

CHAPTER 2.9

INDIAN SYSTEMS OF MEDICINE AND HOMOEOPATHY

INTRODUCTION

2.9.1 The umbrella term, Indian systems of medicine and homoeopathy (ISM&H), includes Ayurveda, Siddha, Unani, Homoeopathy and therapies such as Yoga and Naturopathy. Practitioners of ISM&H catered to all the health care needs of the people before modern medicine came to India in the twentieth century. Currently, there are over 680,000 registered ISM&H practitioners in the country; most of them work in the private sector. A major strength of ISM&H system is that it is accessible, acceptable and affordable.

2.9.2 India also has a vast network of governmental ISM&H healthcare institutions. There are 3,000 hospitals with over 60 beds and over 23,000 dispensaries providing primary healthcare. Over 16,000 ISM&H practitioners qualify every year from 405 ISM&H colleges. The Department of ISM&H supports four research councils and provides research grants to a number of scientific institutions and universities for conducting clinical research, ethno-botanical surveys and pharmacopoeial and pharmacognostic studies on herbal drugs and medicinal plants. Pharmacopoeial Committees constituted by the Department are finalising standards for single simple formulations and will shortly take up the task of formulating standards for compound ISM formulations.

2.9.3 Despite all these efforts, the ISM&H have not realised their full potential because:

- ☒ existing ISM&H primary, secondary and tertiary healthcare institutions lack essential staff, infrastructure, diagnostic facilities and drugs;
- ☒ the potential of ISM&H drugs and therapeutic modalities has not been fully exploited;

- ☒ lack of quality control and good manufacturing practices have resulted in the use of spurious and substandard drugs;
- ☒ the quality of training of ISM&H practitioners has been below par; many ISM&H colleges lack essential facilities, qualified teachers and hospitals for practical training; there is no system of Continuing Medical Education (CME) for periodic updating of knowledge and skills;
- ☒ the ISM&H practitioners are not involved in national disease control programmes or family welfare programme; and
- ☒ medicinal plants have been overexploited and, as a result, the cost of ISM&H drugs has increased and spurious products are getting into the market.

2.9.4 The National Health Policy (1983) visualised an important role for the ISM&H practitioners in the delivery of health services. In order to give focused attention to the development and optimal utilisation of this branch of medicine, a separate Department for ISM&H was set up in 1995. The Department is making efforts to ensure that ISM&H practitioners are brought into the mainstream so that they provide a complementary system of care along with practitioners of modern systems of medicine.

2.9.5 Globally, there has been a revival of interest in a complementary system of healthcare especially in the prevention and management of chronic lifestyle-related non-communicable diseases and diseases for which there are no effective drugs in the modern system of medicine. India is currently undergoing demographic and lifestyle transition which will result in the increasing prevalence of non-communicable diseases and lifestyle related disorders. ISM&H, especially ayurveda, yoga and naturopathy, can play an important role in the prevention and management of these disorders.

ISM&H practitioners can undertake the task of counselling and improving the coverage and continued use of drugs in national diseases control programmes and the family welfare programme. If ISM&H practitioners take up these tasks, they can enable the country to achieve the health and demographic goals set for the Tenth Plan.

Approach during the Tenth Plan

2.9.6 The approach during the Tenth Plan will be to ensure that the ISM&H system achieves its full potential in providing healthcare by:

- ☒ improving the quality of primary, secondary and tertiary care;
- ☒ mainstreaming ISM&H institutions and practitioners with modern systems of medicine so that people have access to complementary systems of care;
- ☒ strengthening ISM&H educational institutions so that students get adequate training, giving them confidence to practise their system and participate in national programmes;
- ☒ investing in continuing medical education;
- ☒ ensuring the conservation, preservation, promotion, cultivation, collection and processing of medicinal plants and herbs required to meet growing domestic demand for ISM&H drugs and the export potential;
- ☒ completing Pharmacopoeia of all the systems of ISM&H and drawing up a list of essential drugs and ensuring their availability;
- ☒ ensuring quality control of drugs and improving their availability at an affordable cost;
- ☒ investing in research and development (R&D) for the development of new drugs and formulations, and patenting them; and
- ☒ undertaking clinical trials of promising drugs by appropriately strengthening Central Research Councils and coordinating their research with other research agencies such as Indian Council of Medical Research (ICMR), Delhi.

HEALTH CARE SERVICES

2.9.7 The Ninth Plan aimed at improving the quality of primary, secondary and tertiary care in ISM&H, with the Departments of ISM&H in the centre and the states taking up several initiatives to improve the quality and coverage of these services at each level.

