AYUSH and PUBLIC HEALTH – POLICY REVIEW – Ideas and Mandates (1946 – 2006)

Dr. Ravi Narayan, Community Health Advisor,
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Goals of Human Resource Development in India

Health Survey and Development Committee Bhore Committee, 1946

(Majority View)

It should left to the Provincial Government to decide what part, if any, should be played by the indigenous systems in the organization of Public Health and Medical Relief, It is for them to consider, after such investigation as may be found necessary under what conditions, the practice of these systems should be permitted and whether it is necessary, either during some interim period or as a permanent measure, to utilize them in their schemes of Medical relief. What we have said in regard to indigenous systems applies generally to Homoeopathy also.

VS

(Minority View)

Services of persons trained in the indigenous systems of medicine should be freely utilized for developing medical relief and public health work in the country

--Drs. Butt, Vishwa Nath and Narayanrao

Health Survey and Planning Committee Mudaliar Committee, 1961

Recommendations

1. Training in Ayurveda and other indigenous systems should be in the Shudha in place of the integrated system and syllabus and courses should be left to experts in these systems

2. Chairs of Indian system of medicine should be established in all Medical Colleges

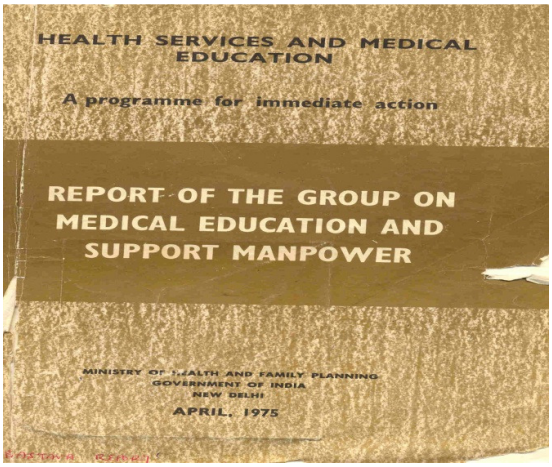
3. After 3-4 years training in Ayurveda graduate should be trained in preventive medicine, OBG and principles of surgery … so that their services can be utilized in the health services

4. Research in indigenous systems should be done in Central Institute of Medicine and Modern Medical Colleges

5. Post graduate training should be available to medical men from both systems… and the integration of the 2 systems of medicine will eventually come about as a result of the labours of such scientific worker

6. Separate councils of research and sufficient financial support for training in indigenous systems

The Srivastava Report – 1975



<u>National System of Medicine</u>

"A reference has already been made to the need to evolve a national system of medicine for the country by the development of an appropriate integrated relationship between modern and indigenous systems of medicine. We recognize the significance of the issues involved for the development of a comprehensive plan of health services suited to our needs and aspirations although, for want of time, it has not been possible for us to go into details."

Manual for Community Health Workers – 1978

Ministry of Health and Family Welfare

Our country has a wealth of knowledge in various traditional systems of medicine, and chapters on these systems have also been included in the manual, so that in those areas where indigenous systems of medicine are popular, the Community Health Workers can be trained to use these traditional remedies.

Chapter 13 – Ayurveda

Chapter 14 – Yoga for Health

Chapter 15 – Unani Medicine

Chapter 16 – Siddha

Chapter 17 – Homeopathy

Chapter 18 – Naturopathy

Chapter 19 – Medicinal Plants

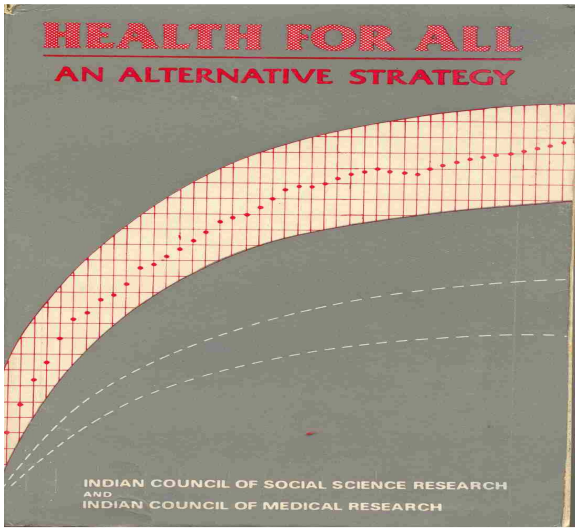
The ICSSR – ICMR Health For All Reports (1981)

