) there would be differences as per CCIM norms. The witness Director (in-charge), Ayurveda Medical Education supplemented that, at present every college have PG qualified teachers except those who joined before 1-7-1989 as they were exempted. The teaching posts under Ayurveda Medical Education Department has been redesignated as Assistant Professor, Associate Professor and Professor according to CCIM norms and for the appointment to the post of Assistant Professor itself, PG qualification as prescribed by CCIM is made mandatory, she added.
- 109. When the Committee enquired whether the special rules were amended in line with CCIM norms, the witness, Principal Secretary AYUSH answered in negative and submitted that a secretary level meeting of Law, P&ARD and AYUSH department is scheduled to convene in the very next week to scrutinize and finalise the draft amendment of the Special rule.
- 110. The Committee was at dismay to know that the department has been following CCIM norms for teaching faculty appointment without amending the special rules in line with CCIM norms. The Committee observed that, since the appointment to these posts are being carried out by Kerala Public Service Commission, it should be done only as per special rules present if any. Otherwise it may lead to unnecessary litigations and chaos in future. Therefore it is necessary to amend the special rules in line with CCIM norms at the earliest.
- 111. The Committee further expressed its concern over the lackadaisical attitude of the department in amending the special rules even after three years of the audit observation and decided to direct that the special rules for Kerala State Ayurveda Medical Education (Teaching) Services should be amended in line with CCIM norms within six months and the Principal Secretary, AYUSH department assured to do so.

#### Conclusion/Recommendation

112. The Committee observe that as per the CCIM norms the appointment of teachers of various posts in Government Ayurveda Colleges should be from among the P.G.holders of the same subject or having speciality in or allied subjects w.e.f.1st July 1989 onwards. But it is informed that a few teachers not having the required qualification as per CCIM norms have been inducted to the faculty in Government Ayurvedic Colleges in accordance with the existing special rules for Kerala State Ayurveda Medical Education (Teaching) Services. The Committee doubts that the delay in amending the special rules with respect to CCIM norms was deliberate for accommodating the unqualified candidates and urged to furnish the details of candidates (such as their qualification (in which branch), whether qualified as per CCIM norms) appointed upto the amendment in the Special rule came into force to the Committee without delay.

### Infrastructure of Ayurveda Colleges and attached hospitals (3.11)

### **Execution of Building works (3.11.1)**

GOK sanctioned ₹ 3.85 crore during the period 2011-2014 for three construction works<sup>28</sup> in GAC Thiruvananthapuram. Audit noticed that these works were not started/completed as of December 2014 due to non-identification of site, non-preparation of plan and design, etc. Similarly, in VPSV Ayurveda College, Kottakkal also, three works namely Panchakarma block first floor (₹ 0.68 crore), OP block first floor (₹ 0.53 crore) and Electrical Sub-station (₹ 0.22 crore) started in 2011 were yet to be completed as of March 2014.

Government replied (December 2014) that follow up action will be taken by DAME for completion of these works.

[Audit paragraph 3.11.1 contained in the Report of C&AG of India for the year ended 31<sup>st</sup> March 2014 (General and Social Sector)

Notes furnished by the government in this regard is included as Appendix II]

Excerpts from Committee's discussion with department officials.

<sup>28</sup> Construction of Ladies Hostel, Construction of a multi-storied building for laboratory and diagnostic centre and Construction of Sewage Treatment Plant at Panchakarma Hospital.

- 113. The Committee noticed the audit observation that, Government of Kerala had sanctioned ₹ 3.85 Crore during 2011-2014 for three construction works in Government Ayurveda college, Trivandrum but those works were not started/completed till December 2014. Similarly in VPSV Ayurveda College, Kottakal also three works started during 2011 were yet to be completed as on March 2014.
- 114. On a query about the present status of construction works, the witness, Principal Secretary, AYUSH department informed that Government had provided funds for construction of Ladies Hostel, multi-storied building for Laboratory-diagnostic centre and for constructing sewage treatment plant in Government Ayurveda College, Thiruvananthapuram. Of these the work of sewage treatment plant is about 80% completed, work has already been tendered for Laboratory-diagnostic centre and the tender process had been initiated in the case of Ladies hostel. The works in VPSV Ayurveda College has already been completed, he added.
- 115. The Committee then expressed its reservation on the non completion of construction works sanctioned during 2011 even after six years and pointed out that there may occur considerable revenue lapse due to the revision of estimates during this period which could not be entertained. Therefore it urges the department to submit an updated report regarding the progress of construction work in Government Ayurveda College, Thiruvananthapuram and directed the department to complete the work at the earliest.

#### Conclusion/Recommendation

116. The Committee expresses its reservation on the non completion of construction works sanctioned during 2011 even after six years and pointed out that there may occur considerable revenue lapse due to the revision of estimates during this period which could not be entertained. Therefore the Committee urges the department to submit an updated report regarding the progress of construction work in Government Ayurveda College, Thiruvananthapuram and also directs to complete the work at the earliest.

## Deficiencies in infrastructure in college hospitals (3.11.2)

Audit found several deficiencies in infrastructure facilities in the test checked colleges and attached hospitals. It was noticed that the W&C hospital, Poojappura, (Prasuthithantra and Kaumarabhritya departments of GAC Thiruvananthapuram), with 80 beds including the Ayurveda paediatric ward meant for treating children with complaints of Developmental Diseases, Cerebral Palsy and Autism was functioning in two old tiled roof buildings which were congested due to lack of space while a new four-storied building constructed to increase the bed strength and to accommodate the operation theatre and labour room and inaugurated in October 2013, was not yet put to use as of December 2014 except shifting the OP department.

The Government Ayurveda College Panchakarma hospital, under the Panchakarma Department of GAC Thiruvananthapuram was also functioning in an incomplete four storied building constructed in 2011. The building was found damp and wet as rainwater was flowing through the duct provided for electric connection and the opening provided for the staircase. Solid waste was found dumped in the compound near Kashayam room.

Government stated (December 2014) that the new building at W&C Hospital, Poojappura can be used only on creation of new posts. But due to resource constraints, Government could not sanction the posts.

Reply of the Government is not acceptable as the shifting of the 80 bedded hospital from the existing two old tiled roof buildings to the newly constructed building could have been made without creation of additional posts. Failure to utilise the building resulted in denial of better facilities to the patients.

[Audit paragraph 3.11.2 contained in the Report of C&AG of India for the year ended 31<sup>st</sup> March 2014 (General and Social Sector)

Notes furnished by the government in this regard is included as Appendix II]

Excerpts from Committee's discussion with department officials.

117. The Committee noticed the audit observation that the Women and Children hospital, Poojappura with 80 beds including the Ayurveda Paediatric ward had been functioning in two old buildings which were congested due to lack of space and while a new four storied building constructed to increase the bed strength and to accommodate the operation theatre and Labour room were not yet been operational as of December 2014. Thus the failure of the department in shifting the hospital to its new building resulted in the denial of better facilities to the deserved patients.

118. On a query about this, the witness, Director (in-charge) submitted that the women and Children hospital was completely shifted to the new building and is operational in full fledge at the moment. Moreover cash has been deposited to construct another block above the new building specially meant for differently abled children, she added. The Committee accepted the explanation.

#### Conclusion/Recommendation

119. No Comments.

## **Deficiencies of Equipment (3.11.3)**

During physical verification of facilities in test checked College Hospitals, Audit noticed deficiencies in equipments as detailed below in Table 3.

**Table 3 : Deficiency in equipments** 

Name of Institution	Deficiency
VPSV Ayurveda College hospital, Kottakkal	Ultra sound scanner was not working since 2009. The ECG machine procured in January 2014 was not installed due to lack of space. There was no generator facility in the hospital.
W&C Hospital, Poojappura, Thiruvananthapuram	The Ultra sound scanner in the hospital was not put to use for lack of PNDT registration.
	Hospital furniture procured for the new four storied building were found dumped in the building which includes 56 cots, 65 beds, 75 pillows, 55 bedside lockers pending allotment to new wards.
	Equipment found dumped in the building include items like Anaesthesia Machine, Spot light for labour room, Pulse Oxymeter Infant warmer, Phototherapy unit, etc. pending utilization.

Government admitted (December 2014) the facts and stated that action will be taken on these issues.

[Audit paragraph 3.11.3 contained in the Report of C&AG of India for the year ended 31<sup>st</sup> March 2014 (General and Social Sector)

Notes furnished by the government in this regard is included as Appendix II]

Excerpts from Committee's discussion with department officials.

120. The Committee noticed the audit observation that in VPSV Ayurveda College, Kottakal, the Ultra Sound Scanner has not been working since 2009, the ECG machine procured in January 2014 wasn't installed yet and there was no generator facility in the hospital.

- 121. While considering this the witness Principal Secretary, AYUSH department informed that ECG machine had already been installed, generator power supply is also made available but the technicians certified that ultrasound scanner is beyond repair at the moment. Then, the committee directed the department to procure a new ultrasound scanner to VPSV, Ayurveda College, Kottakkal at the earliest.
- 122. Further on a query about the situation in Women and Children hospital, Poojappura where the audit noticed that ultrasound scanner was not put to use for lack of PNDT registration and furnitures and equipments procured for the new hospital buildings were found to be dumped in the building. The witness Principal Secretary, Ayush clarified that all those problems were cleared when the hospital was shifted to new block and those dumped equipments are very much in use at the moment. The Committee accepted the explanation.

#### Conclusion/Recommendation

123. The Committee directs the department to procure a new ultrasound scanner to VPSV, Ayurveda College, Kottakal at the earliest.

### Research and Development (3.12)

## Functioning of Research Units (3.12.1)

Research and Development activities under the Government sector in Ayurveda were carried out in institutions under the DAME like the Patent Cell, the Pharmacognosy and Drug Standardization Units attached to the GAC Thiruvananthapuram and also the Research Cell on Sports Ayurveda under the DISM.

# Pharmacognosy Unit (3.12.1.1)

A Pharmacognosy<sup>29</sup> Unit for conducting research on medicinal plants with special focus on their identification according to the Ayurveda texts was functional (since March 1966) in the GAC Thiruvananthapuram. As of December 2014, the Unit published 13 volumes of Pharmacognosy of 198 medicinal plants. Even though Pharmacognosy included study of physical, chemical, bio-chemical and

<sup>29</sup> The word "pharmacognosy" is derived from the Greek words 'pharmakon' (drug), and 'gnosis' (knowledge). The American Society of Pharmacognosy defines pharmacognosy as "the study of the physical, chemical, biochemical and biological properties of drugs, drug substances or potential drugs or drug substances of natural origin as well as the search for new drugs from natural sources."

biological properties of drugs, records produced to Audit revealed that the Unit conducted studies of only biological properties of the plant. It was admitted by the Unit that physical, chemical and bio-chemical properties of Ayurveda drugs were not studied due to lack of infrastructure and manpower. The unit in its first publication itself had mentioned that the identity of a plant can be fixed only on study of all properties including chemical, and in the absence of such a study, it is not possible to differentiate any spurious specimen from the genuine one. Thus, a study conducted at Pharmacognosy unit is not comprehensive without analysis of chemical properties.

Government replied (December 2014) that the existing physical facilities were not adequate to conduct the research work as pointed out by Audit. However, Government did not clarify the measures taken to strengthen the unit.

[Audit paragraph 3.12.1 and 3.12.1.1 contained in the Report of C&AG of India for the year ended 31<sup>st</sup> March 2014 (General and Social Sector)

Notes furnished by the government in this regard is included as Appendix II] Excerpts from Committee's discussion with department officials.

- 124. While considering the audit observation on the functioning of research units in Ayurveda sector, the Committee was informed that, the pharmacognosy unit functioning in Government Ayurveda College, Thiruvananthapuram for performing research in Medicinal plants with special focus on their identification according to Ayurveda texts had been conducting studies only on the biological properties of the plant due to lack of infrastructure. Since the identity of a plant could only be revealed through studies on different properties including chemical the research output of pharmacognosy unit happened to be not comprehensive and thus failed to serve the purpose of the unit.
- 125. On a query about this, the witness Principal Secretary, AYUSH department deposed that the existing manpower and physical facilities are inadequate for analysing the physical, chemical and biochemical properties of medicinal plants. Therefore a new proposal for infrastructure upgradation and manpower enhancement is going to be submitted to Government very soon.

- 126. An official from the office of the Accountant General interfered to remind that the audit observation was specific on the failure to study chemical properties and there seems to be a lack of co-ordination between different departments under AYUSH for better research outcome.
- 127. Then the witness, Senior Research Officer, Drug standardization Unit (DSU), Government Ayurveda College, Thiruvananthapuram deliberated that, the Ayurveda Research Institute (ARI) consist of three departments namely the Drug standardization Unit (DSU), Pharmacognosy unit and the Model demonstration (MD) garden. Earlier the DSU and Pharmacognosy units were under the charge of a Professor ie., Professor of Pharmacognosy. But on retirement of the then Professor who was a Botanist, Government had appointed the senior most faculty who hails from chemistry department as the Professor of Pharmacognosy and department head. This had been challenged in the court by the senior most botany faculty and the court ruled to split the department in to two independent units under the charge of senior Research Officer (Chemistry) and Senior Research Officer (Botany).
- 128. She continued that, the Pharmacognosy unit is now working in the campus of Poojappura Ayurveda Research Institute and DSU in the campus of Government Ayurveda College, Thiruvananthapuram. The Chemical property studies of medicinal plants have been conducted by DSU. But unfortunately these works were not co-ordinated with the plant cultivation process of botany department. Eventhough both DSU and pharmacognozy unit are part of ARI, they are functioning like two watertight compartment at present. Through the effective co-ordination of DSU and pharmacognozy units under ARI, the outcome in Ayurveda research can be improved considerably, she added.
- 129. When enquired about the possibility of deploying chemistry faculties from DSU to pharmacognosy unit for analysing chemical properties, the witness, senior Research Officer, DSU informed that the Botany department in Poojappura doesn't have the laboratory facilities for such chemical analysis. She continued that, the pharmacognosy unit conducts botanical studies of single drugs whereas in DSU, the chemical properties of formulations like 'Murivenna' and their ingredient single drugs are also analysed. The microbiological and biochemical properties of

drugs are also assessed in concerned divisions of Government Ayurveda College Thiruvananthapuram as well. But the only post of botanist in DSU for single drug identification remains vacant at present and sought for the service of a botanist from Pharmacognosy unit Poojappura, she added.

- 130. Then the witness, Director (in-charge), Ayurveda medical Education admitted that due to the professional conflict between Botany and Chemistry wing, ARI failed to perform comprehensive research on medicinal plants by analysing chemical, botanical and biochemical properties. The botany wing publishes Pharmacognosy of medicinal plants without evaluating the chemical aspects as pointed out by audit whereas the chemistry wing conducts chemical analysis of certain formulations and co-ordinate the chemical studies of PG research projects.
- 131. The Committee then observed that ARI failed to serve its purpose of comprehensive medicinal plants research as the pharmacognosy unit and DSU failed to co-ordinate each other in analysing the biological and chemical properties. Therefore the Committee directed the department to submit a report regarding the study of real issue behind the split of DSU & Pharmacognosy unit, whether the non competency of research could be solved by merging the units without any post creation and the measures to be adopted for improving the efficiency of Ayurveda Research with special emphasis on the effective co-ordination of DSU and Pharmacognosy unit with in one month.

#### Conclusion/Recommendation

- 132. The Committee observes that the existing physical facilities and manpower is inadequate for analysing the chemical, physical and biochemical properties of medicinal plants. The Committee finds that ARI failed to conduct comprehensive medicinal plants research due to lack of co-ordination between pharmacognosy unit and DSU in analysing micro biological, pharmacological and chemical properties.
- 133. The Committee directs the department to submit a report regarding the study of real issue behind the split of DSU & Pharmacognosy unit, whether the non-competency of research could be solved by merging the units without any post creation and the measures to be adopted for improving the efficiency of

Ayurveda Research with special emphasis on the effective co-ordination of DSU and pharmacognosy unit. The Committee directs to conduct monthly review meetings of DSU and Pharmacognosy unit to ensure co-ordination between two units.

### Drug Standardization Unit (DSU)(3.12.1.2)

Government established (February 1974) a Drug Standardisation Unit (DSU) under the control of the Principal, GAC Thiruvananthapuram with the objective of evolving methods for standardisation of Ayurveda drugs by prescribing standards of raw material, methods of manufacture and standardization of finished products. The DSU was directed to conduct research on items which were not attended to by the Central Council for Research in Indian Medicine & Homeopathy (CCRIMH). Under the D&C Act, Ayurvedic Pharmacopoeia of India (API) publications (part I and II) are the books of standards for single drugs and compound formulations included therein and would be official.

The DSU published six monographs comprising of 70 medicinal plants/drugs. Though the API was a collective work of various laboratories, no efforts were made by DSU to contribute to API. No action was initiated to obtain technical or financial assistance from GOI for conducting the research activities, though the Department of AYUSH had schemes to provide financial assistance for drug standardisation like 'Extra Mural Research', Scheme for evolving Pharmacopoeial Standards for Ayurveda drugs and Standardised Operating Procedures of Manufacturing Processes of Ayurveda drugs.

Government stated (December 2014) that research methodology of PG students and research works in standardisation are going on in DSU. Government admitted that orders were not issued to DAME to contact API for encouraging the function of DSU.

As DSU has not initiated any action to incorporate their works in API publications, their works have no acceptance at national level and no legal validity.

[Audit paragraph 3.12.1.2 contained in the Report of C&AG of India for the year ended 31st March 2014 (General and Social Sector)

Notes furnished by the government in this regard is included as Appendix II] Excerpts from Committee's discussion with department officials.

- 134. While considering the audit observation on Drug standardization unit (DSU), the committee observed that, under Drugs and cosmetics Act, Ayurveda Pharmacopeia of India (API) Publications (Part I and II) are the books of standardization for single drugs and compound formulations included there in and would be official. Eventhough DSU under the control of the Principal, Government Ayurveda college, Thiruvananthapuram was established with the objective of evolving methods for standardization of Ayurveda drugs, it has not initiated any action to incorporate their works in API publication. Therefore those works had no acceptance at national level and happened to be legally invalid.
- apprised that being only a research department under the Principal, Government Ayurveda College, Thiruvananthapuram, DSU has not yet received any directions to contribute to the API. DSU is now doing research in 'murivenna' and having exclusive results. But if the result is to be globally accepted and legally binding it should be published in API with the prior approval of Ayurveda Phamacopeial Committee (APC) under the Central Government. Formal Communications had already been done in this regard. She continued that, in India many API contributing laboratories are already established but Kerala had none. In this circumstance necessary steps should be taken to upgrade DSU as a national level laboratory to be recognised by APC. A proposal for upgrading DSU as a contributing laboratory of API has already been approved in the Secretary level meeting and submitted to AYUSH department for further transmission to APC for approval, she added.
- 136. The Committee then observed that, even though there has been lot of research and establishments in the Ayurveda sector of Kerala, it is unfortunate that those knowledge are not globally accepted and legally binding as we failed to publish in API. Therefore the Committee directed the AYUSH department to take necessary steps to upgrade DSU, Thiruvananthapuram as a contributing laboratory of API.

Notes furnished as reply to additional information called for by Committee included as Appendix III

#### Conclusion/Recommendation

137. The Committee observes that even though there has been lot of research and establishments in the Ayurveda Sector of Kerala it is unfortunate that this knowledge is not globally accepted and legally binding. The Committee opines that it is necessary to upgrade DSU as a national level laboratory to be recognised by APC for developing it into a contributing laboratory of API. Therefore the Committee directs the AYUSH department to take necessary steps to upgrade DSU, Thiruvananthapuram as a contributing laboratory of API. The Committee also recommends to compile the research findings of both pharmacology unit and DSU to be included in API.

### Research Cell in Sports Ayurveda (3.12.1.3)

A Research Cell for Indian System of Sports Medicine was established (December 2009) under the DISM to manage sports injuries, to improve physical fitness of athletes using Ayurveda treatment, to prepare new formulations and to conduct research works on these purposes. During the period 2009-2014, ₹3.61 crore was spent (out of ₹3.70 crore allotted) on various activities of the Research Cell, but there were no recorded data on any research work carried out by the Research Cell as of December 2014.

The Ayurveda Sports Medicine State Level Committee (SLC) entrusted the work (August 2011) to the Chief Co-ordinator, Sports Medicine for the manufacture of Sports Special Medicines. SLC awarded (March 2012 & September 2012) the manufacture of sports special medicines (Thailam I, II, III and Special Lepam) to the Ayurveda Oushadha Nirmana Vyavasaya Co-operative Society Ltd., Thiruvananthapuram. Necessary clinical trials were not conducted and ethical clearances for these medicines as per World Health Organisation guidelines were not obtained. Audit further noticed that there was no system in place to ensure the quality of raw materials used in the manufacture of these medicines and to conduct quality tests for toxicity/heavy metal in the manufactured drugs.