Primary Health Care

2.9.8 ISM&H practitioners provide primary healthcare to vulnerable sections of the population especially those living in urban slums and remote areas. Details of the number of ISM&H hospitals and dispensaries (as on 1 April 1999) is given in Annexure 2.9.1. In some states like West Bengal and Gujarat, ISM&H practitioners alone are posted in primary health centres (PHCs) in some remote rural and tribal areas. In Kerala, ISM&H practitioners provide a complementary system of care in the PHCs. It is important to ensure that the ISM&H dispensaries and hospitals are linked with PHC/urban health care centres so that they can have ready access to diagnostic and other facilities available in these institutions and, at the same time, patients can choose the system for treatment.

Secondary Health Care

2.9.9 A majority of existing ISM&H secondary hospitals function as separate institutions and do

Infrastructure

Vast infrastructure has been created:

☒ Hospitals	3005
☒ Beds	60,681
☒ Dispensaries	23,028

Problems

- ☒ No organised referral system.
- ☒ They provide healthcare only to those who come to them.
- ☒ Each centre is isolated; they are not linked with other institutions in the area.
- ☒ No linkage with existing modern system hospitals – hence they are unable to function optimally as a complementary system or utilise the diagnostic facilities available.

not have linkages with either primary ISM&H healthcare institutions or with secondary healthcare institutions in the modern system of medicine. Very often these institutions lack adequate diagnostic facilities, infrastructure and manpower. The Ninth Plan had envisaged initiation of a pilot project to test the feasibility and usefulness of posting ISM&H practitioners in district hospitals. Some states did attempt to provide ISM&H clinics in district hospitals but the experience in this area has been limited.

Tertiary Health Care

2.9.10 All ISM&H colleges, private as well as public, have attached tertiary care hospitals. In addition, there are tertiary care and/or speciality centres attached to national institutes. Private/voluntary sector institutions also provide tertiary care in ISM&H. During the Ninth Plan, the Department of ISM&H provided funds to strengthen many of these institutions. One Unani speciality clinic was established in the Ram Manohar Lohia Hospital, Delhi and one Ayurvedic and one Homoeopathic unit was established in the Safdarjung Hospital, Delhi. The Department has also provided funds for establishing speciality clinics in the National Institute of Mental Health and Allied Sciences (NIMHANS), Bangalore. These clinics are reported to have very good attendance.

2.9.11 During the Tenth Plan, a major thrust will be given to mainstream the ISM&H system and utilise ISM&H practitioners by:

- ☒ ensuring that ISM&H clinics are located in the primary, secondary and tertiary care institutions in modern medicine and financing ISM&H care through funds provided for these institutions;
- ☒ focusing on the use of ISM&H therapeutic modalities for diseases for which the modern system does not have effective drugs free of serious side effects and prevention and management of lifestyle-related chronic diseases;
- ☒ increasing the utilisation of ISM&H practitioners working in government, voluntary and private sectors to improve information, education and communication (IEC) and counselling to improve utilisation of services under national

disease control and family welfare programmes;

- ☒ strengthening tertiary care institutions, especially those attached to ISM&H colleges and national institutions, in order to improve patient care, teaching, training, R&D;
- ☒ establishing effective referral linkages between primary, secondary and tertiary care institutions;
- ☒ monitoring how patients are responding to the efforts in providing complementary system of healthcare in these hospitals; and
- ☒ assessing the pros and cons of providing complementary system of healthcare and effecting mid-course corrections.

Development of Human Resources for ISM&H

Table 2.9.1 - Medical Education in ISM&H

System	Colleges	
	Undergraduate	Postgraduate
Ayurveda	198	53
Unani	39	5
Siddha	2	2
Homoeopathy	166	17
Total	405	77
Admission capacity	16,845	821

Source: Department of ISM & H, 2001

2.9.12 There has been a progressive increase in the number of practitioners graduating from ISM&H educational institutions during the last five decades. Currently there are 405 under graduate and 77 post graduate colleges in ISM&H (Table 2.9.1). But the quality of training these colleges impart is poor. A recent inspection of 160 colleges showed that:

- ☒ 44 per cent of them lack the required number of departments;
- ☒ 89 per cent do not have the requisite number of teachers;
- ☒ 52 per cent lack required hospital beds;
- ☒ 79 per cent have less than 60 per cent bed occupancy;

Current Problems in Medical Education

- ☒ Students join ISM&H institutions through a common entrance examination; those who do not get admission in modern system of medicine opt for ISM&H colleges.
- ☒ The quality of teachers is poor and teaching aids are in short supply.
- ☒ Morale of ISM&H teachers and students is low.
- ☒ Present ISM&H syllabus and curriculum are inadequate. As a result, graduates do not have the knowledge, skills and confidence to practice ISM&H therapy.