I. Alternative Model of Health Care

i. Best of Tradition and Modern Science
ii. Integrating Preventive, Promotive, Curative

i. Democratic, decentralized, participatory

i. Community rooted and economical and Equitous



II Health Human Power Training

i. No new medical colleges

ii. Personnel for Primary Health Care

iii. Public Health Training through chain of schools

iv. Continuing education

v. Medical and Health Education Commission

Values from our tradition for the alternative model of health care

1. **"Ashrama concept of life**
2. **Non consumerist approach to life – with simplicity and self discipline**
3. **Health Services – individual and community responsibility**
4. **Yoga – powerful instrument for physical and mental health**

5. **Simple and effective health care – herbs, naturopathy, games and sports requiring less equipment/space etc."**

National Health Policy - 1983

1. **Large stock of health manpower in various systems for example, Ayurveda, Unani, Sidha, Homoeopathy, Yoga, Naturopathy, etc has not been adequately utilized.**
2. **These practitioners enjoy high local acceptance and respect and consequently exert considerable influence on health beliefs and practices.**
3. **It is necessary to initiate organized measures to enable each of these systems… to develop in accordance with its genius**
4. **Planned efforts should be made to dovetail the functioning of the practitioners and integrated their services at the appropriate levels, within specified areas of responsibility and functioning, in the over-all health care delivery system, specially in regard to the preventive, promotive and public health objectives.**
5. **Well considered steps should be launched towards the meaningful phased integration of the indigenous and the modern systems.**

National Education Policy in Health Sciences Bajaj Report - 1989

Practioners of Indian Systems of Medicine and Homeopathy

1. **Significant proportion is institutionally qualified and certified.**
2. **Potential manpower resource yet to be effectively drawn and optimally utilized for delivery of health care….**
3. **Simplicity, community acceptability and comparative cost-effectiveness of the delivery of health care through these systems – can play major role in disease prevention and health promotion**
4. **Within health care systems these practitioners can strengthen the components of i) health education ii) drug distribution for national control programmes iii) motivation for family welfare iv) motivation for immunization, control of environment etc**
5. **Necessary curricular changes need to be introduced and appropriate course contents to design learning experiences related to expected task performance.**
6. **Equal emphasis to be placed in UG and PG education of modern system of medicines to introduce basic concept of ISM and Homeopathy to familiarise basic doctors and specialists with the scientific basic of ISM&H**
7. **A healthy and mutual respect for qualified practitioners of medicine, irrespective of the system, is an essential prerequisite for effective health manpower utilisation**

Report of the Expert Committee on Public Health System (1996)

Ministry of Health and Family Welfare, Govt. of India

Recommendations

E-10.1.1.29 Involvement of ISM & Homoeopathy

"The practitioners of Indian System of Medicine can be gainfully employed in the area of national Health Programs like the National Malaria Eradication Program, national leprosy Eradication Program, Blindness Control Program, Family Welfare and universal immunization, nutrition program etc. within the health care system, these practitioners can strengthen the components of (i) health education, (ii) drug distribution for national disease control programs, (iii) motivation for family welfare, and (iv) motivation for immunization, control of environment etc."

E-11.1.1.7 Joint Council of Health, Family Welfare and ISM & Homeopathy

"Indian Systems of Medicine and Homoeopathy should be appropriately involved in strengthening further the public health system of the country. Therefore, the committee recommends that the existing Joint Council of Health & Family Welfare should be further broad based to made a Joint Council of Health, Family Welfare and Indian Systems of Medicine & Homeopathy."

Presented to Independent Commission on Health in India: (A CHC Report 1998), Agenda for Change