Government stated (December 2014) that the studies conducted on special medicines prepared by the Research Cell in Sports Ayurveda during 2012-13 and 2013-14 were on a pilot basis and no ethical clearance was needed for pilot studies. Government also stated that an ethical committee would be constituted with immediate effect and the department of ISM would subject future studies to the committee for clearances. It further stated that a High Level Committee headed by the Joint Director of ISM and Chief Co-ordinator had been constituted to effect the procurement and preparation of research medicines.

The department of ISM had however, not produced any documents on conduct of research works with reference to the objectives and efficacy of Sports Ayurveda Medicines.

[Audit paragraph 3.12.1.3 contained in the Report of C&AG of India for the year ended 31<sup>st</sup> March 2014 (General and Social Sector)

Notes furnished by the government in this regard is included as Appendix II] Excerpts from Committee's discussion with department officials.

- 138. The Committee observed the audit findings that a research cell for Indian system of Sports Medicine was established in 2009 under the DISM to manage sports injuries, to improve physical fitness of athletes using ayurveda treatment, to prepare new formulations and to conduct research works on these purposes. During the period 2009-2014, ₹ 3.16 crore was spent on various activities of the research cell, but there were no recorded data on any work carried out by the research cell. Moreover necessary clinical trials were not conducted and ethical clearances as per WHO guidelines were not obtained for the special medicines prepared by research cell. There was no system in place to ensure the quality of raw materials used in the manufacture of these medicines and to conduct quality tests for toxicity/heavy metal in the manufactured drugs.
- 139. When the Committee enquired about the present status of Research Cell the Director, ISM informed that, research cell in Sports Ayurveda have four regional units. They are conducting OP in different Sports Schools where athletes and students are taken care of. About 32,000 athletes were treated through this programme till date.

- 140. On a query about the specialised faculties in sports Ayurveda, the witness, Chief Medical Officer, Government Ayurveda Hospital, Kanjiramkulam detailed that, the project was started in 2010 as 'Sports Ayurveda Research Centre' and attended only Sports injuries as a trial. When on receiving positive feed back sub units were established in Ernakulam and Kolencherry. In Trivandrum both G.V. Raja and Vellayani Sports School have its units. IP treatment units have been working in GAC Trivandrum, GAC Thodupuzha and GAC Palakkad. A national level sports Ayurveda Complex is going to be established in Thrissur district, he added.
- 141. He continued that, in beginning of the project 'Sports Ayurveda Research Centre' there was no manpower support from Government except the service of ISM doctors and paramedical staff which resulted in the failure of proper documentation of the research studies. Sports Ayurveda Research cell have many clinical evidences of authentic manuscripts and books of its own but doesn't have proper infrastructure and exclusive research wing to flourish the output. Inspite of all these shortcomings, Sports Ayurveda Research Cell have done a good job in the short span, he claimed.
- 142. He further submitted that, eventhough, full fledged sports hospitals are the need of the hour, the real challenge at present is that Sports Ayurveda Cell with existing manpower and infrastructure could not meet the demand of sports person hence OP were conducted once or twice in a week in the midst of busy hospital schedule of doctors concerned. He continued that, National level Sports hospital might be established in LNCPE and IP treatment unit in GV Raja Sports School. He also added that, during the events like National Games or any other Sporting events or Sports interviews, the Sports Ayurveda Research Cell has been giving its best even if the allopathy counter parts doesn't promote the same.
- 43. When enquired about the presence of research facilities other than DSU & Pharmacognosy in the AYUSH department, the witness, Principal Secretary, AYUSH department, informed that, there is no proper research going on in the Ayurveda sector as it lacks an exclusive research wing. The Director (in-charge) Ayurveda Medical Education clarified that eventhough research works relates to PG courses and certain other projects are going on under different departments, there is no special wing for research at the moment.

- 144. The Committee observed that an exclusive research wing is necessary to identify and assess the properties of medicinal plants and to utilize that for further development in Ayurveda sector. It then opined that, we are preparing the Ayurveda formulations as per authentic text books and traditional knowledge gained for centuries, there should be a scientific principle behind all these knowledge. If we can explore in to the Chemical, biochemical and microbiological properties of the ingredients in a renowned formulation like 'Dashamoola Arishtam' to identify the chemical content and its optimum concentration in that product, it may be possible to develop alternate methods to prepare the same formulation without using large amount of raw materials which in turn is more economic than the traditional method. ie., we could be able to produce 'Chyavanaprasham' like formulations without using that much quantity of gooseberries as referred to in traditional methods. Being the traditional system of medicine in India, Ayurveda could be modernised to reduce healthcare cost and thereby attract more people in to the system.
- 145. Then the witness, Director in charge Ayurveda Medical Education submitted that there could be huge difference in quality between Chyavanaprasham product from alkaloids and that prepared using natural ingredients in traditional pathway. If we look for more chemical combinations, it can't be claimed as Ayurveda. Therefore, a 'Re-search' to mould and present our resources in line with the need of the society is necessary to medicine Ayurveda. The service of a biostatistician can contribute very much for the modernisation of the system, she added.
- 146. When enquired about the constitution of ethical Committee, the Director (in-charge) Ayurveda Medical Education informed that the proposal was under consideration of Government.
- 147. The Committee observed that, Sports Medicine in Ayurveda has very much potential and the initiatives, advantages and facilities available in this system should be made public to flourish the sector. The Committee then directed the department to submit a proposal for financial assistance to backup Sports Medicine in Ayurveda and to Strengthen research and proper documentation in this sector. The Committee also directed to submit a brief report on the initiatives of Sports Ayurveda cell and the measures to be adopted for enhancing its efficiency.

Notes furnished as reply to additional information called for by Committee is included as Appendix III.

### Conclusion/Recommendation

148. The Committee observes that Sports Medicine in Ayurveda has very much potential and the initiatives, advantages and facilities available in this system should be made public to flourish the sector. The Committee recommends to develop centralised sports Ayurveda research and analysis cell with proper infrastructure and exclusive research to identify and assess the population of medicinal plants. The Committee also directs the department to submit a proposal for financial assistance to backup Sports Medicine in Ayurveda and to strengthen research and proper documentation in this sector.

149. The Committee recommends to attach sports Ayurveda Units in connection with District & Taluk Hospitals under the ISM. The Committee recommends to constitute sports Ayurveda Units in sports schools and sports institution under SAI.

### Patent Cell (3.12.2)

Traditional Knowledge Digital Library (TKDL) was a collaborative maiden Indian venture between the Council of Scientific & Industrial Research (CSIR), Ministry of Science and Technology and Earth Sciences and Department of AYUSH to prevent misappropriation of traditional knowledge belonging to India at International Patent Offices.

Government of Kerala constituted (July 2003) a 'Patent Cell' in the DAME to take steps for acquiring patent rights on Ayurveda concepts. The Patent Cell was to conduct survey, identify, collect and digitise Ayurveda literature documents. The Cell has digitised 2505 formulations and five books were published.

Audit noticed that no formulations digitised by Patent Cell were incorporated in the database of TKDL and thereby protection of Traditional Knowledge digitised by the Patent Cell was not ensured. Audit also noticed that no Patent rights for any of the formulations digitised were acquired as of December 2014.

Government stated (December 2014) that the issue was raised before Department of Industrial Policy and Promotion, GOI which is dealing with all Intellectual Property Rights and response from GOI is awaited.

The fact remains that the traditional knowledge digitised by the Patent Cell remained unprotected as of December 2014 as the database was not linked to the TKDL and thus the work of Patent Cell became infructuous.

[Audit paragraph 3.12.2 contained in the Report of C&AG of India for the year ended 31<sup>st</sup> March 2014 (General and Social Sector)

Notes furnished by the government in this regard is included as Appendix II] Excerpts from Committee's discussion with department officials.

150. While considering the audit observation on Patent cell, the Committee observed that, the traditional knowledge digitised by the patent cell remained unprotected as the database was not linked to the 'Traditional Knowledge Digital Library' (TKDL) and thus no patent rights acquired for any of the formulations digitized. The Committee directed the Government to expedite the procedures to link the database of patent cell with TKDL.

### Conclusion/Recommendation

151. The Committee observes that the traditional knowledge digitised by the patent cell remained unprotected as the database was not linked to the 'Traditional Knowledge Digital Library' (TKDL) and thus no patent rights acquired for any of the formulations digitized. Therefore Committee directs the Government to expedite the procedure to link the database of patent cell with TKDL.

### Conservation of Manuscripts (3.12.3)

The Publication Division of the GAC Thiruvananthapuram has a collection of 224 manuscripts out of which 99 were deciphered (September 2014). The National Mission for Manuscripts had stipulated Basic Minimum Standards for Conservation of Manuscripts such as protection from fire, water, natural calamities, Insect attack, microbiological attack, dust, environmental pollution and light, fluctuations in temperature and relative humidity, etc. Audit scrutiny revealed the following instances of non-compliance with guidelines in conservation of these invaluable assets.

 Quarantine room or any procedure for checking the newly acquired manuscripts for insect or fungus attacks was not in place.  The manuscripts were found dumped in a cupboard and no methods were adopted for the scientific preservation of these manuscripts. Training was also not imparted to the staff of the Publication Division on safe handling of the manuscripts.

• Index register was not maintained to show the provenance of these manuscripts

Non-compliance of guidelines laid down by the National Mission for Manuscripts

For conservation of the invaluable manuscripts may result in future risks of deterioration of manuscripts. The Head of Publication Division admitted (September 2014) the audit observations on the shortcomings.

Government stated (December 2014) that the Manuscripts in the Publication Division are being kept in safe custody in order to ensure safety from fire, water, natural disasters, insect bites, light, pollution, etc.

The GOK however, did not offer assurance on adhering to guidelines laid down by the National Mission for Manuscripts for conservation of the manuscripts other than that relating to safe custody.

[Audit paragraph 3.12.3 contained in the Report of C&AG of India for the year ended 31<sup>st</sup> March 2014 (General and Social Sector)

Notes furnished by the government in this regard is included as Appendix II] Excerpts from Committee's discussion with department officials.

- 152. Regarding the audit observation on the conservation of manuscripts, the Committee was informed that non compliance of guideline laid down by the National Mission for Manuscripts for conservation of the invaluable manuscripts resulted in risk of deterioration of manuscripts
- 153. When enquired about the measured adopted to protect the manuscripts as per guidelines the witness, Director (in-charge), Ayurveda Medical Education informed that all the manuscripts were handed over to Traditional Knowledge Innovation Kerala (TKIK) and had been shifted to an air conditioned room as well. The digitization of the manuscripts were almost completed and a scientific Assistant was posted for its proper maintenance, she added. The Committee accepted the explanation.

### Conclusion/Recommendation

154. No Comments.

### Accreditation by National Accreditation Board for Hospitals (NABH) (3.13.2)

NABH offered accreditation to wellness centres (Ayurveda hospitals, Spas, Ayurveda Centres, Yoga & Naturopathy centres, Fitness centres, Skin care centres, etc.) possessing standards of quality prescribed by it after evaluation of such standards. NABH accreditation was offered to assure the tourists and locals that the centres were providing services as per global standards. These accredited wellness centres were entitled to incentives for accreditation by Ministry of Tourism for listing on Incredible India website, display of NABH Mark of Excellence and logo approved by Ministry of Tourism at appropriate locations, financial support from GOI for participation in the international wellness tourism events, etc. These would facilitate creation of awareness of such centres among potential tourists and eventually help to attract tourists and thereby to promote Ayurveda.

As of March 2014, only five such wellness centres in the private sector in the State had obtained NABH accreditation. Audit noticed that no institution under Government sector obtained NABH accreditation as of March 2014.

### Conclusion(3.14)

Failure of GOK/NRHM to furnish Utilisation Certificates to GOI for funds already received resulted in the State losing GOI assistance of ₹ 12.75 crore receivable during 2012-2014. Failure to set up new departments for Preventive Ayurveda, Yoga, Naturopathy and Vishachikitsa in GAC Thiruvananthapuram resulted in refund of GOI assistance of ₹ 1.5 crore in May 2013. DISM did not fix any standards for infrastructure facilities and services in hospitals/dispensaries. Lack of infrastructure and deficient human resources affected the quality of services delivered by the Government Ayurveda hospitals and dispensaries. Among the test checked hospitals, GAH Punnapra had the lowest bed occupancy of 33 per cent. The hospital neither provided diet to its patients nor therapy to male patients due to absence of Cook/male Nurses/Therapist. In seven test checked hospitals, there was no heating facility in the therapy/treatment rooms forcing patients to bring fuel and stove for heating Thailam for oil massage. Drugs procured from Oushadhi for free distribution to patients in hospitals were not tested for presence of heavy metals, aflatoxin, toxicity and pesticide residue. The DSU attached to the GAC Thiruvananthapuram obtained ₹ 1.50 crore for setting up a DTL for ASU drugs in the State. However, the DSU continues to function as a research unit for supplementing academic activities and not as a DTL for ASU drugs in the State. GOK could not also enforce its own orders for transferring control of the DSU to the DDC (Ayurveda). The DISM did not enforce provisions of the Kerala Ayurveda Health Centres (Issue of License and Control) Act, 2007 stipulating the issue of licenses to Ayurveda Health Centres. The indents for departmental/scheme supply and LSGI supply of Ayurveda drugs were prepared without assessing the consolidated annual requirement. Database of 2505 Ayurveda formulations created by the Patent Cell under DAME remained unprotected as the database was not linked to that of TKDL.

### Recommendations(3.15)

State Government may ensure:

 Upgradation and standardization of Ayurveda hospitals and dispensaries in the State in a specific time frame;

- Compliance with its order of January 2013 requiring the Drug Standardization Unit and its employees to be placed under the administrative control of the DDC (Ayurveda) for testing quality of ASU medicines;
- Enforcement of provisions of the Kerala Ayurveda Health Centres (Issue of License and Control) Act 2007 requiring DISM to issue licenses to these Centres after inspection and certification;
- Preparation of an EDL for Ayurveda drugs in conformity with the EDL published by GOI and preparation of purchase indents based on the list and actual requirements of hospitals;
- Scientific assessment about manpower requirement and appropriate placement;
- Development of Pharmacopoeia for Ayurveda drugs with details of proportion of the ingredients.

[Audit paragraph 3.13.2 to 3.15 contained in the Report of C & AG of India for the year ended  $31^{\rm st}$  March 2014 (General and Social Sector)

Notes furnished by the government in this regard is included as Appendix II] Excerpts from Committee's discussion with department officials.

- 155. Regarding the audit observation the Committee observed that only five wellness centres (Ayurveda Hospitals, Spas, Ayurveda Centres, Yoga and Naturopathy Centres, Skincare Centre etc.) in the private sector in the state had obtained NABH accreditation and no institutions under Government sector obtained NABH accreditation till date.
- 156. When the Committee enquired about the present status of NABH accreditation the witness, Additional Secretary, AYUSH department informed that, a feasibility study in this regard had been completed and ₹ 25 lakh had been granted in the current financial year for the said purpose. Government Ayurveda College, Thiruvananthapuram had taken all steps to implement the standards as per accreditation norms issued by National Accreditation Board for hospitals, he added. The Committee accepted the explanation.

### Conclusion/Recommendation

157. No Comments.

## Misappropriation of Government Money in District Ayurveda Hospital, Palakkad (5.4)

Non-adherence to codal provisions and lack of supervision resulted in misappropriation of  $\uprec{₹}$  9.30 lakh.

As per Rule 131 (a) of the Kerala Treasury Code (KTC), the contents of the cash chest or the cash on hand shall be counted by the head of the office or, under his orders, by a gazetted subordinate at the close of the business on each working day and verified with the book balance in the Cash Book and other registers after they have been closed for the day. Moreover, Rule 7 (2) of the Kerala Financial Code (KFC)- Vol I stipulates that money received on account of Government dues should be remitted into Treasury the next working day. When this is not possible owing to distance from the Treasury, or any other cause, the money should be remitted periodically, i.e., at least once in a week on the last working day.

Section 12 of the Kerala Indigenous Medicine Departmental Manual stipulates that the District Indigenous Medical Officers (DMO, ISM) shall make intensive annual inspection of hospitals and dispensaries under their jurisdictions.

The Chief Medical Officer (CMO), District Ayurveda Hospital, Palakkad (DAH) was maintaining four separate cash books for General, Hospital Management Committee (HMC³0), Kerala Health Research and Welfare Society (KHRWS³1) and NRHM (Ayush funds³2) transactions. He was also the custodian of cash. As per the entries in the four cash books, the closing balance of cash as on 25 November 2013 was ₹ 9.30 lakh³3. However, a physical verification of cash conducted by the CMO at the instance of Audit revealed that the total opening cash

<sup>30</sup> Hospital Management Committees are constituted vide GO dated 14-3-2007 to make effective, the working of the concerned health institutions, by discharging the entrusted responsibilities. Source of funds includes RSBY revenue as well as receipts from other hospital services (GO dated: 22-2-2010).

<sup>31</sup> A Government owned society established in 1973 to make better infrastructure facilities in Medical Colleges and other Government hospitals and to strengthen public health care system.

<sup>32</sup> National Rural Health Mission (funds received from Department of AYUSH, Government of India.

<sup>33</sup> General Cash Book (₹ 1.31 lakh); HMC (₹ 6.11 lakh); KHRWS (₹ 1.88 lakh); NRHM Ayush (₹ NIL).

balance as on 26 November 2013 was 'Nil', indicating misappropriation of funds. The CMO admitted (November 2013) the shortage of money and certified that there were no unaccounted advances, expenses or receipt as on 26 November 2013.

On detecting the shortage of money, Audit undertook a detailed scrutiny of various cash books maintained in the DAH. It was seen during audit that from July 2012 to November 2013, the CMO disregarding the provisions of Rule 7(2) of KFC had neither remitted all general cash into the Treasury nor remitted the relevant cash to the KHRWS/HMC accounts except in a few cases. The CMO did not pay the electricity and water charges despite receiving funds from the District Panchayath for the purpose. He had also withdrawn advances from HMC accounts using self cheques in excess of actual requirement.

It was further observed that the DMO (ISM) was informed by the Regional Manager of KHRWS (October 2013) about the non-remittance of reciepts under KHRWS accounts in the bank by the CMO. However, other than directing the CMO to remit the receipts into bank, no action was taken by the DMO to investigate the issue further. Had the DMO conducted regular inspections at the DAH as stipulated under Section 12 of the Kerala Indigenous Medicine Departmental Manual, the accumulation of large cash balances, its non-remittance and eventual misappropriation could have been avoided.

It was also noticed that though the CMO was responsible for maintaining the Cash Book and authorising payment, the cash book was not regularly updated and physical cash balance not checked which is in violation of Rule 131(a) of KTC. Thus there was failure in internal control system.

Thus, non-adherence to codal provisions by the CMO and laxity on the part of the DMO facilitated misappropriation of ₹ 9.30 lakh at the DAH. On pointing out this misappropriation by Audit, Government placed the CMO under suspension (December 2013) and directed him (September 2014) to repay ₹ 9.30 lakh with interest at the rate of 18 per cent from 25 November 2013 till date of repayment.

[Audit paragraph 5.4 contained in the Report of C&AG of India for the year ended 31<sup>st</sup> March 2014 (General and Social Sector)

Notes furnished by the government in this regard is included as Appendix II] Excerpts from Committee's discussion with department officials.

158. While considering the audit observation, the Committee observed that, the non-adherence to Kerala Treasury code provisions for maintaining cash book and authorising payments by the Chief Medical Officer of Government Ayurveda dispensary, Palakkad and the laxity on the part of the District Medical Officer to conduct regular inspections as stipulated under Kerala Indegeneous Medicine Departmental Manual resulted in the misappropriation of ₹ 9.30 lakh.

159. On a query about this, the witness, Director (in-charge), Ayurveda Medical Education deposed that, the concerned Chief Medical Officer Dr. Ashok had retired from service but necessary orders had been issued to recover ₹ 9.30 lakh with interest at the rate of 18% from his pensionary benefits. It could be recovered when the pension is sanctioned he added.

160. The Committee observed that misappropriation of such an amount was serious issue and directed the Government to submit the latest status in recovery proceedings at the earliest. The witness, Additional Secretary, AYUSH department agreed to submit the details within a week. The Committee accepted the explanation.

### Conclusion/Recommendation

161. The Committee is serious to note about the misappropriation of ₹ 9.30 lakh due to non adherence to Kerala Treasury Code provisions for maintaining cash book and authorising payments by Chief Medical Officer of Government Ayurveda dispensary, Palakkad and the laxity on the part of the District Medical Officer to conduct regular inspections as stipulated under Kerala Indegeneous Medicine Departmental Manual. Therefore the Committee directs the Government to submit the latest status about the recovery proceedings against the delinquent medical officer.

V. D. SATHEESAN,

Thiruvananthapuram, 21<sup>st</sup> January, 2021.

Chairman, Committee on Public Accounts.