- ☒ 91 per cent do not have adequate diagnostic equipment; and
- ☒ 52 per cent of all colleges have a student/bed ratio, which is higher than the prescribed ratio of 1:3.

2.9.13 While a lot of time is spent on teaching anatomy, physiology and bio-chemistry, not enough attention is paid to train the students to use ISM&H diagnostic and therapeutic modalities. As a result, these students lack confidence, knowledge and skills in using ISM&H therapeutic modalities and tend to practise the modern system of medicine in which they are not trained. Patients, therefore, do not get the benefit of ISM&H therapy in spite of accessing ISM&H practitioners.

2.9.14 During the Tenth Plan, states would be encouraged to:

- ☒ introduce an entrance examination for ISM&H undergraduate courses with appropriate eligibility criteria to identify the potential and interest of students;
- ☒ ensure uniformity in the admission system in undergraduate and postgraduate courses;
- ☒ reorient the syllabus keeping in mind the potential for employment in industry and ISM&H services being offered through speciality clinics;
- ☒ strengthen existing national centres of excellence in collaboration with the Department of ISM&H;
- ☒ strengthen and mainstream at least one college for each system as a model of undergraduate/

postgraduate college in each of the major states; and

- ☒ operationalise an appropriate and transparent accreditation system for educational institutes through Councils of ISM&H.

Quality Assurance in Education in ISM&H

2.9.15 The Indian Medicines Central Council Act, 1970 was enacted for the constitution of a Central Council of Indian Medicines, maintenance of a central register of Ayurveda, Siddha and Unani and related matters. The Central Council of Indian Medicine (CCIM) and the Central Council of Homoeopathy (CCH), constituted in 1970 and 1973 respectively, are responsible for :

- ☒ laying down and maintaining uniform standards of education for ISM&H courses, prescribing standards of professional conduct, etiquette and code of ethics for practitioners and
- ☒ advising the central government on matters relating to the recognition of appropriate qualifications of ISM&H.

They also work in coordination with state-level board/council to maintain standards in ISM&H medical institutions. In addition, they maintain central registers for Indian systems of medicine and homoeopathy respectively.

2.9.16 A review of the functioning of the Councils by the Department of ISM&H showed that the monitoring procedures and schedules are not adequate. The recommendations of the CCIM and CCH are often not acted upon. There is no legal framework and, consequently, no institutional mechanism available to lay down and enforce standards relating to yoga and naturopathy. The standards of education in these two disciplines are, therefore, poor.

2.9.17 A large number of colleges are being opened predominantly in the private sector, after obtaining permission from state governments and getting affiliated to universities. Between 1995 and 2000, the CCIM permitted setting up of 73 ayurveda colleges, 11 homoeopathy colleges and three siddha colleges. This mushrooming of colleges has adversely affected the quality of ISM&H education. The problem was discussed in the Central Council

for Health and Family Welfare 1997 and at the first conference of State Health Ministers in ISM&H in 1997. It was recommended that suitable amendments be made to the Indian Medicines Central Council Act, 1970 and the Homoeopathy Central Council Act, 1973 to ensure that new colleges comply with the prescribed guidelines.

2.9.18 During the Tenth Plan, every effort will be made to reduce the proliferation of substandard medical colleges and check the deterioration in standards of teaching. Simultaneously, the Department of ISM&H will take steps to ensure that the statutory councils perform the role assigned to them. Periodic inspection of all established ISM&H colleges is necessary to ensure that only those colleges which have the necessary infrastructure, manpower and facilities are allowed to continue operating. This is, undoubtedly, a difficult task but is necessary to improve the standards of ISM&H education.

Paraprofessionals in ISM&H

2.9.19 Currently there are no arrangements for providing a degree or diploma in IS&M pharmacy nor is it included as one of the options in the general pharmacist course. Similarly, there is no training for nursing in ISM&H. During the Tenth Plan these two matters will be taken up, so that ISM&H practitioners have the necessary support staff.

National Institutes in ISM&H

2.9.20 The Department of ISM&H has set up national institutes in each of the major disciplines which are meant to act as centres of

National Institutes Funded by the Central Government	
<input checked="" type="checkbox"/>	National Institute of Ayurveda, Jaipur
<input checked="" type="checkbox"/>	National Institute of Unani Medicine, Bangalore*
<input checked="" type="checkbox"/>	National Institute of Homoeopathy, Calcutta
<input checked="" type="checkbox"/>	National Institute of Naturopathy, Pune
<input checked="" type="checkbox"/>	Morarji Desai National Institute of Yoga, New Delhi
<input checked="" type="checkbox"/>	National Institute of Siddha, Chennai*
<input checked="" type="checkbox"/>	Rashtriya Ayurveda Vidyapeeth, New Delhi

* being established

excellence providing high quality patient care, teaching and research. While some of these institutes are well established and are functioning effectively, many are in the initial stages of operationalisation. During the Tenth Plan, these centres will play a pivotal role in improving teaching, training, patient care and research standards.

Continuing Medical Education (CME) in ISM&H

2.9.21 Most of the Registered Practitioners of ISM&H (Table 2.9.2), are in the private sector; there is a need to periodically update their knowledge and

Table 2.9.2 - Registered Medical Practitioners in ISM&H

Ayurveda	4,27,504
Unani	42,445
Siddha	16,599
Naturopathy	429
Homoeopathy	1,94,147
TOTAL	6,81,124

Source: Department of ISM&H, 2001

skills through continuing medical education. During the Ninth Plan period, the Department of ISM&H started a scheme for re-orientation and in-service training. The scheme offered one month's course for teachers and physicians and a two months' course for ISM&H practitioners in specialised fields like *ksharasutra*, *panchakarma therapy*, dental practices and in yoga. The response to this course has been poor because most practitioners felt that they cannot leave their practice for an extended period.

2.9.22 During the Tenth Plan, a major effort will be made to provide all registered ISM&H practitioners with updated information about advances in their respective systems. Government-employed ISM&H practitioners will be the first to get the benefit of this in-service training. The training material will be produced by the national institutes and the state ISM&H colleges with the help of experts. Optimal use will be made of advances in information technology to improve the outreach of the CME programme so that it does not disrupt their

practice. Attempts will also be made to increase the involvement of ISM&H practitioners in counselling and improving the utilisation of services under the national health and family welfare programmes during the Plan period. The ISM&H practitioners will play an important role in:

- ☒ health education;
- ☒ drug distribution for national programmes;
- ☒ motivation and counselling in family welfare programmes;
- ☒ acting as depot holders for selected items such as condoms and oral rehydration therapy (ORT) packages;
- ☒ motivation for immunisation; and
- ☒ improvement in environmental sanitation through community efforts.

Preservation, Promotion and Cultivation of Medicinal Plants and Herbs

2.9.23 Over the last two decades there has been a steady increase in the demand for drugs used in ISM&H. However, the demand for good quality medicinal plants and herbs have not been met. The prices of several plants have increased sharply, making them unaffordable and some species of medicinal plants are also reported to be endangered because of increasing pressure on forests.

2.9.24 The Planning Commission had constituted a Task Force on the Conservation, Cultivation,

Medicinal Plants

Current Problems

- ☒ The demand for medicinal plants is growing; the trade in medicinal plants is secretive and exploitative.
- ☒ The profit motive is leading to unsustainable practices being employed. As a result, plant species are in danger of extinction.
- ☒ Quality of ingredients is poor, leading to poor quality of drugs.
- ☒ Cultivation has not been encouraged and most plants are uprooted from the wild.

Sustainable Use and Legal Protection of Medicinal Plants. The Task Force recommended:

- ☒ establishment of medicinal plants conservation areas (MPCA), covering all ecosystems, forest types and sub types;
- ☒ ex-situ conservation of rare, endangered medicinal plants may be tried out in established gardens managed by the Departments of Agriculture, Horticulture or Forests;
- ☒ gene banks created by the Department of Biotechnology should store the germplasm of all medicinal plants;
- ☒ establishment of 'Vanaspati vans' in degraded forest areas;
- ☒ forest areas rich in medicinal plants should be identified, management plans formulated and sustainable harvesting encouraged under the Joint Forest Management System;
- ☒ technically qualified NGOs must be encouraged to take up the task of improving awareness and increasing availability of plant stock and involved in the promotion of agro-techniques for cultivation of medicinal plants;
- ☒ screening/testing/clinical evaluation of herbal products to be taken up and completed;
- ☒ drug testing laboratories for ISM&H products should be established with qualified staff;
- ☒ establishment of a Traditional Knowledge Digital Library so that information on medicinal plants and their use in the country could be accessed readily; and
- ☒ establishment of a Medicinal Plant Board for integrated development of the medicinal plants.