APPENDIX I SUMMARY OF MAIN CONCLUSIONS /RECOMMENDATIONS

Sl. No.	Para No.	Department Concerned	Conclusion/Recommendations	
1	2	3	4	
1	6	Health and Family Welfare Department	The Committee observed that the failure to furnish the Utilisation Certificates in time leading to lapse of grant for Centrally sponsored schemes should be treated as administrative lapse and the officials concerned should be made accountable for the same. The Committee directs the AYUSH department to submit a report specifically on the status of the lapsed amount of ₹ 12.75 crore receivable from Government of India as grant in aid to SHFWS under NRHM for upgradation of Ayush hospitals and dispensaries and withholding of ₹ 0.93 crore sanctioned to VPSV Ayurveda college, Kottakkal.	
2	12	Health and Family Welfare Department	The Committee understands that M/s Habitat group withdrew from the sanctioned project for the construction of buildings for establishing additional departments in Government Ayurveda College, Thiruvananthapuram in 2013 on disagreeing to take up the work at schedule of rates of PWD fixed in 2011. The Committee is of the view that instead of shelving the project the department should have either given the work of the project to another agency on risk and cost basis or should have revised the rates. The Committee finds that refunding the amount for the work without even considering alternative methods for completing the project has caused huge loss to the health care infrastructure of the State. The Committee directs the Government to submit a detailed report regarding the reasons for	

1	2	3	4			
			the delay in commencing the sanctioned work and the reasons for not exploring alternate methods by the department to ensure project realisation.			
3	19	Health and Family Welfare Department	The Committee observes that NRHM dispensaries were usually allotted to those panchayats on their request where Government dispensaries are absent and it is mandatory to withdraw one dispensary from those places where both are present. The Committee points out the co-existence of both Government dispensaries and NRHM dispensaries in many panchayats while many Grama Panchayats lack either of them. The Committee directs to furnish the details regarding panchayats where both dispensaries are functioning. The Committee recommends to sanction Government Ayurveda dispensaries to panchayats whereever necessary.			
4	27	Health and Family Welfare Department	The Committee observes that the failure of Government to address the misplaced concerns of practitioners of modern medicine resulted in denying the public easy access to healthcare services of their choice and thereby caused huge loss of central assistance. Therefore the Committee recommends that being the first phase of materializing the national policy of holistic approach in healthcare services, the co-location of AYUSH institutions with that of modern medicine should be implemented at the earliest.			
5	28	Health and Family Welfare Department	The Committee directs the department to urge the Government to take a policy decision to establish Ayurveda hospitals in the same premises of hospitals with allopathy system in panchayats where Ayurveda hospitals are not established or working in rented buildings.			
6	29	Health and Family Welfare Department	The Committee recommends that the Government should			

1	2	3	4
7	37	Health and Family Welfare Department	The Committee recommends that after the establishment of Ayush ministry the upgradation and standardisation of different levels of Ayurvedic institutions in the State must be done in line with the essential National Public Health Standards with the indicative list named KASH (Kerala Accreditation Standards for Hospitals) to the advanced NABH guidelines. An Expert Committee may be formed to frame the guidelines suited for each level of institutions and LSGD may also be involved for assisting its implementation. The Committee recommends that infrastructure and service standardisation for AYUSH institutions in the State should be adopted after discussing with the experts either based on the provisions of Clinical Establishment (Registration and Regulation) Act, 2010, or NABH accreditation norms and communicated to whomsoever concerned at the earliest.
8	38	Health and Family Welfare Department	The Committee expresses its concern over the audit observation that majority of the basic amenities like Electricity, Water, Laboratory, X-ray, Toilet etc., specified in the Central Act were absent in most of the AYUSH institutions in Kerala. Therefore the Committee recommends to fix a common standard for basic amenities and infrastructure facilities in AYUSH institutions and to communicate the same to Local Self Governments inorder to provide those facilities in the transferred institutions as well.
9	47	Health and Family Welfare Department	The Committee understands that the newly formed AYUSH department is going through tethering problems and so a comprehensive study must be conducted to record the details of staff and equipments in present form to assess the number of institutions to be created/upgraded and number of posts in each category to be created, assessing financial implications. Any Central assistance may also be sought for the above purpose. Committee urges to furnish

1	2	3	4				
			the comprehensive study report without delay. The Committee also directs to submit an updated report on the staff strength in Ayush Department with respect to the creation of posts subsequent to audit findings.				
10	48	Health and Family Welfare Department	The Committee observes that there is shortage of qualified male therapists in Ayurvedic sector. The Committee points out shortage of male therapists may result in the induction of unqualified persons as therapists ultimately causing serious problem in Ayurveda health care. Therefore Committee recommends that Ayurveda therapists course including diploma course should be sanctioned to more institutions which possess necessary infrastructure so that qualified therapists are brought out.				
11	50	Health and Family Welfare Department	The committee finds that the diet provided to patients in Ayurveda hospitals was neither sufficient nor up to the quality prescribed. The Committee opines that the diet charge of ₹30/day per patient was insufficient to provide adequate diet. Therefore the Committee recommends to enhance the diet charges and to serve food item in prescribed quantity in Kerala Indigenous Medicine Departmental Manual.				
12	54	Health and Family Welfare Department	The Committee observes that due to initiative of concerned Medical Officer, certain Ayurveda hospitals have full fledged physiotherapy units. The Committee opines that the Medical Officers in all Ayurveda Hospitals and Clinics should take initiative in time to utilise the allotted fund. The Committee observe that the administrative system in AYUSH institutions is completely lethargic and it should be revamped by prioritising the urgent needs and also by constant monitoring. The Committee directs that the concerned authorities should make sure that heating facility is available in therapy treatment rooms and local aid could be sought for providing the facility.				

1	2	3	4					
13	59	Health and Family Welfare Department	The Committee is astonished to observe that the medicines, after the date of expiry, are being used for treatment in Ayush hospitals, dispensaries and DISM has not yet issued any instruction regarding the shelf life period of Ayurveda drugs as per the norms of Government of India issued in 1 <sup>st</sup> April 2010. The Committee directs to issue a circular regarding the shelf life of Ayurveda drugs.					
14	60	Health and Family Welfare Department	The Committee recommends to fix norms for intending of medicine from general fund and local fund on the actual requirement of medicine in every LSGI and the same should be issued as circular.					
15	63	Health and Family Welfare Department	The Committee was dismayed to know that stipulated standard in drug manufacturing was not being adhered by Oushadhi. The Committee was disturbed to notice that Oushadhi lacks sterile manufacturing areas for production of drugs. Also products were rolled out from the factory without conducting tests for presence of heavy metals, toxins and pesticide residue which may cause undesired effects upon consumption. Committee emphasize the need for adhering to stipulated standards in drug manufacturing even if it involves procurement of new machines which may cause rise in the cost of production.					
16	64	Health and Family Welfare Department	Therefore Committee recommends that sterile manufacturing areas should be created so as to ensure the hygiene of production unit. Also, proper machinery should be installed for testing drugs for heavy metals, aflatoxins, toxicity and pesticide residue and thus ensuring that the presence of those is within prescribed limits. Thus every measures should be taken as so as ensure that drugs manufactured by Oushadhi strictly adheres to stipulated standard of quality.					

1	2	3	4					
17	69	Health and Family Welfare Department	The Committee recommends to formulate perfect norms for the procurement of medicines through DISM and local bodies.					
18	71	Health and Family Welfare Department	The Committee observes that quality of the drugs procured and its proper distribution to patients can be ensured only by regular inspection of manufacturing units. The Committee recommends to appoint sufficient number of Drug Inspectors in the department for regular inspections of manufacturing units to check the manufacturing process as well as testing of the products.					
19	78	Health and Family Welfare Department	The Committee expresses its concern that drug testing lab was not established for testing statutory samples of Ayurveda, Siddha and Unani drugs. The Committee observes that 90% of products marketed as Ayurvedic were incompetent and that there was no laboratory mechanism to prove the inefficacy. The Committee recommends to establish exclusive laboratories in Government sector for analysing the ingredients, toxicity and efficacy of Ayurveda drugs.					
20	79	Health and Family Welfare Department	The Committee recommends to establish an AYUSH regulating authority in the State to regulate and standardize AYUSH products and related healthcare services in the State.					
21	80	Health and Family Welfare Department	The Committee observes that, majority of the offenders beat the rap by exploiting the ineffective implementation and loopholes in the D&C Act and Drugs and Magic Remedies (Objectionable Advertisement) Act. Therefore the Committee recommends that adequate legislation with fool proof provisions should be made to control and monitor the AYUSH health care sector.					

1	2	3	4			
22	84	Health and Family Welfare Department	The Committee understands that DISM has not issued a single license to any of the Ayurveda Health Centres and didn't have adequate data about the Ayurveda Health Centres operating in the State. The Committee observes that many unauthorised ill-equipped and incompetent healthcare centres were operating in the Ayurvedic sector of the State which caused heavy risk to the healthcare system. The Committee hopes that by the introduction of Kerala Clinical Establishment (Registration and Regulation) Act, 2018 which came into force in 2019 all clinical establishments will be regularised and monitored.			
23	92	Health and Family Welfare Department	The Committee observe that as Ayurveda is a globally practised and emerging system of medicine, the education in this sector should be provided with well qualified experienced faculties and adequate infrastructure to produce globally competent doctors and health care services.			
24	100	Health and Family Welfare Department	The Committee is of the view that a doctor should possess the desired expertise and should be properly trained in order to successfully address the medical needs of a patient. The Committee is disturbed to note that though the BAMS syllabus includes training in Surgery and Gynaecology, the Government Ayurveda Colleges in the State still lack appropriate facilities for imparting such training for BAMS students and the existing arrangements for imparting such training in Government Allopathy hospitals were not effective. The Committee recommends that the Government should take necessary steps to establish proper infrastructure and to appoint qualified faculties in both Gynaecology and Surgery departments of every Government Ayurveda College with immediate effect for ensuring adequate training and practical exposure to these BAMS students.			

1	2	3	4	
25	106	Health and Family Welfare Department	The Committee opines that eventhough Ayurveda Paramedical courses have immense job potential, the courses offered by unregistered private sector institutions are unrecognised and inefficient. The Committee observes that many petitions against inefficient therapists are increasing day by day which in turn is affecting the Ayurveda health care Sector and tourism potential of the State. Therefore the Committee recommends that a separate 'school of paramedical courses' should be established under Directorate of Ayurveda Medical Education to conduct and regulate Ayurveda paramedical courses in Public and Co-operative sectors subject to standards prescribed by the Government and to accredit the quality of the course and infrastructure facilities.	
26	107	Health and Family Welfare Department	The Committee expresses its concern over the non enforcement of existing rules to regulate AYUSH institutions. Therefore it directs the department to enforce the existing rules effectively to ensure quality healthcare service in AYUSH sector.	
27	112	Health and Family Welfare Department	The Committee observe that as per the CCIM norms the appointment of teachers of various posts in Government Ayurveda Colleges should be from among the P.G.holders of the same subject or having speciality in or allied subjects w.e.f.1st July 1989 onwards. But it is informed that a few teachers not having the required qualification as per CCIM norms have been inducted to the faculty in Government Ayurvedic Colleges in accordance with the existing special rules for Kerala State Ayurveda Medical Education (Teaching) Services. The Committee doubts that the delay in amending the special rules with respect to CCIM norms was	

1	2	3	4				
			deliberate for accomodating the unqualified candidates and urged to furnish the details of candidates (such as their qualification (in which branch), whether qualified as per CCIM norms) appointed upto the amendment in the Special rule came into force to the Committee without delay.				
28	116	Health and Family Welfare Department	The Committee expresses its reservation on the non completion of construction works sanctioned during 2011 even after six years and pointed out that there may occur considerable revenue lapse due to the revision of estimates during this period which could not be entertained. Therefore the Committee urges the department to submit an updated report regarding the progress of construction work in Government Ayurveda College, Thiruvananthapuram and also directs to complete the work at the earliest.				
29	123	Health and Family Welfare Department	The Committee directs the department to procure a new ultrasound scanner to VPSV, Ayurveda College, Kottakal at the earliest.				
30	132	Health and Family Welfare Department	The Committee observes that the existing physical facilities and manpower is inadequate for analysing the chemical, physical and biochemical properties of medicinal plants. The Committee finds that ARI failed to conduct comprehensive medicinal plants research due to lack of co-ordination between pharmacognosy unit and DSU in analysing micro biological, pharmacological and chemical properties.				
31	133	Health and Family Welfare Department	The Committee directs the department to submit a report regarding the study of real issue behind the split of DSU & Pharmacognosy unit, whether the non-competency of research could be solved by merging the units without any post creation and the				

1	2	3	4
			measures to be adopted for improving the efficiency of Ayurveda Research with special emphasis on the effective co-ordination of DSU and pharmacognosy unit. The Committee directs to conduct monthly review meetings of DSU and Pharmacognosy unit to ensure co-ordination between two units.
32	137	Health and Family Welfare Department	The Committee observes that even though there has been lot of research and establishments in the Ayurveda Sector of Kerala it is unfortunate that this knowledge is not globally accepted and legally binding. The Committee opines that it is necessary to upgrade DSU as a national level laboratory to be recognised by APC for developing it into a contributing laboratory of API. Therefore the Committee directs the AYUSH department to take necessary steps to upgrade DSU, Thiruvananthapuram as a contributing laboratory of API. The Committee also recommends to compile the research findings of both pharmacology unit and DSU to be included in API.
33	148	Health and Family Welfare Department	The Committee observes that Sports Medicine in Ayurveda has very much potential and the initiatives, advantages and facilities available in this system should be made public to flourish the sector. The Committee recommends to develop centralised sports Ayurveda research and analysis cell with proper infrastructure and exclusive research to identify and assess the population of medicinal plants. The Committee also directs the department to submit a proposal for financial assistance to backup Sports Medicine in Ayurveda and to strengthen research and proper documentation in this sector.

1	2	3	4					
34	149	Health and Family Welfare Department	The Committee recommends to attach sport Ayurveda Units in connection with District & Taluk Hospitals under the ISM. The Committee recommends to constitute sports Ayurveda Units in sports schools and sports institution under SAI.					
35	151	Health and Family Welfare Department	The Committee observes that the traditional knowledge digitised by the patent cell remained unprotected as the database was not linked to the 'Traditional Knowledge Digital Library' (TKDL) and thus no patent rights acquired for any of the formulations digitized. Therefore Committee directs the Government to expedite the procedure to link the database of patent cell with TKDL.					
36	161	Health and Family Welfare Department	The Committee is serious to note about the misappropriation of ₹9.30 lakh due to non adherence to Kerala Treasury Code provisions for maintaining cash book and authorising payments by Chief Medical Officer of Government Ayurveda dispensary, Palakkad and the laxity on the part of the District Medical Officer to conduct regular inspections as stipulated under Kerala Indegeneous Medicine Departmental Manual. Therefore the Committee directs the Government to submit the latest status about the recovery proceedings against the delinquent medical officer.					

# Statement of Action Taken on the report of C&AG on General and Social Sector for the year ended March 2014

l l	Deta	Para 3.6 The Under-utilisation of funds Details of budget provision and expenditure of the Health and Family Welfare					
		Budget Provision		Expenditure		Grant in	
	Yçar	H &	ISM and Ayurved a Medical Educatio		ISM and Ayurve da Medica I Educati on	aid from AYUSH Depart ment, GOI	
.	2009- 10	1517.45	188.56	1518.82	182.65	13.93	
	2010- 11	1849.23	223.84	1847.63	217.38	32.19	
111	2011- 12	2647.23	314.07	2591.44	287.26	14.58	
II.	2012- 13	2897.66	308.74	2919.77	307.37	0	
- 11	2013- 14	3330.89	386.56	3283.68	375.1	0	
-	1	12242.4 6		- 1	1369.7 6	60.7	

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Action Taken report

Non-Plan expenditure for each of the given Financial Year has not exceeded the budget amount allocated for the same. The details are given in the table below.

Financial Year	Budget Provision (in Lakhs)	Expenditure (in lakhs)
2009-10	8572.88	8491.17
2010-11	9672.21	9593.89
2011-12	13443.21	13379.29
2012-13	14754.14	14706.09
2013-14	18437.51	18354.56

APPENDIX-II

Para 3.6.2 Lack of Development of Ayush Institutions Under the scheme for development of AYUSH institutions/colleges. GOI sanctioned (June 2010) 2.19 crore Government Ayurveda College (GAC). Thiruvananthapuram for construction of buildings for establishing additionaldepartments for Preventive A Strict direction has been given to Director, Ayurveda Medical Education for Ayurveda, Yoga, Naturopathy and Vishachikitsa and making proper arrangements for the construction works when funds are released `1.5 crore. Audit noticed that GAC available and to avoid the recurrence of such incidents in future. Thiruvananthapuram could not start the work due to which the amount was finally refunded to GOI (May 2013). Government replied (December 2014) that M/s. Habitat Technology Group whowere entrusted with the work were not willing to take up the work at the prevailingPWD Schedule of Rates and that the PWD was also not interested in undertakingthe work. The reply is an admission of inefficiency of the department to make arrangements for the construction works when funds were available for the purpose and is a matter of concern. AYUSH Department has been constituted vide G.O (M.S) No.124/2015 dated 3 Paa 3.7.1 Lack of Formation of Full Fledged Ayush Department. 18/06/2015 of Health and Family Welfare Department, Government of Kerala. The National Policy on ISM&H 2002 and GOI's The Hon'ble Chief Minister inaugurated the new department on 5th of August directions (March 2011) envisaged formation of a 2015. Also Government have appointed a Secretary for AYUSH Department. separate AYUSH Department with a full-fledged Secretary in States. The State Government appointed a Special Secretary only in August 2014 exclusively to look after the ISM & Homocopathy under H&FWD. However, a separate AYUSH department is yet to be established. Government stated (December 2014) that the formation of a separate AYUSH department was under active consideration of the Government

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Para 3.7.2  Opening of New Dispensaries  One of the stated objectives of the Department of ISM was to open an Ayurveda dispensary in every Grama Panchayath (GP). However, no time frame was fixed for attainment of the objective. Audit noticed (March 2014) that 65 out of 425 Gps in the test checked districts did not have either a Government Ayurveda Hospital or Dispensary and hence the objective of having Ayurveda dispensary in every GP was not achieved. However, in 63 of the 65 GPs, temporary dispensaries were being operated by NRHM.  Government admitted (December 2014) that 178 panchayaths in the State were without Government ISM hospitals and dispensaries and that '70 lakh was earmarked during 2014-15 for opening such institutions in uncovered GPs.	
10th plan (2002-03 to 2006-07), to integrate AYUSH	Co-Location of AYUSH facilities was envisaged at PHC/CHC/DH levels. These institutions are under the administrative control of Director of Health Services. A decision will be taken at Government level for implementation of the scheme.

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of quality and cost effective health care under a single roof

Government replied (December 2014) that presently seven Government Ayurveda Dispensaries (GADs) are functioning in the premises of PHCs/CHCs but the policy of co-location of AYUSH facilities at PHC/CHC/DH level could not materialise in the State due to reluctance of professional and service organizations in Allopathic (modern) medicine sector.

The fact, however, remains that Government's failure to address the misplaced concerns of the practitioners of modern medicine has resulted in denying people easy access to healthcare services of their choice, besides loss of GOI grant.

Para 3.7.4 Hospitals/Dispensaries

> by upgradation of hospitals in a phased manner under the existing 50 to 100 in 10 District Ayurveda Hospitals resulted in improving the efficiency of the institutions. (DAH), (ii) to provide X-ray facilities, Panchakarma and Ksharasutra units in all DAHs (iii) to provide laboratory facilities in all hospitals and (iv) to provide equipments/furniture/utensils/LPG connection and drugs, etc. in dispensaries.

During 2009-14, GOK provided `15.75 crore for upgradation of hospitals and '4.50 crore for strengthening of dispensaries of which DISM spent '14.53 crore and 3.77 crore respectively.