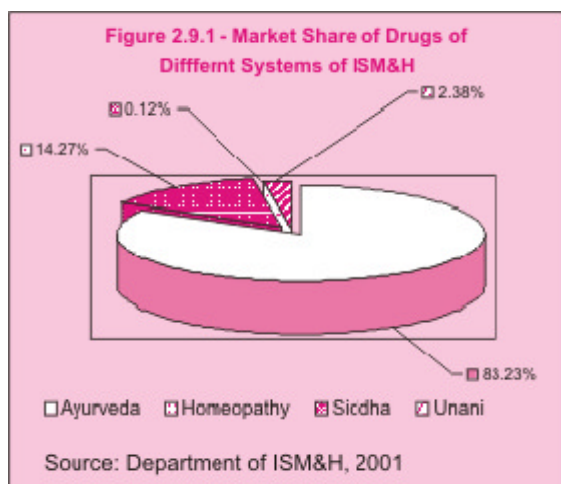
2.9.25 Many of the recommendations of the Task Force have been implemented. The Medicinal Plant Board has been established in the Department of ISM&H to look after all multi-sectoral issues relating to the development of medicinal plants. The Board is expected to formalise and organise the marketing of and trade in medicinal plants, coordinate efforts of all stakeholders in the sector and improve their awareness and availability of herbal products. Twelve state governments have established State Medicinal Plant Boards. The Ministries of Health and Family Welfare, Environment and Forest, Rural Development and Agriculture are promoting the

cultivation of medicinal plants. Agro-techniques are being standardised for 28 plants identified for fast track cultivation. States have been requested to introduce measures to register cultivators and traders dealing with medicinal plants and to make the Forest Development Corporation the conduit for supply of medicinal plants to industry. The proposals to encourage R&D, support gene banks and support industry for the identification of export markets and market segmentation are under consideration.

2.9.26 The Department of ISM&H has initiated a scheme on a Traditional Knowledge Digital Library. Around 35,000 formulations described in 14 ancient texts relating to ayurveda have been entered in this library and can be accessed by all. This step will help ready access to traditional practices and prevent outsiders taking patents on them. The Department has established a Patent Cell to keep track of patents concerning ayurveda, siddha and unani drugs being filed in India and abroad. The cell will also provide professional and financial assistance to government and private ISM&H scientists for filing of patents. An Expert Group has been constituted for advising the Department with regard to patenting issues.

ISM&H Industry

2.9.27 The global market in herbal products in alternative systems of medicine is estimated to be \$62 billion. India's share in this is very meagre. Even within the country the share of ISM&H products is only a modest Rs. 4,200 crore ; Ayurvedic drugs and formulations account for over 80% of the products (Figure 2.9.1).



2.9.28 A survey of the current status of the ISM&H industry undertaken by the Department of ISM&H showed that it is divided into the large, medium, small and very small-scale sectors (Table 2.9.3).

Table 2.9.3 - ISM&H Industry in India

☒	Rs.4, 200 crore industry (ayurveda accounts for Rs. 3,500 crore)	
☒	7,000 manufacturers of ayurvedic products	
↔	Large (> Rs. 50 crore)	10
↔	Medium (Rs. 5-10 crore)	25
↔	Small (Rs. 1-5 crore)	965
↔	Very Small (<Rs. 1 crore)	6,000

Source : Deptt of ISM&H 2001

The small-scale sector is not pursuing good manufacturing practices. Patent proprietary medicines are being introduced through wide-scale licensing without checking their efficacy or quality. These medicines have become expensive. A number of products claiming to be ayurvedic medicines use large quantities of synthetic ingredients as excipients. Classical and *shastra* preparations are not getting due importance.

2.9.29 The Department has taken several steps to ensure good manufacturing practices and quality control of drugs so that there is increasing confidence in ISM&H drugs and formulations, as a result of which their market will expand both within the country and abroad.

Quality Control of Drugs

2.9.30 There are a large number of ISM&H pharmacies in the country (Table 2.9.4) and many of them, especially smaller ones, do not adopt good

Table 2.9.4 - Licensed Pharmacies in India

☒	Ayurveda	8,533
☒	Unani	462
☒	Siddha	385
☒	Homoeopathy	613
☒	Total	9,992

Source : Department of ISM&H, 2001

manufacturing practices. The Department of ISM&H has finalised and notified good manufacturing practices for ayurveda, siddha and unani drugs over the last two years.