Necessary steps were taken to allocate Rs.5 Lakh under the plan fund in the Upgradation and Standardisation of Ayurveda financial year 2015-16, for the upgradation of District Ayurveda Hospitals in Thiruvananathapuram, Kollam, Ernakulam, Thrissur and Kasargode to 100 GOK aimed to provide better Ayurveda treatment facilities bedded hospitals. The proposal is under consideration of Government.

scheme Upgradation and Standardisation of hospitals after. The implementation of a new X-ray unit sanctioned for District Ayurveda fixing standards for infrastructure facilities and services. Hospital, Ernakulam could not materialize due to the building construction GOK had also planned to standardise the facilities in work currently progressing in the Hospital. A Direction has been given to Ayurveda dispensaries in partnership with LSGIs on a District Medical Officer for monotoriing to the same without delay. Steps to project mode under the scheme Strengthening and be taken to improve the standard of Ayurveda Hospitals/Dispensaries are Improvement of dispensaries. Under the schemes, it was discussed during the monthly conference of District Medical Officers at the inter alia planned to (i) increase the bed strength from the Department Directorate and effective implementation of instructions has

Audit noticed that the bed strength was increased to 100 only in DAH Kozhikode

against 10 DAHs proposed as GOK is yet to accord sanction for other DAHs. While X-ray units were provided in all DAHs except DAH Ernakulam, Panchakarma and Ksharasutra units were not yet provided in three DAHs and 10 DAHs respectively. Laboratories were provided only in 46 hospitals out of the 118 hospitals in the State Details of poor infrastructure facilities in the test checked hospitals and dispensaries such as hospitals and dispensaries functioning in old/dilapidated/unfit/leaking buildings, space constraints for functioning of wards/therapy room, non-provision of basic amenities like toilet, drinking water, electricity, water connection, etc., non-functioning X-ray units, laboratory units, etc. noticed in Audit are given in Appendix 3.2. GOK/Clinical Establishment (Registration & Regulation) Act 2010 specified 39 common items/equipment required in Ayurveda dispensaries. Audit found non-availability of common items/equipment when compared to the above list as shown in Appendix 3.3.

DISM had not fixed any standards for infrastructure facilities and services in hospitals/dispensaries. It had also not prepared any evaluation report on implementation of the schemes for each year specifying the physical targets and Audit Report (General and Social Sector) for the year ended 31 March 2014 42 achievements there-against resulting in non-assurance of effective implementation of the schemes.

Government stated (December 2014) that at present there is no provision for standardisation of ISM institutions and a Core Committee would soon be formed for the purpose. It was also stated that presently permission to start X-ray and Laboratory units were granted only to hospitals where adequate space was available.

### **Outpatient and Impatient Services**

Out-patient services were offered by both hospitals and occasions. Hospitals (GAH) and dispensaries in the State had period. patientfootfall of 2.04 crore which included 93,387 in-10 except in Malappuram where an upward trend was including Panchakarma treatment there by increasing the bed occupancy. noticed in year 2013-14. Audit also noticed that the average bed occupancy against the available bed strength during the period 2009-14 in 10 out of 14 test checked hospitals ranged between 33 and 90 per cent as detailed in Appendix 3.4. The lowest bed occupancy of 33 per cent was noticed at GAH, Punnapra. It was noticed that due to the absence of male Nurses/Therapists and Cook, the hospital neither provided therapy treatment to male patients nor provided diet to its patients, which could explain the very low bed occupancy in the hospital. Nonavailability of Specialist doctors,

Therapists and also the isolated location of the hospitals were cited as reasons for the lower bed occupancy by the Medical Officers of two hospitals (GAH Thiruvali and DAH Valavannur). Government confirmed (December 2014) these reasons.Government however, did not mention about the measures taken to improve the bed occupancy.

The declining trend of patients in Government Ayurveda Institutions as mentioned in the report is attributed mainly to periodical change and festive

dispensaries while Impatient services were offered only by For example, a decrease in the number of patients attending both O.P and I.P. hospitals. During the year 2013-14, Government Ayurveda in Ayurveda Hospitals and Dispensaries has been noticed during the summer

The District Ayurveda Hospitals in Wayanad and Pathanamthitta patients. Footfall of out-patients and bed occupancy in which were upgraded to 100 bed hospitals does not have adequate Medical respect of test-checked hospitals/dispensaries are Officer posts in par with the bed strength. Steps are being taken for the up discussed below. Audit analysed the footfall of out-pradation of District Ayurveda Hospitals in Thrivuananthapuram. Kollam, patients in test-checked hospitals and dispensaries under Ernakulam, Thrissur and Kasrgode to 100 bed Hospitals and to sanction DISM in five selected districts. It was seen that the sufficient additional posts. The creation of sufficient posts is a necessity for number of out-patients declined in all test checked the smooth functioning of institutions including Ayurveda Hospitals. This will districts when compared to the footfalls in the year 2009 ensure that more patients are admitted in Ayurveda Hospitals for treatments

Para 3.8.2

hospitals/dispensaries under the control of DiSM (status P.G. deputation etc. These vacancies are expected to be filled soon. as on 1 October 2014) as given in Table 3.2. Table 3.2:

Shortage of st	aff		
Name of post	Sanctioned	Actual	Shortage
Medical Officers/Spe cialists	1136	1062	74
Nurses	401	389	12
Therapists	30	19	11
Pharmacists	931	853	78
Lab Technicians	15	5	10
Radiographe rs	2	0	2
Nursing Assistants/At tenders/ Pharmacy Attenders	1223	1051	172

Staff pattern for Ayurveda hospitals under the DISM with reference to the bed strength was fixed as early as in May 1978. Audit noticed shortage/excess in the number of posts sanctioned when compared with the number of posts required against the average bed occupancy in hospitals test checked. It was seen that in Government Ayurveda Marma

Hospital (GAMH), Kanjiramkulam and Government

The total number of vacancies in the post of Medical Officer (Ayurvda) is Shortage of Medical Officers and Para Medical Staff | currently 20, instead of 74 noticed in the audit report. As a PSC rank list of Audit noticed inadequate number of Medical Officers and Medical Officer (Ayurvda) is currently in force, the arising vacancies are duly Paramedical staff in position against sanctioned strength in reported to PSC excluding the ones year marked for reservation,

> Government Ayurveda Marma Hospital (GAMH), Kanjiramkulam is a 10 bedded Hospital. The sanctioned Medical Officer strength in the institution is two. One Chief Medical Officer and one Medical Officer are currently working in the institution.

The post of Hospital Superintendent which is remaining vacant in the Government Ayurveda Research Institute for Mental Diseases (GARIM) is to be filled through promotion. The official duly qualified for promotion is currently doing her Post Graduation under Service quota. The vacancies of specialists in the institution were reported to PSC and necessary steps are being taken by PSC regarding the same.

Currently there are 31 sanctioned posts of Ayurveda Therapists in the Department. 41 Therapist posts were created Vide GO(MS)14/2016/AYUSH dtd.16.07.2016.

Necessary steps are being taken to address the shortage of posts of Nurses, Pharmacists, Lab Technicians, Radiographers and Attenders. The existing vacancies during the audit was mainly attributed to the unavailability of PSC ranked lists and appointments are being issued to fill these vacancies now.

The ratio of male-female nurses was fixed as 1:5 vide G.O (P) 91 dated 17/01/1967. But as per the special rules currently in force, no such ratio has been mentioned. Also qualified male nurses are not available for selection to the post of Nurse.

Visha Vaidya Hospital (GVVH), Wadakkanchery, the average bed occupancy during 2009-14 was more than the sanctioned bed strength. However, there was shortage in Officers/ sanctioned posts of Medical Pharmacists/Nurses. In GAMH, Kaniiramkulam, against sanctioned bed strength of 10, average bed occupancy was 45 indicating that a large number of patients were availing the facilities in the hospital. However, against the required staff strength of three Medical Officers, two Pharmacists and five Nurses, there was a shortage of one Medical Officer, one Pharmacist and three Nurses. Similarly, in the GVVH, Wadakkanchery, there was shortage of two Nurses. while at GAH Nedumangad the shortage of nurses was three. In view of the fact that certain hospitals with lesser average bed occupancy had the full complement of sanctioned staff strength and in some cases even excess staff (Appendix 3.5), failure of GOK to rationalize the staff strength has resulted in hospitals with higher number of patients having to function

with lesser number of staff. Shortage of manpower significantly affected service delivery in hospitals/dispensaries as elucidated below:

- In Government Ayurveda Research Institute for Mental Diseases (GARIM), Kottakkal in Malappuram district, the post of Hospital Superintendent remained vacant since April 2010 and against three sanctioned posts of Specialists, two posts were vacant from November 2012.
- It was noticed that though sanctioned strength of Nurses were filled up in 13 out of 14 hospitals test checked, no male Nurses were appointed in eight of these hospitals.
- The post of Therapist was essential for carrying out the Kriyakarman i.e., panchakarma procedures. Therapists/Masseurs were assigned the responsibility of application of various massages to the patients on the direction of the physician concerned. Ten out of 14

hospitals test checked did not have sanctioned posts of Therapists. While Hospital Management Committees (HMCs) in five30 hospitals had engaged Therapists for attending to patients, in five31 other hospitals test checked, these services were delivered by Nurses/Nursing Assistants/Attenders who were not trained in Therapy.

- In GAH Punnapra, only female Nurses were available and consequently, the male patients were denied therapy.
- In the absence of sanctioned posts of Pharmacists in two32 of 36 Government dispensaries test checked, Attenders were dispensing the medicines.
- Despite nine of the 14 hospitals test checked having laboratories, the post of Laboratory Technician was not sanctioned for four hospitals.

Laboratory Technicians were appointed by Government in two hospitals and laboratories in six hospitals were functioning with technicians appointed by HMC on daily wage basis. In GAH Necturnangad, laboratory was yet to be made operational. Government stated (December 2014) that DISM had informed that the vacant posts of Medical Officers and paramedical staff were not filled up since advice for appointment from Kerala Public Service Commission (KPSC) was yet to bereceived and that the posts of Attenders, which were to be filled up by promotion were not done due to shortage of staff in the lower categories. The reply is not acceptable in view of the fact that Government/HMC could have engaged these personnel on temporary basis to address the shortfall in manpower till permanent filling up of these posts.

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### Para 3.8.5 Oil Massage

Oil massages play a major role in the treatment protocol committees.

'Thailam38' used in therapy requires to be heated prior to

The Director of Indian Systems of medicine has issued directions to all District Medical Officers to address the issue through Hospital Management committees.

application on the patients. Audit noticed that in DAH Valavannur in Malappuram district, Panchakarma Hospital, Alappuzha, GAH Nedumangad, GAH Punnapra, GAH Palode, GVVH Wadakkanchery and GAH Thiruvali there was no heating facility in the therapy/treatment room. Failure of the hospitals to make provision for heating Thailam resulted in patients being forced to bring stoves and fuel for warming the Thailam, which is a matter of concern. The inputient survey showed that 30.19 per cent of patients had to bring fuel and stove for heating Thailam and 64.15 per cent of patients had to bring the raw herbal materials required for the treatment. CMO, DAH Valavannur stated that the facility was not provided as sanction was not received for LPG installation. Government replied (December 2014) that majority of inpatients in hospitals have to undergo various treatment procedures and accepted that the allocation for fuel was meagre. It also stated that DISM had since issued directions to District Medical Officers in this regard. The reply is not acceptable in view of the immense hardships being caused to patients. In the circumstances, the Government/DISM is required to provide these basic facilities.

Para 3.8.6

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### Distribution of Ayurveda Drugs to Patients

Government Ayurveda Hospitals and Dispensaries supply expiry period of the medicine. free drugs to all patients obtaining treatment from these institutions. Audit noticed following deficiencies in this regard:

• The survey conducted among in-patients and outpatients indicated that 33.02 per cent of in-patients and 58.51 per cent of out-patients were getting all drugs from Pharmacy, 64.15 per cent of in-patients and 35.33 per cent of out-patients purchased some drugs from the market due to nonavailability of drugs in Pharmacy. Others did not

The Director of Indian Systems of medicine has given Strict instructions to District Medical Officers for the disbursement of Ayurvedic drugs before the expiry period of the medicine.

respond. Further, 1.89 per cent of in-patients were purchasing drugs from market due to difficulty in coming to the hospitals as drugs were supplied from Pharmacy on alternate days only during treatment period. Moreover, 1.09 per cent of out-patients were skipping the treatment as cost of drugs was not affordable.

 GOI had introduced (October 2009) shelf life for Ayurveds medicines with effect from I April 2010 and directed that medicines should not be in circulation after their expiry date. In the test checked hospitals and dispensaries, Audit noticed several items of time expired medicines in main stock and pharmacy and administration of such drugs to patients. The CMO, DAH Valavannur stated that they were not aware of the introduction of expiry dates for Ayurveda drugs as the information was

not communicated to them. Audit also noticed that time expired medicines were administered to patients in GAD Mundathikode in Thrissur district, even after having been pointed out about such defects by Audit. Government stated that DISM have cautioned CMO, DAH Valavannur and GAD Mundathikode about their ignorance

on the subject. However, Audit observed that the DISM had not issued any directions to DMOs regarding

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### Para 3.9.1

introduction of shelf life of Ayurveda drugs.

Non adherence of Stipulated Standars by Oushadhi hospitals. As part of our audit exercise for assessing the inside the factory. The medicine is thus kept away from Ground Surface. quality of drugs procured by GOK for free distribution among patients, we conducted (July 2014) physical verification of the manufacturing facility of Oushadhi, standards were not being adhered to by Oushadhi.

We noticed during audit that 'churnam' manufactured in

Strict instruction have been given to Oushadhi to avoid such instances in future. As such Oushadhi have made elevated surfaces to store choornams so DISM procured Ayurveda drugs from Oushadhi, a GOK that the finished products are kept separate, therefore in no way, will be undertaking for free distribution to patients in government contaminated. Special trolleys are used to collect and transport choornam

Filling of Elaneerkuzhambu is now done in a sterile environment. The work for renovation of existing factory is already in progress which includes a jointly with its officials which revealed that stipulated separate sterile area for the preparation of Elaneerkuzhambu. The renovation

is expected to be completed by March 2016.

the factory was piled on the floor of the factory and the possibility of the drug being

planned to shift its production to a separate area.

aflatoxins, toxicity and pesticide residue.

and stated that facilities were available for testing only the approval of Ayush Department, GOI to test raw drugs and finished goods. microbial load and physico-chemical parameters. Audit noticed reported instances (February 2014) of patients complaining about numbness in the tongue and general fatigue on administration of Suryaprabha39 tablets (Batch No P50-9) in three40 GADs. Despite receiving several complaints from institutions, the reported batch of the drug was not withdrawn from hospitals/dispensaries. Oushadhi, however, conducted Microbial tests of the returned medicine with reference to the control sample and found no variations. It stated that mode of administration, media of intake and quantity prescribed by the doctors vary from patients to patients and therefore, it was not necessary to withdraw the whole of the batch. However, in view of Oushadhi admitting its inability to

Corporation has already procured instruments to conduct checking of metallic contents of the medicines. Regarding testing of aflatoxin, toxicity contaminated with dirt and sand cannot be ruled out and pesticide residue instruments for the same are very costly and therefore There were no sterile manufacturing areas with bacterial some more time will be required for the purpose. In practice, no major retaining filters, etc. in the factory essential to Ayurvedic organization is doing these tests, Procurement cost may shoot up manufacture sterile drugs like 'Elaneerkuzhambu', an eye cost of production also. Suryaprabha is a time tested medicine. Even in ointment. Routine microbial count of the manufacturing modern medicines several instances are cited where same molecule create area during operations was also not carried out. Oushadhi undesired effects in different patients. Erythromycine is a proven antibiotic, admitted that there was no separate area for manufacturing but produces allergy in some patients. That does not mean that, it is not sterile 'Elaneerkuzhambu' and stated that they have now recommended elsewhere. Similarly in last 20 years Suryaprabha has been administered to thousands of patients during epidemic seasons and other Ayurvedic Pharmacopcia of India (API) emphasised that circumstances and medicine was found useful on all occasions. Undesired all Ayurveda drugs must comply with the limits for heavy effects reported confined to very few limited cases only and medicine metals prescribed in individual Monograph and wherever belonging to same batches or other batches have not shown such effect in rest limits were not stipulated, compliance with the limits of the patients. This is purely an individual experience and proves no demerit given in World Health Organisation publications was on manufacturing or use of Suryaprabha. Even after this observation noted by stipulated. It was noticed that the products manufactured Auditors Suryaprabha as a standard medicine was sold through Oushadhi by Oushadhi were not tested for presence of heavy-metals, Dealers and used in patients by several Doctors' reporting no untoward results. The Drugs Controller (Ayurveda)also reported that recently Oushadhi has Oushadhi admitted its inability to conduct tests about purchased an Atomic Absorption Spectrophotometer (AAS) for the analysis of heavy-metals, aflatoxins, toxicity and pesticide residue heavy Metals. M/s.Oushadhi has started a Drugs Testing Laboratory also with

test for heavymetals, aflatoxins, toxicity and pesticide residue, the presence of these elements in the products and resultant patient discomfort cannot be ruled, out, Audit, therefore, could not obtain assurance that the drugs supplied by Oushadhi conformed to stipulated safety standards. Government replied (December 2014) that steps are being taken by Oushadhi to collect churnam in a trolley directly from the machine instead of transferring to the floor, the manufacturing of Elaneerkuzhambu will be shifted to a sterilised area where microbial count will be kept minimum and to ensure the hygiene of the production unit and that the installation of new machine procured for testing heavy metals is in progress and machines for testing aflatoxins, etc. would be procured in the next year.

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### Para 3.9.2 Drug Production at GAC, Thiruvananathapuram and Para 3.9.5 Avurveda Drug Testing Laboratory

Thiruvananthapuram.

scale. A Commission appointed by the Principal to examine the deficiencies and to suggest steps to improve the functioning of the harmacy recommended (August 2012) setting up of a Pharmacy Advisory Board for overseeing all the activities of pharmacy attached to the GAC Thiruvananthapuram. The report also suggested constituting a Pharmacy Production Committee for scientific production of Ayurveda drugs, laid down

Production of Essential Ayurvedic drugs required for Ayurveda College Hospital, Thiruvananthapuram is carried out in the Govt. Ayurveda College Pharmacy Thiruvananthapuram. The quality of raw materials and oil used for the production of ayurvedic drugs is analysed in the Drug Testing Lab working under the pharmacy. The prepared medicines from the pharmacy is also placed for testing in the Drug Testing Lab before issuing to patients. This Ayurveda drugs are manufactured at the Pharmacy at department initiated steps for obtaining license under D&C Act for preparing GAC Thiruvananthapuram for use of patients in the three medicines to patients. It is also informed that the pharmacy is not mere an hospitals attached viz., GAC Hospital, Women and institution for manufacturing drugs needed for the collegiate hospitals. The Children (W&C) Hospital and Panchakarma hospital in main object of the unit for providing training to research purpose for students under Rasasasthra and Bhaishajyakalpana PG students and training in Audit noticed that the Pharmacy did not possess a licence manufacturing of drugs to UG students and also students in the paramedical under D&C Act, though it manufactured drugs on a large course (Ayurveda pharmacist Certificate training programme)

procedures for storing of raw materials/finished products, etc. Audit however, noticed that the College was yet to take remedial action on the recommendations. Government replied (December, 2014) that license was not essential since the drugs

were manufactured at the Pharmacy for free distribution to the patients and was not intended for sale. The reply is not acceptable in view of the fact that the National Research Institute for Panchakarma, Cheruthuruthy, Thrissur district, a GOI institution manufacturing only three drugs for free distribution to patients in the hospital had obtained manufacturing license. Moreover, possessing a licence under the D&C Act would also have ensured adherence to provisions of the Act and resultant production and distribution of quality drugs to the patients.

3.9.5 : Ayurveda Drug Testing Laboratory

In the state, Ayurveda drugs are tested for statutory quality control in a division functioning within the State Drug Testing Laboratory (DTL) for allopathic medicines under the administrative control of State Drugs Controller. Quality Council of India during the gap study (June 2009) of DTL recommended (April 2011) to separate the Ayurveda, Siddha and Unani (ASU) testing laboratory from the rest of DTL, which mainly caters to testing of allopathic drugs. But it was noticed that the same was not implemented (December 2014) and the State still does not have a separate State DTL for testing samples of ASU drugs (December 2014). Audit noticed that under the GOI scheme for strengthening DTL for quality control of ASU drugs in the State, the Drug Standardisation Unit (DSU) attached to the Government Ayurveda College, Thiruvananthapuram obtained 1.50 crore. The DSU. despite having spent '1.43 crore of GOI grant continues to function as a research unit for supplementing academic activities and not as a DTL for ASU drugs in the State.

Government stated (December 2014) that strict directions were issued to the Principal, GAC Thiruvananthapuram to conduct drug testing at DSU in consultation with DDC (Ayurveda), and that directions of Government (January 2013) to shift the DSU and its employees to the control of DDC (Ayurveda) was kept in abeyance due to strong protest from students/staff. The reply is not tenable in view of the fact that only the DDC (Ayurveda) is the licensing authority for Ayurveda manufacturing units in the State with powers to initiate action as per provisions of the D&C Act, 1940. Results of drugs tests were also to be authenticated by a notified officer (Government Analyst). No powers were vested with the DAME/Principal in this regard. Hence the direction of Government to DAME/Principal to

were vested with the DAME/Principal in this regard. Hence the direction of Government to DAME/Principal to conduct drug testing was not practical and against legal provisions. Non-availability of an exclusive DTL for testing statutory samples of ASU drugs even after availing GOI grant of 1.5 crore is a matter of concern.