2.9.31 Setting up pharmacopoeial standards and strengthening of the drug control laboratories has been identified as a priority in the Ninth Plan. The Pharmacopoeial Laboratory of Indian System of Medicine (PLIM) and Homoeopathic Pharmacopoeial Laboratory (HPL) at Ghaziabad are the major ISM&H drug testing laboratories. However,

Central Government's efforts to strengthen drug quality control

- ☒ Pharmacopoeial Laboratory for Indian Medicines, Ghaziabad and Homoeopathy Pharmacopoeial Laboratory, Ghaziabad are being strengthened.
- ☒ Appellate laboratories for drug testing and quality control are being identified.
- ☒ Preparation of drug formularies and Pharmacopoeias for ayurveda, siddha, unani and homoeopathy drugs are proceeding rapidly.
- ☒ The Department of ISM&H is assessing and training ISM&H drug industry personnel and drug inspecting staff in standardisation and quality control.

ensuring quality control is still a major problem because of lack of adequate number of ISM&H testing laboratories. In order to address this problem, the Department has initiated a centrally-sponsored programme for strengthening of state drug testing laboratories and for improving good manufacturing practices in ISM&H pharmacies. However, complaints of poor quality of ingredients or adulteration and substitution of components used for preparation of ISM&H drugs and lack of confidence in the safety, efficacy and quality of the drugs persists. Testing of complex ISM&H drugs is difficult. Drug testing laboratories at the state level are either inadequate or non-existent. state governments are not enforcing the standards laid down by appropriate licensing and quality control measures.

2.9.32 During the Tenth Plan every effort will be made to improve the quality control of drugs used in ISM&H by:

- ☒ completing all pharmacopoeial work by 2004;
- ☒ modernising state ISM&H pharmacies;
- ☒ motivating these pharmacies and the ISM&H industry to adopt good manufacturing practices;
- ☒ strengthening the central and state quality control laboratories, and exploring the feasibility of utilising laboratories of the Central Council for Research in Ayurveda and Siddha (CCRAS), and chemistry and biochemistry laboratories of universities/college departments, as well as existing drug testing laboratories in the modern system of medicine, for testing and quality control of ISM&H drugs;
- ☒ implementing stringent drug quality control and strictly enforcing the provisions of the Drugs and Cosmetics Act (1940) and the Magic Remedies Prevention Act, 1954; and
- ☒ monitoring work relating to testing of survey samples and statutory samples of ISM&H drugs.

Neutraceuticals and Food Supplementation Products

2.9.33 Food supplements, cosmetics and toiletries and neutraceuticals are flooding the Indian market. It has been reported that they have export potential. These products contain not only plant-based materials, exotic plant ingredients but also synthetic chemicals. As these products do not come under the category of either modern system or ISM&H drugs, they are not governed either by the Drugs and Cosmetic Act or the Prevention of Food Adulteration Act (1986), they enter the market without any quality control. It is important that these products are brought under the purview of Drugs and Cosmetic Act or the Prevention of Food Adulteration Act through suitable amendments of these acts and compliance with the Act is monitored carefully.

Medical Tourism

2.9.34 There has been a resurgence of interest in traditional medicine in India and abroad, leading to an increased demand for specialised treatment available in ISM&H. A number of tourists are visiting Kerala for *panchakarma* treatment for rejuvenation, and for treatment of neuro-muscular and orthopaedic disorders. Himachal Pradesh has initiated a scheme on health tourism by offering *panchakarma* in good hotels. During the Tenth Plan, opportunities in this area will be explored and catered to. At the same time appropriate transparent quality and cost of care norms will be set up and monitored to prevent exploitation of the clients.

Research and Development

2.9.35 There are four research councils in ISM&H: the CCRAS, the Central Council for Research in Unani Medicines (CCRUM), the Central Council for Research in Yoga and Naturopathy (CCRYN) and the Central Council for Research in Homoeopathy (CCRH). These councils are the apex bodies for research in the various systems of medicine and are fully financed by the Government of India. They initiate, guide, develop and coordinate, basic and applied research, medico-botanical surveys, research on cultivation of medicinal plants and

pharmacognostical studies. These councils also conduct research programmes aimed at drug standardisation and clinical trials of new ISM&H drugs.

2.9.36 During the Tenth Plan the following measures will be taken to improve R&D:

- ☒ priority will be accorded for bio-medical research pertaining to drug development in specific areas where strength of ISM has already been established;
- ☒ importance will be given to research on the fundamental principles of ISM&H;
- ☒ emphasis will be laid on research in the preventive and promotive aspects of ISM especially lifestyle-related disorders;
- ☒ medico-historical investigations of ISM&H will be continued; and
- ☒ promising and widely accepted practices and skills of traditional healers in rural and tribal areas will be identified and evaluated.