13 Para 3.9.3

Procurement Process of Drugs under DISM

The Directorate of Indian System of Medicine procures medicines once in four months subject to annual monetary ceiling 41 according to the category of institutions. Indents prepared by Medical Officers of institutions were approved by the DMOs concerned and forwarded to Oushadhi for supply of drugs directly to the institutions. The DISM procured drugs directly for implementation of various State Plan Schemes 12 to provide Ayurveda oriented health care services through healthcare institutions. Besides, funds were also provided by LSGIs for procurement of medicines from Oushadhi and Ayurdhara 43 for use by hospitals/dispensaries under their control. Audit noticed shortcomings in procurement and distribution of medicines as brought out below:

Necessary steps have been taken to avoid such instances in future.

• As per GOI guidelines, the procurement agencies are to decide about the required medicines out of the medicines listed in Essential Drug List (EDL) as per the prevalence and needs of patients. However, DISM had not prepared a list of medicines in conformity with EDL. Government stated (December 2014) that an expert committee for formulating EDL in the State would be constituted immediately.

 There is no system in place at the DISM to assess centrally the annual requirement of drugs of field units after reckoning the stock available and trend in consumption. In the hospitals/dispensaries visited, Audit noticed that indents for departmental/scheme supply and LSGI supply are prepared without assessing the consolidated annual requirement. Audit further noticed large quantities of medicines stocked in four44 hospitals/ dispensaries in two districts due to procurement in excess of actual requirement. In Malappuram District, three45 hospitals held imge stock of drugs procured during 2012-14. Audit compared (July 2014) the item-wise stock of drugs available at the DAH Valavannur with that consumed during the years 2012-14 and noticed that the hospital had sufficient stock of drugs supplied by LSGIs to cater to the entire needs of the hospital for the next two to 14 years. The CMO of the hospital attributed the bulk! stock to the delayed supply of medicines for the year 2012-13. Audit also noticed during physical verification damage to 10000 numbers of 'Vilwadi Gulika' amounting to `13400 (at the rate of `134 per 100 numbers) received during 2012-13 in GAH Manjeri. Government replied (December 2014) that explanation from DMO concerned has been sought for the lapses and implementation of an Inventory Management System for ISM was being seriously looked into.

Para 3.10.1
Admission of Students

14

It is true that in the academic year 2012-2013, the vice principal , Gov Ayurveda College , Thiruvananthapuram appeared before the Ayush

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The UG course in Bachelor of Ayurvedic Medicine and department for hearing on the short coming, reported by CCIM, during their Teachers for conducting these PG courses.

inspection but they denied and reduced the PG seats.

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## Para 3.10.2

Training in Surgery and Gynnecology

As per the syllabus for BAMS course, students are required to be trained in Surgeryagainst legal provisions. Non-availability of an exclusive DTL for testing statutory samples of ASU drugs even after availing GOI grant of 1.5 crore is a matter of

concern, and Gynaecology. Since adequate facilities were not available for imparting such training in Ayurveda Colleges, Government directed (1984 and later) the Directorate of Health Services to provide facilities in Government Allopathy hospitals for imparting training in Surgery and Gynaecology. Government also issued orders (1988) to continue the arrangement till the Ayurveda colleges were equipped with the required facilities. During

Surgery (BAMS) was available in all 16 inspection Even though the Vice principal requested time to fulfill the Government/Aided/Self-financing colleges in the State shortcoming CCIM did not accept the assurances made by the viceprincipal with an intake capacity of 910 students. Post Graduate and reduced the number of PG seats in Kaumarabhrithya and Agadhathantra courses were available only in six Department This department tried its best to provide qualified teaching staff Government/Aided/Self-financing colleges as of March in Kaumarabhritya Department by reappointing qualified and experienced 2014 with ability to admit only 130 students. Audit Retired professor, Dr.S.K.Ramachandran . Inspite of these action, the CCIM noticed that during 2012-13, the CCIM48 refused did not respond to the request of DAME to retain the sanctioned strength PG permission to GAC Thiruvananthapuram to admit students seats in Kaumarabhrithya and Agadhathantra Department. It is also reported to the PG course in Kaumarabhritya (5 seats) and also that the experience stipulated by CCIM for each category is the teaching reduced the number of seats for Agadatantra from five to experience after acquiring PhD in concerned subject or in their absence PhD three. Thus, as against 10 admissible seats for these two in the allied subject where as the special rules governing the series of teaching PG courses, permission was granted to operate only three staff in Ayurveda colleges stipulates only teaching experiences and Phd for seats since the college did not fulfill the eligibility each teaching post. It do not specifically states that the teaching experiences conditions of CCIM in terms of adequacy of qualified should be the one after acquiring PhD. The teaching staff in Kaumarabhrithya and Agadhathantra Department do possess Phd degree. But they acquired GOK replied (December 2014) that the GAC sought time these qualification while on deputation, holding different higher posts. Hence to fulfill the shortcomings noticed by CCIM during when teaching experience aft r acquiring Phd is concerned they have less teaching experience as per ICIM norm. This was the main reason for However GOK did not clarify why GAC failed to explain explaining the inadequancy of teaching staff in Govt Ayurveda College in Kaumarabhrithya and Agadhathantra Department

In the Judgment dated 3.6.2015 in WPO13595/15 Hon ble High court had set aside G.O(MS)No.60/2015/H&FWD and had directed Govt to consider the issue afresh after hearing the stake holders .Accordingly hearing was conducted and Government decided to create necessary posts under modern medicine for doctors in concerned fields to work in Ayurveda , so that the students in Ayurveda Colleges get the required exposure within their hospitals. Government of Kerala has directed the Ayurveda Medical Education Director to submit proposal for creation of posts under modern medicine for doctor in concurred fields to work in Ayurveda. It is also directedtht till such time these posts are created, the existing arrangement of following Ayurveda students as observers in the designated hospitals under Director of Ayurveda Medical Education and Director of HEALTH Services shall continue as per G.O(MS)No.241/2015/H&FWD ,Dated 27.10.2015

test check, it was however, noticed that the Ayurveda colleges continued to lack facilities for providing training in Surgery and Gynaecology to their students. Failure to provide requisite facilities in Ayurveda colleges for such training even after a lapse of 30 years, is a matter of concern.

Government replied (December 2014) that DAME had reported that some Allopathy doctors were eluctant to obey Government orders and BAMS students were not well treated in Allopathic hospitals and to overcome the simutions, the required facilities for training of BAMS students are to be provided in Ayurveda colleges only. Government also stated that orders were again issued (December 2014) facilitating training in selected Allopathic hospitals in the State. Failure of Government to enforce its own orders is cause for concern.

Para 3.10.3

providing Ayurveda treatment and were in demand both in and due to inadequacy of other facilities. DAME conducted these courses Government and private sector. DAME was the sole with 4 Temporary posts ( Head Clerk-1, Clerk -2, Typist-1) sanctioned by the authority in the State to regulate parametrical certificate Government from March, 2010. Qualified Ayurveda Therapists play a major courses in Ayurveda Therapist and Ayurveda Pharmacy, role in providing Ayurveda treatment and were in demand both in Government Admission to these courses in Government/Government and Private sector. Directorate of Ayurveda Medical Education was the sole Aided/Self-financing Ayurveda Colleges/Institutions was authority in the State to conduct and regulate ayurveda paramedical made on the directions issued by DAME. Audit, however, courses For conducting Ayurveda Paramedical Courses regularly, it is noticed that during the period 2009-14, certificate course necessary to convert these 4 temporary posts as Permanent. in Ayurveda Therapist was conducted only twice in 2009-10 and 2012-13. Records produced to Audit certificate courses on Therapy will lead students depending on unrecognised did not indicate any initiatives taken by the department tol private institutions for such course. As part of making aware of the public

despite demand. Failure of DAME to conduct sufficient papers also. number of Paramedical certificate courses on Therapy led to students depending on unrecognised private institutions

conduct such certificate courses in Government sector about such illegal agencies, information has been published in leading news

During the year from 2009 to 2014, certificate course in Ayurveda Therapist Ayurveda Paramedical Certificate Course on Therapy was conducted only twice in 2009-10 and 2012-13. It is difficult to conduct Qualified Ayurveda Therapists play a major role in the paramedical certificate courses regularly with the existing staff strength Failure of DAME to conduct sufficient number of paramedical

for such courses. Government stated (December 2014) that DAME had reported that it is difficult to conduct the paramedical certificate courses regularly with the existing staff strength and due to inadequacy of other faculties. However, Government did not offer comment about conduct of paramedical certificate courses unrecognised private institutions. 18 Para 3.11.1 During the financial year 2011-12 to 2011-14, Government provided funds Execution of Building Works under plan heads for the construction of Ladies hostel, a multi storied GOK sanctioned `3.85 crore during the period 2011-14 building for lab and diagnostic centre and also for the construction of Sewage works52 construction GAC Water Treatment Plant in Govt. Ayurveda College, Thiruvananthapuram. Thiruvananthapuram. Audit noticed that these works were not started/completed as of December 2014 due to non-Out of which construction work of ladies hostel and multi storied building for identification of site, nonpreparation of plan and design, lab are not started yet. But in connection with the construction of Ladies etc. Similarly, in VPSV Ayurveda College, Kottakkal also, Hostel at Panchakarma Hospital premises, Poojappura, a meeting was held at three works namely Panchakarma block first floor Government level on 08/12/2014 and decision were taken to hand over the (`0.68crore), OP block first floor (`0.53 crore) and RMO Quarter and Nurse Quarters situated in the proposed site to the PWD for Electrical Sub-station ( 0.22 crore) started in 2011 were demolishing the same for starting construction works. As such the quarters vet to be completed as of March 2014. Government replied were vacated and handed over to PWD. The PWD authorities have taken steps December 2014) that follow up action will be taken by to demolish the quarters by means of public auction and the quarters are DAME for completion of these works. demolished. It is expected that the construction work will be started in due course. In case of construction of multi storied building for Lab & diagnostic centre, the PWD authorities neither submitted the required plan nor started the work till date. The PWD was reminded several times and the matter has already been reported to Government and also the PWD higher officials and they are requested to take necessary steps to implement the project immediately. In the light of this performance audit report, the PWD authorities have once again requested to report the present stage of the work. 19 Para 3.11.2 Even though the new hospital block was inaugurated on October 2013, certain Deficiencies in Infrastructure in College Hospitals additional works such as additional facilities to both Operation theatre & the Audit found several deficiencies in infrastructure facilities Labour Room etc., are to be carried out and the same has already been in the test checked colleges and attached hospitals. It was entrusted with Hindustan Life Care Limited and the works is on progress. Due noticed that the W&C hospital, Poojappura, to some technical reasons Lift facility to the building is not yet been

labour room and inaugurated in October 2013, was not yet Government. put to use as of December 2014 except shifting the OP department. The Government Ayurveda College Panchakarma hospital, under the Panchakarma Department of GAC Thiruvananthapuram was also functioning in an incomplete four storied building constructed in 2011. The building was found damp and wet as rainwater was flowing through the duct provided for electric connection and the opening provided for the staircase. Solid waste was found dumped in the compound near Kashayam room. Government stated (December 2014) that the new building at W&C Hospital, Poojappura can be used only on creation of new posts. But due to resource constraints. Government could not sanction the posts. Reply of the Government is not acceptable as the shifting of the 80 bedded hospital from the existing two old tiled roof buildings to the newly constructed building could have been made without creation of additional posts. Failure to utilise the building resulted in denial of hetter facilities to the nationts.

(Prasuthithantra and Kaumarabhi itya departments of GAC completed. The general ward provided in the second floor has bed capacity of Thiruvananthapuram), with 80 beds including the only 30 patients. Hence shifting of 80 beds from the existing old building as Ayurveda paediatric ward meant for treating children with complaints of Developmental Diseases, Cerebral Palsy undergoing treatment in this ward in connection with a project with duration and Autism was functioning in two old tiled roof buildings which were congested due to lack of space while a new in Children conducted jointly by Department of Kaumarabhitya, Indian four-storied building constructed to increase the bed strength and to accommodate the operation theatre and proposal for the construction of a new building is under consideration of the

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20	P	ara 3.11.3
	Deficien	cies of equipment
	During physical verification College Hospitals, A equipments as detailed by	ation of facilities in test checked audit noticed deficiencies in claw in Table 3.3:
	Table 3.3: Deficiency in Name of Institution	
	Transcot Histiation	

VPSV Avurveda College Hospital, Kottakkal

1. The Ultrasound Scanner is now in irrepairable condition. Technicians were contacted. It was certified that the machine is beyond repair.

- 2. Adequate space has been created at the first floor of new OP block under Investigation Unit and the ECG machine procured in January 2014 has since been installed and is now working.
- 3. The Permission of Electrical Inspector for running the Generator has since been received. The Connection to hospital will be made available within few

	VPSV Ayurveda College hospital, Kottakkal	Ultra sound scanner was not working since 2009. The ECG machine procured in January 2014 was not installed due to lack of space. There was no generator facility in the hospital.	days after observing security measures.  W&C Hospital Poojapura Thiruvananathapuram  1. The newly purchased colour Doppler ultrasound scanner was put to use o  18/6/2015 after attaining the permission from District Medical officer.  2. Hospital Furniture procured for the new four storied building are allotted to new wards and in patient facilifies are available  3. Equipments found dumped in the W&C Hospital, Poojapura Thiruvananathapurare are utilized for day to day hospital activities. As pe
	W&C Hospital, Poojappura, Thiruvananthapuram	The Ultra sound scanner in the hospital was not put to use for lack of PNDT registration.	the CCIM norms, for the betterment of the students learning activities, these equipments like anaesthasia machine are used.
		Hospital furniture procured for the new four storied building were found dumped in the building which includes 56 cots, 65 beds, 75 pillows, 55 bedside lockers pending allotment to new wards.	
		Equipment found dumped in the building include items like Anaesthesia Machine, Spot light for labour room, Pulse Oxymeter Infant warmer, Phototherapy unit, etc.	
	Government admitted (Dec stated that action will be taken	pending utilization.  ember 2014) the facts and on these issues.	
21	Para 3. Pharmacog A Pharmacognosy53 Unit for	12.1.1 nosy Unit	Pharmacognosy Unit of Government Ayurveda College, Thiruvananthapuram is publishing the Book "The Pharmacognosy of Ayurvedic Drugs-Kerala". Till now 14 volumes had been published. The technical staffs of Pharmacognosy unit are Botanists. They analyse and study the macroscopic

produced to Audit revealed that the Unit conducted chemical properties of Ayurveda drugs were not studied plants. due to lack of infrastructure and manpower. The unit in its first publication itself had mentioned that the identity of a plant can be fixed only on study of all properties including chemical, and in the absence of such a study, it is not possible to differentiate any spurious specimen from the genuine one. Thus, a study conducted at Pharmacognosy unit is not comprehensive without analysis of chemical properties.Government replied (December 2014) that the existing physical facilities were not adequate to conduct the research work as pointed out by Audit. However, Government did not clarify the measures taken to strengthen the unit.

according to the Ayurveda texts was functional (since and microscopic characters of plants including the types of cells, a. March 1966) in the GAC Thiruvananthapuram. As of to tissues, stomatal types, characters of trichomes, crystals, rese. December 2014, the Unit published 13 volumes of materials, stone cells, fibers etc, and the finding are published in the Pharmacognosy of 198 medicinal plants. Even though book. With reference to authentic chemistry texts the chemical constituent. Pharmacognosy included study of physical, chemical, bio- medicinal plants can be included in future publications. The existing man chemical and biological properties of drugs, records power and physical facilities are not adequate for analyzing the physical Chemical and biochemical properties of medicinal plants. Therefore DAME studies of only biological properties of the plant. It was has agreed to furnish proposals for strengthening the existing infrastructure admitted by the Unit that physical chemical and bio-land man power for comprehensive pharmacognotical study of medicinal

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#### Para 3.12.1.2 **Drug standardisation Unit**

in Indian Medicine & Homeopathy (CCRIMH). Under the DAME, D&C Act. Avurvedic Pharmacopoeia of India (API)

In the performance audit report of Indian System of Medicine, Chapter III-Ayurveda, page no.57, 3.12.12, it is mentioned "As DSU has not initiated any Government established (February 1974) a Drug action to incorporate their works in API publications; their works have no Standardisation Unit (DSU) underthe control of the acceptance at national level and no legal validity". In order to strengthen the Principal, GAC Thiruvananthapuram with the objective of infrastructure facilities and to upgrade DSU as a National level laboratory to evolving methods for standardisation of Ayurveda drugs be recognized by Ayurvedic Pharmacopeial Committee, steps had already by prescribing standards of raw material, methods of been taken by DSU. Govt. had constituted an expert committee to set up an manufacture and standardization of finished products. The Institute for Pharmaceutical Drug Research as per reference 3nd above. The DSU was directed to conduct research on items which initial expenditure for the purpose was also set apart in the budget 2009-10 were not attended to by the Central Council for Research and was expected to meet it under the head of account 2210-05-101-70 by the

publications (part 1 and II) are the books of standards for Presently in Kerala, there is no such contributing laboratory and institution single drugs and compound formulations included therein under Ayuvedic Pharmacopial Committee. Under the above circumstances.

and would be official. The DSU published six monographs necessary steps will be taken to contact API for incorporating research works comprising of 70 medicinal plants/drugs. of DSU in their publications so that the monographs have acceptance at Though the API was a collective work of various national level. laboratories, no efforts were made by DSU to contribute to API. No action was initiated to obtain technical or financial assistance from GOI for conducting the research activities, though the Department of AYUSH had schemes to provide financial assistance for drug standardisation like 'Extra Mural Research', Scheme for evolving Pharmacopoeial Standards for Ayurveda drugs and Standardised Operating Procedures of Manufacturing Processes of Ayurveda drugs. Government stated (December 2014) that research methodology of PG students and research works in standardisation are going on in DSU. Government admitted that orders were not issued to DAME to contact API for encouraging the function of DSU.As DSU has not initiated any action to incorporate their works in publications, their works have no acceptance at national level and no legal validity. 23 Para 3.12..2 The Government order G.O.(Rt) No. 2025/2003/H&FWD dt.7/7/2003, reads Patent Cell that "As Law relating to Patents are universal, Government of India can take Traditional Knowledge Digital Library (TKDL) was a steps for acquiring patents on Ayurvedic concepts. For this purpose the collaborative maiden Indian venture between the Council specific areas in Ayurveda and related matters peculiar to Kerala is to be of Scientific & Industrial Research (CSIR), Ministry of located. Science and Technology and Earth Sciences and Having examined the issue in detail Government are pleased to constitute a Department of AYUSH to prevent misappropriation of Patent Cell." traditional knowledge belonging to India at International

Patent Offices. Government of Kerala constituted (July
2003) a 'Patent Cell' in the DAME to take steps for acquiring patent rights on Ayurveda concepts. The Patent Cell was to conduct survey, identify, collect and digitised literature documents. The Cell has digitised locating and digitising the Traditional knowledge in the state. The Patent Cell constituted for this purpose.

Accordingly a number of documents have been located and digitised.

Accordingly a number of documents have been located and digitised.

nonced that no formulations digitised by Patent Cell were accordingly a number of documents have been located and digitised incorporated in the database of TKDL and thereby. This has been brought to the notice of Dept. of AYUSH and Dept. of IPP, GOI, protection of Traditional Knowledge digitised by the requesting to take necessary steps to link this digital format with that of

Patent rights for any of the formulations digitised were when this linkage is made possible. acquired as of December 2014. Government stated Patent Cell became infructuous.

Para 3.12.3

Conservation of Manuscripts 25

GAC Division The Publication Thiruvananthanuram has a collection of 224 manuscripts out of which 99 were deciphered (September 2014). The National Mission for Manuscripts had stipulated Basic Minimum Standards for Conservation of Manuscripts such as protection from fire, water, natural calamities, Insect attack, microbiological attack, dust, environmental pollution and light, fluctuations in temperature and relative humidity, etc. Audit scrutiny revealed the following instances of non-compliance with guidelines in conservation of these invaluable assets.

· Quarantine room or any procedure for checking the newly acquired manuscripts for insect or fungus attacks was not in place.

 The manuscripts were found dumped in a cupboard and no methods were adopted for the scientific preservation of these manuscripts. Training was also not imparted to the staff of the Publication Division on safe handling of the manuscripis.Index register was not maintained to show the provenance of these manuscripts. Non-compliance of guidelines laid down by the National Mission for Manuscripts for conservation of the invaluable manuscripts may result in future risks of deterioration of

Patent Cell was not ensured. Audit also noticed that no TKDL, GOI. The patent right on the these knowledge can be established

At the same time we publish the documents on Ayurvedic concepts (December 2014) that the issue was raised before and bring it to public domain. Those documents which are already in Public Department of Industrial Policy and Promotion, GOI domain naturally acquires the Patent rights and make it immune to fake Patent which is dealing with all Intellectual Property Rights and claims. All the medicinal formulations in these books are thus protected response from GOI is awaited. The fact remains that the Being one of the defensive measures of protecting patents, the publishing is traditional knowledge digitised by the Patent Cell progressing in good pace. The database is truly, the most important tool for the remained unprotected as of December 2014 as the TK protection, especially to assist the patent offices in identifying fake claims database was not linked to the TKDL and thus the work of in patent applications; Government is expecting a favourable response from GOI in this regard...