Zero Based Budgeting

2.9.37 The Planning Commission had directed all central ministries/departments to review the ongoing schemes using the zero-based budgeting methodology and to ascertain which of the ongoing schemes require continuation in the Tenth Plan. The Department of ISM&H also went through this exercise.

2.9.38 Since the Department started functioning only in 1995, most of the schemes had been initiated during the Ninth Plan. A majority of them relate to strengthening essential central institutions in medical education, healthcare, drug quality and research. All these schemes will therefore, continue. It was found that there were a large number of small schemes and these were merged into broad programmes. Some of the centrally sponsored schemes had been misclassified as central sector schemes and this error was corrected (Table 2.9.5). The outlays and expenditure under each of these during the Ninth Plan is summarised in Annexure 2.9.2.

Some of the major problems in R&D in ISM&H include:

- ☒ ISM&H practitioners and researchers need training in research methodology.
- ☒ in spite of growing interest in Indian health systems, alternate and complementary medicine, none of the research done by research councils, industry and academic institutions has been published in scientific journals of national and international repute.
- ☒ research has not concentrated on areas where ISM&H has unique advantages such as prevention and management of lifestyle-related diseases, and diseases for which drugs are not available in the modern system;
- ☒ research work is not carried out in collaboration with modern hospitals where abundant clinical material is available.

Table 2.9.5 – Summary of Zero Based Budgeting Exercise – 2001

Scheme	Centrally Sponsored Schemes		Ninth Plan – Sum of yearly outlays (Rs. Lakh)
	No. of schemes	Ninth Plan outlay (Rs. Lakh)	
Schemes to be retained	1	51	51
Schemes to be merged	3/8	5,992	8,047
Schemes to be weeded out	1	0	410
Total	4/10	6,043	8,508
Central Sector Schemes			
Schemes to be retained	1	480	680
Schemes to be merged	8/34	20,112	27,465
Total	9/35	20,592	28,145

PATH AHEAD AND GOALS SET

2.9.39 During the Tenth Plan the following areas will receive a major thrust :

- ☒ mainstreaming the ISM&H system;
- ☒ utilisation of the services of the ISM&H practitioners for improving access to health care and coverage under national programmes;
- ☒ improvement in quality of under graduate, postgraduate education and continuing medical education of all practitioners, so that there is improvement in the quality of care provided by ISM&H practitioners;
- ☒ monitoring the quality and cost of care at all levels of health care;
- ☒ promotion of health tourism especially for prevention and management of lifestyle related disorders;

- ☒ implementation of the recommendations of the Planning Commission's Task Force on the Preservation, Promotion and Cultivation of Medicinal Plants and Herbs;
- ☒ enforcement of stringent drug quality control measures and good manufacturing practices for ISM&H drugs and formulations;
- ☒ improving the availability of good quality ISM&H drugs at affordable prices within the country;
- ☒ realising fully the export potential for ISM&H drugs and formulations.

Successful implementation of the above initiatives will enable ISM&H system to get its due share in providing health care for the population, improve quality and access to health care and enable the country to achieve the goals set in the National Population Policy (2000) and National Health Policy (2002). The schemewise outlays for the Department of ISM&H is indicated in Annexure 2.9.2 and Appendix.

Annexure - 2.9.1

HOSPITALS AND DISPENSARIES UNDER INDIAN SYSTEMS OF MEDICINE AND HOMOEOPATHY

Sl. No.	Name of States/UTs	AYURVEDA			UNANI			HOMOEOPATHY			OTHERS		
		Dispensaries	Hospitals	Beds	Dispensaries	Hospitals	Beds	Dispensaries	Hospitals	Beds	Dispensaries	Hospitals	Beds
1.	ANDHRA PRADESH	1437	8	444	207	7	390	286	6	280	0	1	135
2.	ARUNCHAL PRADESH	4	1	15	1	-	-	41	-	-	0	0	0
3.	ASSAM#	329	2	130	1	-	-	75	3	105	4	1	25
4.	BIHAR#	522	9	871	128	4	414	181	1	100	0	0	0
5.	DELHI#	122	9	771	19	4	311	95	3	190	0	1*	50
6.	GOA	59	6	245	-	-	-	56	-	-	0	0	0
7.	GUJARAT	539	45	1745	-	-	-	34	9	730	10	1	1
8.	HARYANA	414	6	840	20	1	10	20	-	-	0	0	0
9.	HIMACHAL PRADESH	1064	16	330	3	-	-	14	-	-	0	2	25
10.	J & K#	247	1	25	171	2	200	2	-	-	25	1	10
11.	KARNA TAKA	561	124	6132	45	11	202	25	25	1480	11	18	586
12.	KERALA	759#	109	2561#	1#	-	-	2754	72	1440	9#	1#	30
13.	MADHYA PRADESH	2105	34	1160	56	1	60	202	12	590	0	0	0
14.	MAHARA -SHTRA#	463	73	11713	23	10	1400	-	77	5505	0	0	0
15.	MANIPUR	-	-	-	-	-	-	9	1	10	1	2	65
16.	MEGHALAYA	-	-	-	-	-	-	5	-	-	0	0	0
17.	MIZORAM	1	-	-	-	-	-	1	-	-	0	0	0
18.	NAGALAND	-	-	-	-	-	-	2	-	-	0	0	0
19.	ORISSA	527	8	323	9	-	-	503	5	150	65	0	0
20.	PUNJAB#	489	11	771	35	-	-	105	6	185	0	0	0
21.	RAJASTHAN	3486	90	1179	79	5	270	121	5	160	3	2	22
22.	SIKKIM	-	-	-	-	-	-	1	-	-	1	0	0
23.	TAMILNADU	10	4	267	6	1	54	41	3	150	339	221	1716
24.	TRIPURA	30	1	10	-	-	-	66	1	20	0	0	0
25.	UTTAR PRADESH#	713#	1671	9911	148#	136	1186	1378	36	399\$	0	0	0
26.	WEST BENGAL#	254	3	215	-	2	110	899	14	682	0	0	0
27.	A & N ISLANDS	-	-	-	-	-	-	7	-	-	0	0	0
28.	CHANDIGARH#	5	1	150	-	-	-	4	1	25	0	1	10
29.	D & N HAVELI	1	1	-@	-	-	-	1	1	-@	0	0	0
30.	DAMAN & DIU	1	1	5	-	-	-	-	-	-	0	0	0
31.	LAKSHADWEEP	4	-	-	-	-	-	2	-	-	0	0	0
32.	PONDICHERRY	12	-	-	-	-	-	1	-	-	8	0	0
33.	CGHS	31	1	25	9	-	-	34	-	-	5	0	0
34.	CENTRAL RESEARCH COUNCILS	32	20	475	8	12	265	41	5	105	4	2	85
35.	M/O RAILWAY	38	-	-	-	-	-	124	-	-	0	0	0
36.	M/O LABOUR	129	-	-	1	-	-	25	-	-	2	0	0
37.	M/O COAL	28	-	-	-	-	-	-	-	-	0	0	0
	TOTAL	14416	2258	40313	970	196	4872	7155	297	12836	487	254	2660

Source : Department of ISM&H, 1999

Note : Institutions Functional as on 1.4.1999; - = Nil Information

= Information for the current year has not been received. Hence repeated for the latest available year. * = Information regarding Yoga Hospitals in Delhi is under clarification. \$ = Figures as on 1.4.98 @ = No. of beds reported nil is under clarification.

Figures are provisional

TENTH PLAN OUTLAYS - DEPARTMENT OF ISM&H

(Rs. In Lakhs)

		9th Plan			10th Plan	2002-03
		Ninth Plan Outlay	Sum of Year- wise Outlay	Anticipated Expenditure	Outlay	Outlay
Centrally sponsored schemes						
1	Development of Institutions	2920.00	4020.00	4279.48	11750.00	1950.00
2	Hospitals and dispensaries	490.00	402.00	73.72	4900.00	750.00
3	Information, Education and Communication (IEC)	51.00	51.00	0.00	1200.00	300.00
4	Drugs Quality Control	2582.00	3700.00	3146.55	4540.00	875.00
Central Sector						
1	Strengthening of Deptt. of ISM&H	1650.00	2129.00	1964.61	2250.00	515.00
2	Educational Institutions	5282.00	6693.00	4990.65	11650.00	2615.00
3	Statutory Institutions	176.00	169.00	147.00	265.00	15.00
4	Research Councils (intra and extra mural research)	8391.00	10777.00	10661.94	13600.00	2520.00
5	Hospitals and dispensaries	71.00	292.00	314.80	2244.00	276.00
6	Medicinal Plants	1765.00	3420.00	2215.56	10700.00	2516.00
7	Strengthening of Pharmacopoeial Laboratories	1082.00	1150.00	365.50	2650.00	567.00
8	Information, Education and Communication (IEC)	480.00	680.00	839.28	1700.00	300.00
9	Other Programmes and Schemes	1595.00	2960.00	226.52	8550.00	1801.00
10	New Initiatives during the 10th plan				1501.00	
Grand Total		26635.00	36443.00	29225.61	77500.00	15000.00