> All the 224 manuscripts were handed over to the TKIK All the 224 manuscripts were handed over to the TKIK on 30/07/2015 as per the order No

- 1) S4/1812/2015\_AVC dated: 27/05/2015
- G4/518/2015/DAME dated: 12/02/2015.

manuscripts The Head of Publication Division admitted (September 2014) the audit observations on the shortcomings Government stated (December 2014) that the Manuscripts in the Publication Division are being kept in safe custody in order to ensure safety from fire, water, natural disasters, insect bites, light, pollution, etc. The GOK however, did not offer assurance on adhering to guidelines laid down by the National Mission for Manuscripts for conservation of

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## Para 5.4 Misappropriation of Government Money in District

the manuscripts other than that relating to safe custody.

Ayurveda Hospital, Palakkad Non-adherence to codal provisions and lack of supervision resulted in misappropriation of '9.30 lakh. working day and verified with the book balance in the misappropriated amount. Cash Book and other registers after they have been closed for the day. Moreover, Rule 7 (2) of the Kerala Financial Code (KFC) - Vol. I stipulates that money received on account of Government dues should be remitted into Treasury the next working day. When this is not possible owing to distance from the Treasury, or any other cause, the money should be remitted periodically, i.e. at least once in a week on the last working day. Section 12 of the Kerala Indigenous Medicine Departmental Manual stipulates that the District Indigenous Medical Officers (DMO, ISM) shall make intensive annual inspection of hospitals and dispensaries under their jurisdictions. The Chief Medical Officer (CMO), District Ayurveda Hospital, Palakkad(DAH) was maintaining four separate cash books for General, Hospital

Dr.A. Ashokan, who was serving as the Chief Medical Officer of District Ayurveda Hospital, Palakkad during the local audit was directed to repay Rs.9.30 Lakh with interest at the rate of 18% from 25th November 2013 till date of repayment. But he has not paid the amount till now. The District Medical Officer, Palakkad has informed that a police case has been registered As per Rule 131 (a) of the Kerala Treasury Code (KTC), against Dr. A. Ashokan, vide crime No.365/2015 under section 409 IPC as part the contents of the cash chest or the cash on hand shall be of the disciplinary action. It is also informed that Dr.A.Ashokan is currently counted by the head of the office or, under his orders, by placed under suspension. Govt also given direction to DISM to initiate a gazetted subordinate at the close of the business on each revenue recovery proceedings against him for recovery of

Management Committee (HMC121), Kerala Health Research and Welfare Society (KHRWS)122 and NRHM (Ayush funds123) transactions. He was also the custodian of cash. As per the entries in the four cash books, the closing balance of cash as on 25 November 2013 was '9.30 lakh124. However, a physical verification of cash conducted by the CMO at the instance of Audit revealed that the total opening cash balance as on 26 November 2013 was 'Nil', indicating misappropriation of funds. The CMO admitted (November 2013) the shortage of money and certified that there were no unaccounted advances, expenses or receipt as on 26 November 2013.

CMO admitted (November 2013) the shortage of money and certified that there were no unaccounted advances. On detecting the shortage of money, Audit undertook a detailed scrutiny of various cash books maintained in the DAH. It was seen during audit that from July 2012 to November 2013, the CMO disregarding the provisions of Rule 7 (2) of KFC had neither remitted all general cash into the Treasury nor remitted the relevant cash to the KHRWS/HMC accounts except in a few cases. The CMO did not pay the electricity and water charges despite receiving funds from the District Panchayath for the purpose. He had also withdrawn advances from HMC accounts using self cheques in excess of actual requirement. It was further observed that the DMO (ISM) was informed by the Regional Manager of KHRWS (October 2013) about the non- remittance of receipts under KHRWS accounts in the bank by the CMO. However, other than directing the CMO to remit the receipts into bank, no action was taken by the DMO to investigate the issue further. Had the DMO conducted regular inspections at the DAH as stipulated under Section 12 of the Kerala Indigenous Medicine Departmental Manual, the accumulation of large cash non-remittance eventuali balances, misappropriation could have been avoided. It was also noticed that though the CMO was responsible for maintaining the Cash Book and authorising payment, the cash book was not regularly updated and physical cash balance not checked which is in violation of Rule 131 (a) of KTC. Thus there was a failure in internal control system. Thus, non-adherence to codal provisions by the CMO and taxity on the part of the DMO facilitated misappropriation of '9.30 lakh at the DAH. On pointing out this misappropriation by Audit, Government placed the CMO under suspension (December 2013) and directed him (September 2014) to repay '9.30 lakh with interest at the rate of 18 per cent from 25 November 2013 till date of repayment.

The statement of action taken furnished for the above paras may kindly be accepted and the objections may



Statement of Action taken on the recommendation contained in para 4.6 of the report of the Comptroller and Auditor General of India on General and Social Sector for the year ended March 2015.

SI.No. Para No.	Recommendation	Action Taken
1 4.6	Misappropriation of Government Money in Ayurveda Dispensary, Cherpulassery.  Non-adherence to codal próvisions and laxity in supervision resulted in misappropriation of ₹2.5 lakhs.  Rule 92 a (ii) of the Kerala Treasury Code (KTC) stipulates that all monetary transactions should be entered in the Cash Book as soon as they occur and attested by the Head of the Office in token of check. Section 12 of the Kerala Indigenous Medicine Departmental Manual stipulates that the District Indigenous Medical Officers (DMO, ISM) shall make intensive annual inspection of hospitals and dispensaries under their jurisdictions.  The Medical Officers (MO) of Government Ayurveda Dispensaries are the Drawing and Disbursing Officers (DDO) in respect of both Government as well as the Local Self Government Institutions (LSGI) funds. In accordance with Government of Kerala (GOK) guidelines (September 1995), funds are released by LSGIs to hospitals under their control for purchase of medicines, maintenance of hospitals, etc. Guidelines issued (April 2006) by GOK on allocation and drawal of LSG funds require that the money drawn by DDOs from a non-banking treasury  The MO, Government Ayurveda Dispensary (GAD) Cherpulassery withdrew Rupees Three lakh (Rupees One Lakh each was withdrawn or 27 October 2011, 27 March 2013 and 19 July 2013) provided by Cherpulassery Grama Panchayat from the Sub Treasury, Cherpulassery for purchase of Ayurveda medicines from Oushadhi must be deposited on the same day in the account opened in a nationalised bank. Payments were to be made by way of demand drafts on receipt of proper acknowledgement Audit examined the accounts of Oushadhi with reference to these transactions and noticed that between October 2011 and July 2013, the MO, GAD Cherpulassery had procured medicines worth Rupees One lakh only from Oushadhi Further, though Rupees One lakh drawn from the Sub Treasury on 27	Comptroller and Auditor General, on para 4.0 Government initiated disiplinary action against the deliquent Officer, Dr.K.G.Dhanesh. The Medical Officers (MO) of Government Ayurveda Dispensaries are the drawing and disbursing officers (DDO) in respect of both Government as well as the Local Self Government Institutions (LSGI) funds. Dr.K.G.Dhanesh has misappropriated ₹ 2.5 lakhs while he was working at Government Ayurveda Dispensary, Cherpulassery in connection with the purchase of Ayurveda Medicines from Oushadhi and the purchase of the computers to that Dispensary.  When the misappropriation was noticed he was suspended from service by the Director of Indian Systems of Medicine and subsequently disciplinary action was initiated. When he was charge sheeted, he admitted to his responsibility and its breach. He has refunded a total amount of ₹ 3,82,682/- (Rupees Three lakhs eighty two thousand six hundred and eighty two only) (the original amount of ₹ 2.5 lakhs along with 18% of interest) to the District Treasury, Cherpulassery as per the chalans No. 26, 27, 28 dated on 7.11.2015. Consequently as part of the disiplinary action taken againt him, Government have decided to bar his three increments with

October 2011 was shown as receipt in the Cash Book and paid to Kerala Public Service Commission. The reply of Oushadhi by way of demand draft for purchase of medicines, the money Public Service Commission is awaited for the was neither deposited in the bank account maintained with State Bank of finalization of the disiplinary action initiated Travancore nor demand draft drawn for payment to Oushadhi. Also, Rupees One lakh drawn from the Sub Treasury on 19 July 2013 was not recorded as receipt in the cash book. Verification of bank account statements by Audit also did not show deposit of the money on 19 July 2013 or on subsequent days. Thus, Rupees two lakh was misappropriated

by the MO. Similarly, the MO withdrew (11 October 2013) ₹0.50 lakh from the treasury for purchase of computers. The amount was taken as receipt in the cash book and shown as expenditure on the same day for purchase of computers. However, records examined by Audit did not confirm any such purchase. No quotation, invoices and stock entries were available on record as evidence of purchase of the computers. Bank account statement also did not show any evidence of deposits and payment made to any firm towards the supply of computers. Moreover, monthly reconciliation of accounts were not found to be done with the bank/treasury. The MO, GAD also stated that no computers were available in the GAD which confirmed that the then MO had misappropriated ₹0.50 lakh. Even though as per Rules, the DMO, ISM was required to make intensive annual inspection of hospitals and dispensaries under their jurisdictions, inspections were conducted only on three occasions (03.02.2010, 24.01.2011 and 12.09.2013) during the years 2009-14 against the required five. However, the DMO, ISM failed to identify the instances of misappropriation during the course of his inspections. Thus, non-adherence to codal provisions by the MO and laxity on the part of the DMO, ISM in conducting periodical and intensive inspections as mandated in the Departmental Manual resulted in misappropriation of \$\forall 2.50 lakh at the GAD, Cherpulassery. It was observed by Audit that on the basis of audit findings, departmental enquiry was conducted by the department and the Director (ISM) had suspended (September 2014) the MO, GAD Cherpulassery from service. Confirming the audit findings, Government of Kerala stated (July 2015) that the MO had admitted the misappropriation and that action was being finalised at the Government level for imposing major penalty against the official.

agaist him upon consultation.

Also strict instruction has already been given to Director, Indian Systems of Medicines to conduct intensive Annual Inspection of bospitals and dispensaries under their jurisdiction.

K.VENU GOPALAN UNNITHAN

Joint Secretary AYUSH Department Covernment Secretariat (biruvananthapuram tol: 8471 2518430

# Statement of Action taken on the recommendation contained in the report of the Co. Auditor General of India on General and Social Sector for the year ended March 2.

Sl.No.	Para No.	Recommendation	Action Taken
1	3.6.1	Rs.60.70 crore during 2009-12 as grant-in-aid to SHFWS under NRHM for upgradation of AYUSH hospitals and dispensaries including procurement of medicines, engagement of personnel and supply of drugs in the State. The State has not received any assistance from GOI since 2012-13 as Government of Kerala (GOK)/NRHM is yet to furnish UCs for Rs.9.38 crore of the Rs.9.4.71 crore received by it due to which the grant of Rs.12.75 crore receivable from GOI for the years 2012-14 under this component has lapsed. GOK/NRHM's failure to obtain GOI's share resulted in the non-payment of	During 2014 sponsored scheme has been dropped and AYUSH Health Society was formed on 2014 and the funds from Government of India have been forwarded to the society since then. Now, Monitoring Mechanism for utilisation of funds have been strengthened and hence, the objection raised may be dropped.
	3.8.3	Diet The Kerala Indigenous Medicine Departmental Manual and subsequent orders of Government prescribed various food items and their quantity to be distributed as diet to patients. The DISM enhanced (August 2013) the cost of diet to inpatients from the existing Rs.25 to Rs.30 per day per patient, with direction to limit the cost to the prescribed rate of Rs.30. Audit noticed (July 2014) that the food items and the quantity supplied in test checked hospitals viz., bread & milk in the	same in the plan proposal and present it for the approval of the working group.

morning, rice & green gram at noon and evening were not as prescribed36 in the Manual and Government orders. Even though 13 out of 14 test checked hospitals provided Kanji diet to its patients, it was seen that GAMH Kanjiramkulam did not include bread and milk in its diet. Three hospitals (DAH Valavannur, GAH Guruvayur and Panchakarma Hospital, Alappuzha) failed to supply bread to its patients. Even the hospitals which distributed bread to its patients distributed only 100-200 gms against the stipulated 400 gms. Against the stipulated requirement of 500 ml milk, all the hospitals which distributed milk, supplied only 200 ml to 250 ml to its patients. Audit noticed that out of 14 Ayurveda hospitals, the GAH Punnapra did not provide diet to in-patients as there was no cook in the hospital. The diet was not able to provide nutritive food to injured sportspersons admitted in the Sports unit of GAH Nedumangad and Rama Varma District Ayurveda Hospital (RVDAH), Thrissur. During survey, 66 per cent of the in-patients expressed that diet provided was sufficient, 10.38 per cent opined that it was not sufficient, while others either did not respond or were subjected to restricted diet as part of the treatment. Government replied (December 2014) that the diet charges of Rs.30 per day were grossly insufficient to give quality food to patients and enhancement of diet charges is under its consideration.

3.8.4 X-ray services

provided with X-ray units. Out of these, three hospitals (DAH agencies. Alappuzha, RVDAH Thrissur and DAH Valavannur) offered X-

X-Ray unit at Government Ayurveda Marma Hospital Atomic Energy (Radiation Protection) Rules, 2004 on licensing Kanjiramkulam started functioning from 24-02-2016. The X-ray of X-ray units provide for issuing of licence for operating technician working at District Ayurveda Hospital Thrissur has radiation installations after inspecting the working practices obtained TLD badge. The construction work of X-ray room at being followed to ensure adherence to prescribed safety District Ayurveda Hospital, Palakkad is in progress. The District standards, availability of appropriate radiation monitors and Medical Officer (ISM) Palakkad is instructed to expedite action to dosimetry devices for purposes of radiation surveillance, etc. start the unit at the earliest. Necessary instructions have been The Director of Radiation Safety (DRS) is the authorised given to the District Medical Officer (ISM) Alappuzha to speed agency in Kerala to issue licences on behalf of Atomic Energy up the actions to obtain necessary certifications from the Regulatory Board. Five of the 14 hospitals test-checked were Radiation Safety authorities and TLD badges from authorised

ray services and as two hospitals (CAMM) is inframitulem and DAH Palakkad), the units were not made functional. Audit! noticed that X-Ray machines were operated in DAH Alappuzha from May 2012 and in RVDAH Thrissur from December 2011 without obtaining Certification of Safety from the DRS. The technician handling the X-ray unit in DAH Alappuzha was not provided with TLD film badges to indicate levels of exposure to radiation. In the absence of TLD badges and safety certification from the DRS, Audit could not obtain reasonable assurance that patients and technicians were not being exposed to more than permissible radiation levels. Government replied (December 2014) that action has been initiated to obtain safety certificates from DRS.

#### Inspection of manufacturing units 3.9.4

licensed Ayurveda manufacturers during 2009 to 2013 was the target of Inspections. 980, 937, 870, 774 and 890 respectively. It was noticed that there was shortfall ranging from 63 to 81 per cent in conducting inspection of the Units GOI insists one DI for every 100 manufacturing units. Minimum number of DIs required for inspection of 890 units (in year 2013) will be eight. However, there were only three DIs and in respect of the four new posts sanctioned in September 2012, appointments were made temporarily from January 2014 and these posts remained vacant from October 2014. The shortage of DIs hampered the inspection process. Government replied (December 2014) that the shortages in conducting inspections were due to insufficient DIs and also non-availability of

The Government accorded sanction to create 4 (four) Quality of drugs procured and distributed to patients in the new posts of Drugs Inspector (Ayureda). The recruitment State for, be ensured only by regular inspection of procedure by Kerala Public Service Commission is under way manufacturing units to check the manufacturing processes and and vacancies are expected to be filled soon. In the meantime resting of products manufactured by them for stipulated provisional drug Inspectors were appointed from Employment quofity. As per the Drugs and Cosmetic Rules, 1945, the Exchange, After the appointment of Provisional Drugs Inspectors Drug Inspectors (DI) are required to inspect all premises the number of inspections conducted has increased considerably. discussed to manufacture Ayouveda drugs, not less than twice a Government of India, under the Centrally Sponsored Scheme, year to ensure that the conditions specified in the licence and has released necessary fund to hire private vehicles for the statutory provisions were being observed. The number of conducting inspections, sampling etc. It has also helped to atrain

vehicles and assured conduct of inspections as stipulated on filling up the four vacant posts by regular hands, for which the recruitment process is in progress. Licensing of Ayurveda Health Centres As per the Section 1(3) of the Kerla Ayurveda Health 3.9.6 The Kerala Avuryeda Health Centres (Issue of Licence and Centres(issue of Licence and Control) Act 2007, it is stated that it Control) Act. 2007 and Rules made thereunder (2008) shall come into force from such date as the Government may by provided for categorizing Avuryeda health centres into "A, B' notification in the Gazette appoint. But it is not notified as stated and 'C' on the basis of facilities available like infrastructure, above. It is also decided to enact Kerala Clinical Establishment trained manpower and equipment. The Act also stipulated that Bill(2013) including the provisions pertaining to Indian Systems Ayurveda Health Centres 46 should possess a valid license of Medicine and is under the consideration of the Legislative issued by the DISM after an inspection and certification by a Assembly. In the light of the inclusions of the provisions three member committee47 with a view to ensure that the pertaining to Indian Systmes of Medicine into the Kerala Clinical provisions of the Act are being complied with. The licenses Establishment Bill(2013). the Kerla Avurveda Health were to be renewed after every three years. Audit noticed that Centres(issue of Licence and Control) Act 2007 not come into the DISM had not issued a single license (December 2014) to force. any such Centre. The DISM also did not possess data on the number of Avuryeda Health Centres operating in the State. Failure of DISM to discharge responsibilities entrusted by the Act is significant when viewed in the light of the fact that criminal cases were registered against six illegal Ayurveda health centres in the State during 2013-14 alone. Government replied (December 2014) that the present Kerala Avurveda Health Centres (Issue of Licence and Control) Act would be repealed when the Kerala Clinical Establishment (Registration & Regulations) Bill 2013 would be enacted by the Legislature. However, the reply fails to explain why the DISM did not enforce provisions of an Act which was passed by the Legislature and for which rules were also framed for implementation. Besides, there were also no directions from Government restricting the DISM from enforcing the provisions of the Act. An executive order has already been Availability of Teachers in Avuryeda Colleges 3.10.4 As per Indian Medicine Central Council (Minimum Standards G.O.Rt.No.408/2016/Ayush dated 19.08.2016, reducing the of Education in Indian Medicine) (Amendment) Regulations teaching staff under Ayurveda Medical Education Department 1989 and notifications issued subsequently, for appointment of into three and redesignated as Assistant Professor, Associate teachers in Ayurveda Colleges with effect from 01 July 1989, a Professor and Professor as stipulated in CCIM Regulations and PG qualification in the subject/speciality or in allied subject necessary amendments in the Special Rules inpar with the CCIM

concerned as notified by CCIM is required. However, Audit Regulations is under processing. noticed that seven out of 167 faculties in the three50 test checked Ayurveda colleges who were appointed after 01 July 1989 did not possess the required PG qualification. One of the seven faculty (Assistant Professor in Ayurveda college, Ollur) has since been declared (November 2014) by CCIM as ineligible for appointment as faculty. Government (December 2014) stated that teachers were appointed in accordance with the Special Rules for Kerala State Ayurveda Medical Education (Teaching Services)51 and hence there will be differences as per the Rules of CCIM. During Exit Conference (December 2014) the Secretary assured that the Special Rules would be amended suitably in line with CCIM norms.

Research Cell in Sports Avurveda 3.12.1.3

established (December 2009) under the DISM to manage conduct research works on these purposes. During the period submitting yearly reports, on the basis of cases managed. 2009-14, `3.61 crore was spent (out of Rs3.70 crore allotted) on various activities of the Research Cell, but there were no treatment units, than research units. recorded data on any research work carried out by the ensure the quality of raw materials used in the manufacture of function effectively under its guidance. (December 2014) that the studies conducted on special dated 28.12.16.

The research cell is undertaking the activities under the four A Research Cell for Indian System of Sports Medicine was main units at Thiruvananthapuram, Eranakulam, Thodupuzha and Kannur. The Sports Ayurveda units under each main unit are sports injuries, to improve physical fitness of athletes using conducting OPs and managing the sports injuries along with the Ayurveda treatment, to prepare new formulations and to endurance enhancement of sports men. Each sports unit

The research cell units are now functioning mere as

Special medicines are prepared by the Ayurveda Research Cell as of December 2014. The Ayurveda Sports Oushadha Nirmana Vyavasaya Co-Op Society, and were used in Medicine State Level Committee (SLC) entrusted the work the units. As it was a pilot project, no ethical clearance was (August 2011) to the Chief Co-ordinator, Sports Medicine for taken. Medicines were prepared under the strict observation of a the manufacture of Sports Special Medicines. SLC awarded committee constituted by ISM Director including coordinator, (March 2012 & September 2012) the manufacture of sports Joint Director of ISM and other doctors. The raw materials were special medicines (Thailam I, II, III and Special Lepam) to the carefully selected and the medicines were prepared in their Ayurveda Oushadha Nirmana Vyavasaya Co-operative Society physical presence. All the raw materials used are mentioned in Ltd., Thiruvananthapuram. Necessary clinical trials were not the Ayurvedic pharmacopeia. The finished product was not conducted and ethical clearances for these medicines as per analyzed, or toxicity study was not conducted. The efficacy of the World Health Organisation guidelines were not obtained product could be analyzed from the pharmacological action. Audit further noticed that there was no system in place to After forming the Ethical Committee, the research cell can

these medicines and to conduct quality tests for toxicity/heavy Now sanction was given to Oushadhi to prepare special metal in the manufactured drugs. Government stated medicines for sports Ayurveda Units vide G.O.Rt 612/16/Ayush

medicines prepared by the Research Cell in Sports Avurveda during 2012-13 and 2013-14 were on a pilot basis and no ethical clearance was needed for pilot studies. Government also stated that an ethical committee would be constituted with immediate effect and the department of ISM would subject future studies to the committee for clearances. It further stated that a High Level Committee headed by the Joint Director of ISM and Chief Co-ordinator had been constituted to effect the procurement and preparation of research medicines. The department of ISM had however, not produced any documents on conduct of research works with reference to the objectives and efficacy of Sports Ayurveda Medicines.

3.13.2 Accreditation by National Accreditation Board for National Ayush Mission (NAM) has fixed a standard named Hospitals (NABH)

tourists and locals that the centres were providing services as standard. per global standards. These accredited wellness centres were appropriate locations, financial support from GOI for hospitals These would facilitate creation of awareness of such centres the report is received. among potential tourists and eventually help to attract tourists and thereby to promote Ayurveda. As of March 2014, only five such wellness centres in the private sector in the State had obtained NABH accreditation. Audit noticed that no institution under Government sector obtained NABH accreditation as of March 2014

Kerala Accreditation Standard for Ayush Hospitals (KASH) for NABH offered accreditation to wellness centres (Ayurveda the institutions under Ayush Department, Based on these hospitals, Spas, Ayurveda Centres, Yoga & Naturopathy standards, department aims to attain this standards to its centres, Fitness centres, Skin care centres, etc.) possessing institutions in a phased manner, and granting funds for this standards of quality prescribed by it after evaluation of such purpose from 2015-16 onwards. Two selected institutions from standards. NABH accreditation was offered to assure the each district are being financially supported to attain KASH

Government Ayurveda College Thirnvananthapuram has entitled to incentives for accreditation by Ministry of Tourism taken all steps to implement the standards as per accreditation for listing on incredible India website, display of NABH Mark norms issued National Accreditation Board for Hospitals. of Excellence and logo approved by Ministry of Tourism at Feasibility study for the said purpose has been completed in all attached to government Ayurveda College participation in the international wellness tourism events, etc. Thiruvananthapuram. The same will be implemented as soon as

SI.No. Para No.	Recommendation	As the
3.14	Conclusion  Failure of GOK/NRHM to furnish Utilisation Certificates to GOI for funds already received resulted in the State losing GOI assistance of Rs.12.75 crore receivable during 2012-14. Failure to set up new departments for Preventive Ayurveda, Yoga, Naturopathy and Vishachikitsa in GAC Thiruvananthapuram resulted in refund of GOI assistance of Rs.1.5 crore in May 2013. DISM did not fix any standards for infrastructure facilities and services in hospitals/dispensaries. Lack of infrastructure and deficient human resources affected the quality of services delivered by the Government Ayurveda hospitals and dispensaries. Among the test checked hospitals GAH Punnapra had the lowest bed occupancy of 33 per cent. The hospital neither provided diet to its patients nor therapy to male patients due to absence of Cook/male Nurses/Therapist. In seven test checked hospitals, there was no heating facility in the therapy/treatment rooms forcing patients to bring fuel and stove for heating Thailam for oil massage Drugs procured from Oushadhi for free distribution to patient in hospitals were not tested for presence of heavy metals aflatoxin, toxicity and pesticide residue. The DSU attached the GAC Thiruvananthapuram obtained '1.50 crore for settin up a DTL for ASU drugs in the State. However, the DS continues to function as a research unit for supplementin academic activities and not as a DTL for ASU drugs in the State. GOK could not also enforce its own orders for transferring control of the DSU to the DDC (Ayurveda). The DISM did not enforce provisions of the Kerala Ayurveda Healt Centres (Issue of License and Control) Act, 2007 stipulatin the issue of licenses to Ayurveda Health Centres. The inder for departmental/scheme supply and LSGI supply of Ayurved drugs were prepared without assessing the consolidate annual requirement. Database of 2505 Ayurveda formulatio created by the Parent Cell under DAME remained unprotect as the database was not	was la to not been 2014 wage appoint was la was have Mech hence follows 128/for 1 1 28/for 1 28

Action Taken

As the UC's were not furnished in time the fund of Rs. 9.38 crore was lapsed. The UCs pertaining the contruction was delayed due to non completion of the various stages of work. All Ucs has been liquidated after completing the civil works during the year 2014 and fund has been released from 2014 onwards. The wages pending to the Medical Officers and Ayurveda Therapists appointed through NRHM have been paid fully. During 2014 sponsored scheme has been dropped and AYUSH Health Society was formed on 2014 and the funds from Government of India have been forwarded to the society since then. Now, Monitoring Mechanism for utilisation of funds have been strengthened and hence, the objection raised may be dropped.

Byen after a long period of 38 years; the ISM department is following a staff pattern fixed in 1978, as per GO (MS) 128/78/HD, dated, 3.5.1978. In this G.O, staff pattern was fixed for 10, 20, 30 and 50 bedded hospitals only. At present, 4, 6, and 100 bedded Hospitals are also functioning under this department. But staff pattern for these hospitals has not yet been fixed. Some of the posts mentioned in the above said order was re designated such as Hospital attendant as Nursing Assistant; Scavanger as Sanitation worker etc. Proposals for fixing staff pattern for the creation of the posts of Pharmacists are under the Consideration of Government. 41 Therapist posts are created in ISM and 10 Therapist posts are created in hospitals under GAC, Thiruvananthapurm. Proposals for strengthening of internal audit wing is also under Consideration of Government.

Action has been taken to renew the Department manual and to fix the delegation of powers of each category. After the implementation of Panchayathraj Act, all the institutions were transferred to concerned local bodies, and hence, they are also responsible to provide necessary infra structure facilities to the institutions.

Government order exists to procure medicines from Oushadhi being Oushadhi is a government institution. At

Sl.No. Para No.	Recommendation	Action Taken
	linked to that of TKDL.	present, the ISM department has no facility to examine to quality of medicines produced by Oushadhi.  As per the Section 1(3) of the Kerla Ayurveda Heal Centres(issue of Licence and Control) Act 2007, it is stated that shall come into force from such date as the Government may it notification in the Gazette appoint. But it is not notified as states above. It is also decided to enact Kerala Clinical Establishmen Bill(2013) including the provisions pertaining to Indian System of Medicine and is under the consideration of the Legislativ Assembly. In the light of the inclusions of the provision pertaining to Indian Systems of Medicine into the Kerala Clinical Establishment Bill(2013), the Kerla Ayurveda Healt Centres(issue of Licence and Control) Act 2007 not come int force.  Parent Cell is coming under the Department of Ayurved Medical Education. The database of Ayurvedic formulation retrieved from ancient palm leaf manuscripts and other literature is kept undisclosed in the office of traditions knowledge Innovation Kerala (TKIK) which is an ungraded structure of erstwhile Patent cell. The TKIK running under the State plan budge continues to be a unit of directorate of Ayurveda Medical Educationk, Department of AYUSH. Government of Kerala. The process of linkage has already been initiated. Two meetings had been held in this regard ith Central AYUSH department, Department of Industrial Policy & Promotion and THDL (CSIR) at New Dehlhi. It was decided in the Secretary level meeting that the technical team of THKL (CSIR) will visit TKIK and submit a report on the linkage of databases to Secretary, Department of AYUSH, Government of India.  The visit and the report of TKDL (CSIR) is awaited; follow up is made in this regard. The Linkage of databases of TKIK, Government of Kerala and TKDL, Government of India now solely depends on the decision of Department of India promotion Government of India and Department of Industrial Policy and promotion Government of India who are the central bodies to deal with traditional know

 	Decommendation	Action Taken
 ra No	Recommendation  Recommendations  State Government may ensure:  • Upgradation and standardization of Ayurveda hospitals and dispensaries in the State in a specific time frame;  • Compliance with its order of January 2013 requiring the Drug Standardization Unit and its employees to be placed under the administrative control of the DDC (Ayurveda) for testing quality of ASU medicines;  • Enforcement of provisions of the Kerala Ayurveda Health Centres (Issue of License and Control) Act 2007 requiring DISM to issue licenses to these Centres after inspection and certification;  • Preparation of an EDL for Ayurveda drugs in conformity with the EDL published by GOI and preparation of purchase indents based on the list and actual requirements of hospitals;  • Scientific assessment about manpower requirement and appropriate placement; and  • Development of Pharmacopoeia for Ayurveda drugs with details of proportion of the ingredients.	

The statement of action taken furnished for the above paras may kindly be accepted and the objections may kindly be dropped.

photographic .

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Statement of Action taken on the recommendation contained in para 4.6 of the report of the Comptroller and Auditor General General and Social Sector for the year ended March 2015.

Sl.No. Para No. Recommendation	Action Taken
Misappropriation of Government Money in Ay Cherpulassery.  Non-adherence to codal provisions and laxi resulted in misappropriation of ₹2.5 lakhs. Rule 92 a (ii) of the Kerala Treasury Code (KTC monetary transactions should be entered in the Cash occur and attested by the Head of the Office in token of the Kerala Indigenous Medicine Departmental M the District Indigenous Medicine Departmental M the District Indigenous Medical Officers (DMO, intensive annual inspection of hospitals and dispejurisdictions.  The Medical Officers (MO) of Government Ayurveda Drawing and Disbursing Officers (DDO) in respect of well as the Local Self Government Institutions accordance with Government of Kerala (GOK) gui 1995), funds are released by LSGIs to hospitals und purchase of medicines, maintenance of hospitals, etc (April 2006) by GOK on allocation and drawal of LSG the money drawn by DDOs from a non-banking treasur The MO, Government Ayurveda Dispensary (GA withdrew Rupees Three lakh (Rupees One Lakh each 27 October 2011, 27 March 2013 and 19 July 2 Cherpulassery Grama Panchayat from the Sub Treasury purchase of Ayurveda medicines from Oushadhi must be same day in the account opened in a nationalised bank be made by way of demand drafts on reacknowledgement Audit evamined the account of acknowledgement Audit evamined.	In pursuance to the recommend Comptroller and Auditor General, of Comptroller and Auditor General, of Government initiated disiplinary act the deliquent Officer, Dr.K.G.Dhar Medical Officers (MO) of Government Dispensaries are the drawing and officers (DDO) in respect of both Government (LSGI) funds. Dr.K.G.Dhard misappropriated \$\frac{1}{2}\$ 2.5 lakhs whi working at Government Ayurveda Cherpulassery in connection with the officers of the computers to that Dispensaries are the drawing and officers (DDO) in respect of both Government (LSGI) funds. Dr.K.G.Dhard misappropriated \$\frac{1}{2}\$ 2.5 lakhs whi working at Government Ayurveda Cherpulassery in connection with the officers of the computers to that Dispensaries are the drawing and officers (DDO) in respect of both Government (LSGI) funds. Dr.K.G.Dhard misappropriated \$\frac{1}{2}\$ 2.5 lakhs whi working at Government Ayurveda Medicines from Oushard purchase of the computers to that Dispensaries are the drawing and officers (DDO) in respect of both Government (LSGI) funds. Dr.K.G.Dhard misappropriated \$\frac{1}{2}\$ 2.5 lakhs whi working at Government Ayurveda Cherpulassery in connection with the misappropriation of Ayurveda Medicines from Oushard purchase of the computers to that Dispensaries are the drawing and officers (DDO) in respect of both Government (LSGI) funds. Dr.K.G.Dhard misappropriated \$\frac{1}{2}\$ 2.5 lakhs whi working at Government Ayurveda Medicines from Oushard purchase of the computers to that Dispensaries are the drawing and officers (DDO) in respect of both Government (LSGI) funds. Dr.K.G.Dhard misappropriated \$\frac{1}{2}\$ 2.5 lakhs whi working at Government Ayurveda Medicines from Oushard purchase of the computers to that Dispensaries are the drawing and officers (DDO) in respect of both Government (LSGI) funds. Dr.K.G.Dhard misappropriated \$\frac{1}{2}\$ 2.5 lakhs whi working at Government Ayurveda Medicines from Oushard purchase of the computers to that Dispensaries are the drawing and officers (DDO) in respect of both Government (LSGI

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by the MO. Similarly, the MO withdrew (11 October 2013) 70.50 lakh from the treasury for purchase of computers. The amount was taken as receipt in the cash book and shown as expenditure on the same day for purchase of computers. However, records examined by Audit did not confirm any such purchase. No quotation, invoices and stock entries were available on record as evidence of purchase of the computers. Bank account statement also did not show any evidence of deposits and payment made to any firm towards the supply of computers. Moreover, monthly reconciliation of accounts were not found to be done with the bank/treasury. The MO, GAD also stated that no computers were available in the GAD which confirmed that the then MO had misappropriated ₹0.50 lakh. Even though as per Rules, the DMO, ISM was required to make intensive annual inspection of hospitals and dispensaries under their jurisdictions, inspections were conducted only on three occasions (03.02.2010, 24.01.2011 and 12.09.2013) during the years 2009-14 against the required five. However, the DMO, ISM failed to identify the instances of misappropriation during the course of his inspections. Thus, non-adherence to codal provisions by the MO and laxity on the part of the DMO, ISM in conducting periodical and intensive inspections as mandated in the Departmental Manual resulted in misappropriation of \$\overline{2}\$2.50 lakh at the GAD, Cherpulassery. It was observed by Audit that on the basis of audit findings, departmental enquiry was conducted by the department and the Director (ISM) had suspended (September 2014) the MO, GAD Cherpulassery from service. Confirming the audit findings, Government of Kerala stated (July 2015) that the MO had admitted the misappropriation and that action was being finalised at the Government level for imposing major penalty against the official.

Also strict instruction has alleady occur given to Director, Indian Systems of Medicines to conduct intensive Annual Inspection of hospitals and dispensaries under their jurisdiction.



2017 ജൂൺ 30-ന് ചേർന്ന പബ്ലിക് അക്കൗണ്ട്സ് കമ്മറ്റിയുടെ യോഗത്തിൽ 2014 മാർച്ച് 31-ന് അവസാനിച്ച വർഷത്തെ സി & എ.ജി റിപ്പോർട്ടിലെ 3.10 മുതൽ 3.15 വരെ ഖണ്ഡികകളിന്മേൽ നടന്ന ചർച്ചയിൽ നിർദ്ദേശിച്ചതിന്റെ അടിസ്ഥാനത്തിൽ സമർപ്പിക്കുന്ന റിപ്പോർട്ട്

2017 ജ്രൺ 30-ന് ചേർന്ന പബ്ലിക് അക്കൗണ്ട്സ് കമ്മറ്റിയുടെ യോഗത്തിൽ 2014 മാർച്ച് 31-ന് അവസാനിച്ച വർഷത്തെ സി & എ.ജി റിപ്പോർട്ടിലെ 3.10 മുതൽ 3.15 വരെ ഖണ്ഡികകളിന്മേൽ നടന്ന പർച്ചയുടെ അടിസ്ഥാനത്തിൽ ഫാർമക്കോഗ്നസി യൂണിറ്റ് ഡി.എസ്.യു. സ്പോർട്സ് സെൽ എന്നിവയുടെ പ്രവർത്തനം മെച്ചപ്പെടുത്തേണ്ടത് അനിവാരുമാണെന്ന് വിലയിരുത്തുകയും അതിലേയ്ക്കാവശ്യമായ നിർദ്ദേശങ്ങളടങ്ങിയ റിപ്പോർട്ട് ഒരു മാസത്തിനുള്ളിൽ ലഭ്യമാക്കുവാൻ നിർദ്ദേശിക്കുകയും ചെയ്തിരുന്നു.

ആയതിന്റെ അടിസ്ഥാനത്തിൽ ആയൂർവേദ മെഡിക്കൽ വിദ്യാഭ്യാസ ഡയറക്ടർ ലഭ്യമാക്കിയ റിപ്പോർട്ടിൽ ചുവടെ പറയുന്ന നിർദ്ദേശങ്ങൾ സമർപ്പിച്ചിടുണ്ട്.

തിരുവനന്തപുരം സർക്കാർ ആയൂർവേദ കോളേജിന്റെ കീഴിൽ 1965 മുതൽ പൂജപ്പുരയിൽ പ്രവർത്തിച്ചുവന്നിരുന്ന ആയൂർവേദ റിസർച്ച് ഇൻസ്റ്റിറ്റ്യൂട്ടിന്റെ കീഴിൽ ഫാർമക്കോഗ്നസി യൂണിറ്റ്, ഡ്രഗ്ഗ് സ്റ്റാൻഡേർഡൈസേഷൻ യൂണിറ്റ് (1974 മുതൽ) മോഡൽ ഡെമോൺസ്ലേഷൻ ഗാർഡൻ എന്നിവ പ്രവർത്തിച്ചു വന്നിരുന്നു. ഇതിൽ സ്ഥലസൗകര്യം പരിഗണിച്ച് ഡി.എസ്.യു. യൂണിറ്റ് തിരുവനന്തപുരം സർക്കാർ ആയൂർവേദ കോളേജ് ആശുപത്രി കോമ്പൗണ്ടിലേയ്ക്ക് മാറ്റുകയും ആയത് (2004 മുതൽ) പ്രത്യേക യൂണിറ്റായി പ്രവർത്തിക്കുകയും ചെയ്യവരുന്നു.

കേരളത്തിലെ ആയൂർവേദ മരുന്നുകളുടെ ഗവേഷണ പുരോഗതിയ്ക്കായി ആയൂർവേദ റിസർച്ച് ഇൻസ്റ്റിറ്റ്യൂട്ടിന്റെ (A.R.I) കീഴിലുള്ള ഡ്രഗ്ഗ് സ്റ്റാൻഡേർഡൈസേഷൻ യൂണിറ്റ് ഫാർമക്കോഗ്നസി യൂണിറ്റ്, മോഡൽ ഡെമോൺസ്ലേഷൻ ഗാർഡൻ, എന്നീ യൂണിറ്റുകൾ പരസ്പർ പുരകമായി ഒന്നിച്ച് പ്രവർത്തിക്കേണ്ടത് അനിവാര്യമാണ്. ഈ ഉദ്ദേശ്യലക്ഷ്യത്തോടെ ആയൂർവേദ റിസർച്ച് ഇൻസ്റ്റിറ്റ്യൂട്ട് സ്ഥാപിക്കപ്പെടുകയും മൂന്ന് വിഭാഗങ്ങളുടേയും നിയത്രണം ഈ വകപ്പുകളിലെ ഏറ്റവും സീനിയറായ റിസർച്ച് ഓഫീസറിന്റെ (Professor of Pharmacognosy എന്ന പേരിൽ) കീഴിലാണ് പ്രവർത്തിച്ചു വന്നിരുന്നത്. ഇടർന്നുടോയ ചില സാഹചര്യങ്ങളിൽ ഇത് വ്യത്യസ്ത യൂണിറ്റുകളായി പ്രവർത്തിച്ചുവരുകയും ഈ യൂണിറ്റുകളുടെ ഗവേഷണ പ്രവർത്തനങ്ങളുടെ ഏകോപനം നഷ്ടപ്പെടുകയും ചെയ്തു.

ആയൂർവേദ മരുന്നുകളുടെ ഗവേഷണം എന്നത് genuine ആയ source plant കളുടെ ശേഖരണം മുതൽ standardization ന്റെ വിവിധ വിഭാഗങ്ങളായ Ayurveda, Botany, Chemistry, Microbiology, Pharmacology എന്നിവയുടെ സംയുക്ത സേവനത്തിലൂടെ മാത്രമേ സാധ്യമാക്ര. ഗവേഷണ ഫലങ്ങൾ അന്തർദേശീയ തലത്തിൽ പ്രസിദ്ധീകരിക്കാനും Ayurveda Pharmacopoeia of India publications ൽ ഉൾപ്പെടുത്തുവാനും അതുവഴി, പൊതുജനങ്ങൾക്ക് ഉപകാരപ്രദമായിത്തീരവാനും സാധിക്കും.

ആയൂർവേദ മെഡിക്കൽ വിദ്യാഭ്യാസ ഡയറകുറുടെ മേൽനോട്ടത്തിൽ ഫാർമക്കോഗ്നസി ഡി.എസ്.യു.വിന്റെയും അധികാരികളമായി യൂണിറ്റിന്റെയും അവരുടെ ഗവേഷണ പ്രവർത്തനങ്ങൾ സംബന്ധിച്ച് എല്ലാ മാസവും അവലോകന യോഗം കൂടി ആസൂത്രണം റിസർച്ച് ഇൻസ്റ്റിറ്റ്യട്ടിന്റെ പ്രവർത്തനത്തിന് ആയൂർവേദ മെച്ചപ്പെട്ട ഉതകന്നതായിരിക്കും. ഇങ്ങനെ പുനഃസംഘടിപ്പിച്ച ആയൂർവേദ **ഇൻസ്റ്റി**റ്റ്യൂട്ടിനെ റിസർച് Ayurveda Pharmacopoeia of India(A.P.I.) യുടെ contributing laboratory അയി ഇതിലേയ്ക് ബോട്ടണി സംബന്ധമായി ഫാർമക്കോഗ്നസി യൂണിറ്റിൽ പ്രവർത്തനങ്ങളടെ ചെയ്യവരുന്ന സംഗ്രഹം എസ്.ആർ.ഒ. ബോട്ടണിയിൽ ഡി.എസ്.യു.വിൽ ചെയ്തവരുന്ന പ്രവർത്തനങ്ങളടെ 👚 സംഗ്രഹം എസ്.ആർ.ഒ. കെമിസ്വിയിൽ നിന്നും ശേഖരിച്ച് Ayurveda Pharmacopoeia of India(A.P.I.) യെ അറിയിക്കാവുന്നതാണ്. അതനസരിച്ച് ഫാർമക്കോഗ്നസി യൂണിറ്റ് പുതുതായി പ്രസിദ്ധീകരിക്കുന്ന വാല്യങ്ങളിൽ രസതന്ത്ര പഠനങ്ങളം കൂടി ഉൾപ്പെടുത്തുന്നതിന് ഫാർമക്കോഗ്നസി യൂണിറ്റിൽ കെമിസ്വി വിഭാഗം ഗവേഷണ ഉദ്യോഗസ്ഥരുടെ തസ്കികയുടെ അഭാവം ഒരു തടസ്സമായി ആയൂർവേദ റിസർച്ച് ഇൻസ്റ്റിറ്റ്യൂട്ടിന്റെ ഭാഗമായ ഡ്രഗ് സ്റ്റാൻഡേർഡൈസേഷൻ യൂണിറ്റിലെ ഒന്നോ രണ്ടോ രസതന്ത്ര വിഭാഗം ഉദ്യോഗസ്ഥരുടെ സേവനം കൂടി ലഭ്യമാകുകയാണെങ്കിൽ ഫാർമക്കോഗ്നസി പ്രസിദ്ധീകരണങ്ങൾ കൂടുതൽ മെച്ചപ്പെടുത്തുന്നതിന് യൂണിറ്റുകളുടെ ഗവേഷണ പ്രവർത്തനങ്ങളുടെ ഏകോപനം സാധ്യമാകുന്നതിലൂടെ ഗവേഷണ പ്രവർത്തനങ്ങൾ കൂടുതൽ മെച്ചപ്പെട്ട നിലയിൽ നടത്തുവാൻ സാധിക്കുന്നതാണ്.

ഫാർമക്കോഗ്നസി യൂണിറ്റിന്റെ ഗവേഷണ പ്രവർത്തനങ്ങൾക്ക് മോഡൽ ഡെമോൺസ്ലേഷൻ ഗാർഡൻ അതൃത്താപേക്ഷിതമായതിനാൽ ഫാർമക്കോഗ്നസി യൂണിറ്റും, അതിലെ ഉദ്യോഗസ്ഥരും, പ്രദർശന മാതൃകാ ഉദ്യാനവും (MD Garden) ഇപ്പോൾ ഇടരുന്ന രീതിയിൽ പൂജപ്പുരയിൽ നിലനിർത്തിക്കൊണ്ടുതന്നെ ഫാർമക്കോഗ്നസി യൂണിറ്റിന്റെയും ഡ്രഗ് സ്റ്റാൻഡേർഡൈസേഷൻ യൂണിറ്റിന്റെയും ഗവേഷണപ്രവർത്തനങ്ങൾ ഏകോപിപ്പിക്കുന്നതിന് സഹായകമായ വിധത്തിൽ അനുയോജ്യമായ അന്തരിക ക്രമീകരണങ്ങൾ സ്വീകരിക്കുന്നതാണ് അഭികാമ്യമായിട്ടുള്ളത്.

. ഡ്രഗ് സ്റ്റാൻഡേർഡൈസേഷൻ യൂണിറ്റിലെ ഗവേഷണ പ്രവർത്തനങ്ങളിൽ ഔഷധങ്ങളുടെ ഗുണനിലവാര പരിശോധനയുമായി ബന്ധപ്പെട്ട് വരുന്ന ഫാർമക്കോഗസി പഠനങ്ങളിൽ ഫാർമക്കോഗന്ധി യൂണിറ്റിലെ ബോട്ടണി വിഭാഗം ഗവേഷണ ഉദ്യോഗസ്ഥരുടെ സേവനം ആവശ്യമായി വരുന്ന സാഹചര്യങ്ങളിൽ അത് നൽകുന്നതിന് ഫാർമക്കോഗന്ധി യൂണിറ്റം ഫാർമക്കോഗ്നസി യൂണിറ്റിന്റെ പ്രവർത്തനങ്ങൾക്കാവശ്യമായ രസതന്ത്രപരമായ പഠനങ്ങളും കൂടി ഉൾപ്പെടുത്തുന്നതിന് ഡി.എസ്.യു.വിന്റെ കെമിസ്മി വിഭാഗം ഗവേഷണ ഉദ്യോഗസ്ഥരുടെ സേവനം ആവശ്യമായി വരുന്ന സാഹചര്യങ്ങളിൽ അത് നൽകുന്നതിന് ഡി.എസ്.യു.വിന്റെ കെമിസ്മി വിഭാഗം ഗവേഷണ ഉദ്യോഗസ്ഥരുടെ സേവനം കൂടി പരസ്പരം ലഭ്യമാക്കാവുന്നതാണ്.

സ്പോർട്സ് ആയൂർവേദ റിസർച്ച് സെൽ സംബന്ധിച്ച് ഭാരതീയ ചികിത്സാ വകപ്പു ഡയറക്ടർ സമർപ്പിച്ച നിർദ്ദേശങ്ങൾ ചുവടെ ചേർക്കുന്നു.

- നൻട്രലൈസ്ഡ് സ്പോർട്സ് ആയൂർവേദ റിസർച്ച് &അനാലിസിസ് യൂണിറ്റ് ഭാരതീയ ചികിത്സാ വകപ്പിൽ സ്ഥാപിക്കുക
- ദാരതീയ ചികിത്സാ വകപ്പിന്റെ കീഴിലുള്ള എല്ലാ ജില്ലാ ,താലൂക്ക് ആശുപത്രികളിലും സ്പോർട്സ് ആയുർവേദ യൂണിറ്റുകൾ സ്ഥാപിക്കുക .
- 3.സ്పോർട്സ് കൗൺസിലുകളുടെ കീഴിലുള്ള സ്పോർട്സ് ഹോസ്റ്റലുകളോടനുബന്ധിച്ച് സ്പോർട്സ് ആയൂർവേദ യൂണിറ്റുകൾ സ്ഥാപിക്കുക
- 4.SAI യുടെ കീഴിലുള്ള സ്പോർട്സ് സ്കൂളുകളിലും ,സ്പോർട്സ് ഇൻസ്റ്റിറ്റ്യൂഷനുകളിലും സ്പോർട്സ് ആയൂർവേദ യൂണിറ്റുകൾ സ്ഥാപിക്കുക.
- 5.സ്പോർട്സ് ആയൂർവേദയ്ക്കുവേണ്ടി എത്തിക്കൽ കമ്മറ്റി ക്ലിയറൻസോടുകൂടി മരുന്നുകൾ നീർമ്മിക്കുന്നതിലേക്കായി R&D വിങ്ങ് സ്ഥാപിക്കുക .
- 6. നാഷണൽ സ്പോർട്സ് ആയൂർവേദ ഇൻസ്റ്റിറ്റ്യൂട്ട് &റിസർച്ച് സെന്റർ തലസ്ഥാനത്ത് വേണ്ട സൗകര്യങ്ങളോടുകൂടി സ്ഥാപിക്കുക

ആയൂർവേദ മെഡിക്കൽ വിദ്യാഭ്യാസ ഡയറക്ടർ,ഭാരതീയ ചികിത്സാ വകപ്പു ഡ്രയറക്ടർ എന്നിവരുടെ മേൽ നിർദ്ദേശങ്ങൾ പരിശോധിച്ച് വിശദമായ പ്രൊപ്പോ സൽ ലഭ്യമാക്കി ഇടർനടപടി സ്വീകരിക്കുന്നതാണ്.

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# Appendix III. List of institutions selected (Paragraph 3.5)

	(Refere	DCE: Laragrapi	13.3)		gr. 18 18 18 18 18 18 18 18 18 18 18 18 18
	Page 4 enail				
Ayurveda	Government	1	1	100	Nil
colleges	Government Aided	2	2	ļ. <del></del>	ļ
Government hospitals in speciality ho	Ayurveda ncluding five spitals	56	(including four speciality hospitals)	25	242
<del> </del>	Government dispensaries	355			
Ayurveda dispensaries	NRHM	75	6	10	416
	Sub-centres	8	2		

# Deficiencies in buildings, basic amenities, furniture and equipment (Reference: Paragraph 3.7.4)

		(Reference: Paragraph 3.7.4)
St.	Remoteness	DAH Valavannur is situated in a hilly area, one kilometr away from main road and 25 kms from distric
<u>'</u>	location	GAD Irunilamcode, GAD Edakkara
2	Lack of sign boards/name board	GAD Harippad, NRHM Ayurveda Dispensary (NRHM AD) Tholikode, GAD Poojappura, GAD Karumady, GAD Thalavady, GAD Puzhakkal, GAD Purakkad and GAD Chettivilakom
3	Buildings	32 State Markon
	a) Unsafe building	GAH Irinjalakluda - Wards, two treatment rooms, a consultation room, a nursing room and eight paywards are functioning in a building declared as unsafe by PWD. RVDAH Thrissur - Sports unit ward is functioning in the 3rd floor of a building, for which occupancy certificate is pending from LSGD.
	b) Old/dilapidated building	GAD Kanjiramkulam, RVDAH Thrissur GAD Thalavady, GAD Pullu and NRHM AD Punnapra
	c) Leaking buildings	DAH Valavannur, GAD Kanjiramkulam, GAD Melatur, GAD Vengara and NRHM AD Morayur - leaking buildings  DAH Alappuzha - Minor sutures were performed in the leaking room, walls of which found damp.  Government Panchakarma hospital, Alappuzha and GAH Thiruva!i - Wards were leaking  GAD Haripad - cartons of medicines were found wet and instances of medicines damaging were noticed.
-	d) Non-unlisation/ non-completion of buildings	CAH Intravali - Two storied building constructed at a cost of ₹40 lakh inaugurated in March 2014 was not put to use.  GARIM Kottukkal - Construction of deluxe pay wards, isolation wards, staff marters were not completed.
	e) Lack of space for therapy/ward	Government Panchakarma hospital, Alappuzha, the only Panchakarma speciality hospital under DISM, did not have any separate room for therapy. Space for therapy was provided by placing a partition in the corridor. Due to lack of space, cots were provided in verandah.

SL No.	ere la la	
	f) Lack of ramp or lift	DAH Alappuzha, GAH Punnapra, Government Ayurveda Marma Hospital, Kanjiramkulam housed in two storey buildings without ramp or lift causing inconvenience to old/ailing patients. GAD Choonda, GAD Pullu, GAH Thiruvali GAD Melatur, NRHM AD Morayur.
	g) Defective/ inadequate cots/ beds	DAH Alappuzha and GAPH Alappuzha - Rusting cots and worn out beds. GAH Nedumangad and RVDAH Thrissur - Cots provided in Sports units were of the size as that in general ward, causing inconvenience to patients. CMO RVDAH Thrissur, stated that cots for sports-personnel should be of 7 feet length.
	h) Space constraints	GAH Punnapra, DAH Thiruvali, GAH Guruvayoor, GAH Irinjalakkuda GAPH Alappuzha, GAD Poojappura, GAD Kanjirankulam, GAD Karumady, GAD Choondal, GAD Kolazhy, Subcentre at Mulanjur, GAH Palode, GAD Malayinkeezh, NRHM AD Velur, NRHM AD Morayur
4	Basic amenities	, , , , , , , , , , , , , , , , , , , ,
	a) Lack of Toilet facilities	GAD Choondal, GAD Poojappura, GAD Malayinkeezhu,GAD Melatur, GAD Mundathicode,GAD Purakkad,GAD Pullu GAD Thalavady,GAD Puzhakkal, GAD Kolazhy GAD Chettivilakom, GAD Nemom, GAD Karumady NRHM AD Othukungal
	b) Lack of Drinking water facility	GAD Kanjiramkulam, GAD Thalavady, GAD Kolazhy, GAD Puzhakkal, GAD Mundathikode, GAD Melatur,NRFIM AD Othukungal, GAD Purakkad GAD Malayinkeezhu, GAD Poojappura, GAD Pullu, GAD Nemom, GAD Karumady GAD Karuvarakundu, GAD Irunilamkode
	c) Lack of Electricity	NRHM AD Tholicode
<u> </u>	connection	NRHM AD Othukungal
	d) Lack of Water	NRHM AD Tholicode and
	connection	GAD Thalavady
5	Lack of laboratory facilities	GAH Nedumangad - Laboratory not started despite availability of equipment.  DAH Alappuzha - Semi auto analyser is not functioning RVDAH Thrissur - The lab was not equipped with a microscope and hence, microscopic examinations were not conducted.

		•				
Sl.		Water Control of the				
No. ;	Market 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u>#15-36                                    </u>				
	X-ray machine not put	GAMH, Kanjiramkulam - X ray Machine (30KW) not				
6		installed as room was not constructed.				
Ľ	to use	GAH Palakkad - X-ray machine supplied in 2009-10 not				
		functioning.				

### Non-availability/non-functioning/shortage of common equipment

(Reference: Paragraph 3.7.4)

SL No.	Name of East				
	THIRUVANANTHAPURAM				(1) Weighing Machine
1	GAH Nedumangad	25	0	25	(2) Stethoscope
2	Marma Hospital Kanjiramkulam	15	0	15	(3) Solar light (4) Solar water beater
3	GAD Kanjiramkulam	30	1	31	(5) Water Pump
4	GAD Kalady	20	2	22	(6) Vacuum Cleaner   (7) B. P Apparatus
5	GAD Karakulam	23	0	23	(8) Wheel Chair
(5	NRHM AD Tholikode	30	0	30	{ (9) Steel Utenslis   (10) Medicine Trolley
	ALAPPUZHA				(11) Scissors, forceps, etc. (12) Sterilizer
7	GAD Purakkad	28	1	29	(13) Stove
В	GAD Muhamma	21	0	21	(14) Water Purifier (15) Traction Set (manual)
9	GAD Thalavady	25	0	25	(16) Induction cooker
10	GAD Karumady	29	1	30	(17) Separation Screen (18) ENT Set
	THRISSUR	<u> </u>		<del>                                     </del>	(19)Examination Table (20) X-ray viewer
	GAH trinjalakuda	9	0	9	(21) Panthi (fibre)
12	RVDAH Thrissur	7	0	7	(22) Dhara stand (metal) (23) Steam Generator
13	Vish Vydya Hospital, Wadakkanchery	12	3	15	(24) Doctor's Chair
14	GAD Choondal	28	0	28	(25) Table (Wood) (26) Almirah (metal)
15	GAD Irunilamkode	26	1 0	26	(27) Cut (teak wood)
16	GAD Kandassamkadavu	29	0	29	(28) Bed (29) Spinal bath
17	GAD Mundur	28		28	(30) Medicine Rack (31) Chair
18	GAD Pulla	24	<del>-</del>	24	(32) Torch
19	GAD Kolazhy	24	0	24	(33) Thermo-meter (34) Tongue depressor
	GAD Puzhakkal	28	1	29	(35) Kharala
	GAD Mundathikode	26	0	26	(36) Hammer (37) Doctor's Table
	NRHM AD Velur	23	0	23	(38) Patient's Steel (39) Foot Step
	PALAKKAD		<del> </del>	<del> </del>	(us) concareh
2.3	GAH Palakkad	9	3	12	†
2.4	GAD Akathethara	27	1	28	†
25	GAD Malampuzha	27		27	1
26	GAD Pudupariyaram	25	0	25	1

naices

SL No.	Name of Blanch			্টি, টি কিব ব		
27	GAD Nallepully	23	0	. 23		
28	GAD Kuzhalmannom	25	0	25	1	
29	GAD Pirayiri	27 -	1	28	1 .	Ţ
ω,	GAD Peruvemba	25	0	25	1	
.51	GAD Kodumbu	27	0	27	1	:
12	NRHM AD Parli	29	0	29	1	
3.3	Sub Centre Mulanjur	29	0	29	1	
	MALAPPURAM		<del>,                                    </del>		1 .	
34	DAH Valavanur	11	0	11	1	,
.15	GAH Thiruvali	13	0	1.3	1	
36	GAD Vengara	21	0	21	1	
.37	GAD Anakkaym	28	0	28	1	
36	GAD Edakkara	23	0	23	1	·
39	GAD Karuvarakundu	29	1	30	1	
4()	GAD Valluvambram	29	0	29	1	
41	GAD Melatur	31	0	31	1	
42	NRHM AD Morayur	24	1	25	1	
4 3	NRHM AD Othukkangal	23	1	24	1	:

## Bed occupancy in the hospitals (Reference: Paragraph 3.8.1)

SI. No.	ŧ.					200
1	DAH Malappuram at Valavannur. Malappuram District	50	40	20	80	50
2	GAH Thiruvali, Malappuram District	10	10	6	100	60
3	GAH Palode, Thiruvananthapuram District	10	10	10	100	100
4	GAH Nedumangad, Thiruvananthapuram District	25	60	33	240	55
5	GAMH Kanjiramkulam, Thiruvananthapuram District	10	45	45	450	100
6	GAH Palakkad	50	50	34	100	68
7	DAH Alappuzha, Alappuzha District	50	50	41	100	82
8	GAH Punnapra, Alappuzha District	30	15	5	50	33
9	Panchakarma Hospital, Alappuzha, Alappuzha District	20	20	18	100	90
10	RVDAH Thrissur, Thrissur District	56	74	50	132	68
11	GAH Guruvayur, ThrissurDistrict	30	30	30	100	100
12	GAH Irinjalakuda, Thrissur District	30	26	18	87	69
13	GVVH Wadakkanchery, Thrissur District	4	4	5	100	125
14	GARIM Kottakkal	50	40	30	80	75

# Analysis of sanctioned staff strength with reference to average bed occupancy in test checked hospitals

(Reference: Paragraph 3.8.2)

	(reservence: Paragraph 3.8.2)										
Nume of finalization									Steven 1988		
THIRUVANANTHAPURA	<b>∖</b> M	H MACHERY								å?	a .
GAH Painde	10	1	1	0	0	T i	T <sub>I</sub>	Τ.ο	2	2	T 0
GAH Nedumangad	33	3	2	2	1	2	1	1	5	2	3
GAMH Kanjiramkulam	45	3	2	0	1	2	1	1	5	2	3
ALAPPUZHA		J	<del>' -</del> -		<u> </u>	<u> </u>	<u> </u>			1 -	1
DAH Alappuzha	41	3	4	1	-1	2	2	0	5	8	-3
GAH Punnapra	5	1	2	0	-1	1	1	0	2	3	1
Panchakarma Hospital, Alappuzha	18	1	1	0	0	1	1	0	2	2	0
THRISSUR						·	*		·		<u></u>
RVDAH Thrissur	50	3	4	3	-1	2	2	0	8	2	1
GAH Guruvayur	30	-3	3	0	0	2	2	0	5	5	0
GAH Irinjalakuda	18	1	3	1	-2	1	2	-1	2	4	2
GVVH Wadakanchery	5	1	1	0	0	1	1	0	2	0	2
PALAKKAD								اا			
DAH Palukkad	34.	3	4	2	-1	2	2	0	5	8	-3
MALAPPURAM					t		<del></del>	ئــــا			<u></u>
DAH Valavannur	20	3	2	0	1	1	2	-1	3	6	-2
GAH Thiruvali	t	1	1	0	0	1	1	0	2	2	0

Note: GARIM Kottakkal has not been reckoned since it is a research institution with different parameters