Significant challenges for the planning process in health care

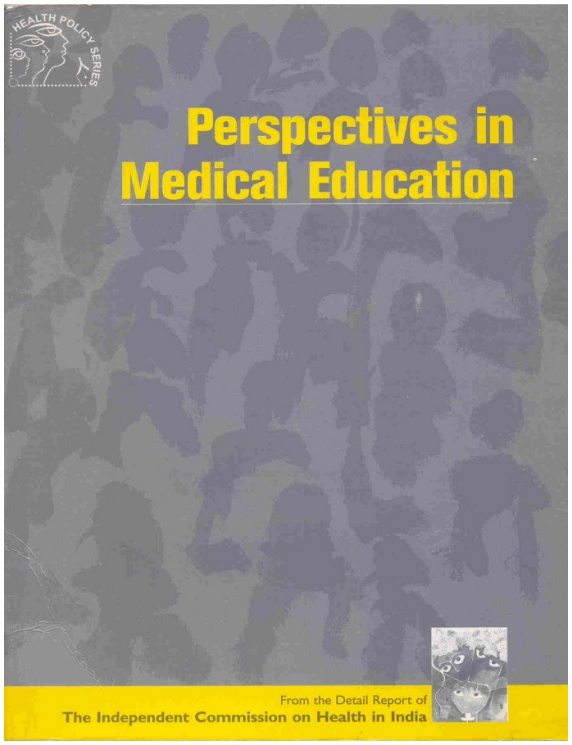
5. "The challenges of providing basic needs and primary health care for all."

7. "Health Education to promote positive health attitudes and capacity towards primary health."

8. "Integration of medical systems, both western and indigenous."

9. "Research in alternative approaches, health 21ehavior, women's health and holistic health care."

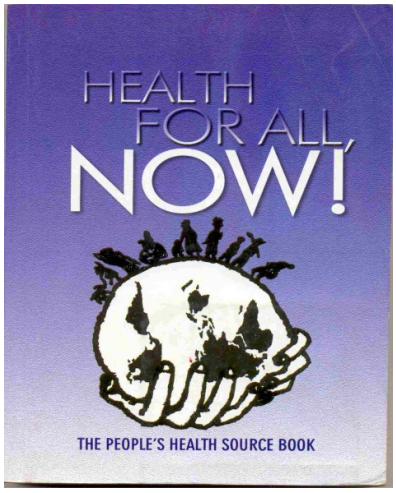
10. "Promotion of holistic health care of positive/wellness model with stress on five basic dimensions of self responsibility, physical fitness, nutritional awareness, environmental sensitivity and stress management."



Strengthening the People's Health Movement: Jana Swasthya Abhiyan from 2000 AD

Indian People's Health Charter

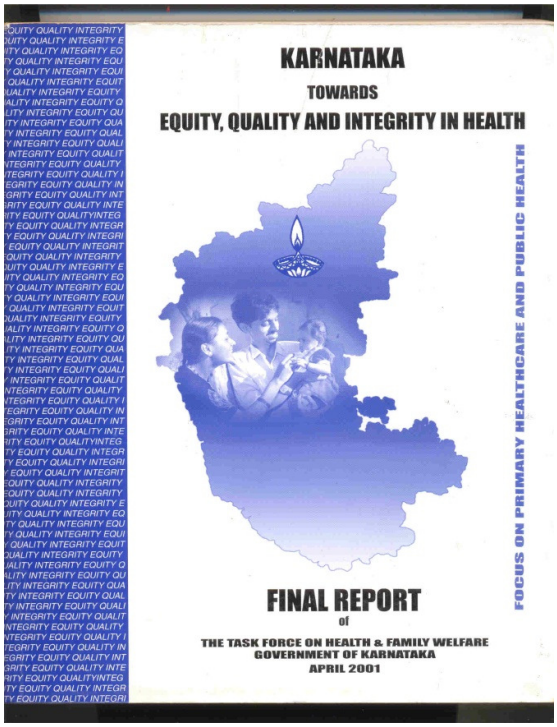
10. "Support be provided to traditional healing systems, including local and home based healing traditions for systematic research and community based evaluation with a view to developing the knowledge base and use of these systems along with modern medicine as a part of holistic healing perspective."



Karnataka Task Force on Health and Family Welfare – 2001: Recommendations for Human Resource Development in Health

Agenda for Action

- **Urgent need to strengthen ISM and Homeopathy – to build up better working linkages, dialogue between systems – moving towards a more integrated, comprehensive health policy, utilising the potential of all systems at different level of health care, particularly primary health care and public health.**
- **At community level – to bridge the cultural gap by making health team more sensitive to people's needs, life situation, belief systems and aspirations and building PHC and Public health systems with full and enthusiastic involvement of the community as empowered participants not passive beneficiaries.**



National Health Policy - 2002

2.5 <u>EXTENDING PUBLIC HEALTH SERVICES</u>

2.5.2 "India has a vast reservoir of practitioners in the Indian Systems of Medicine and Homoeopathy, who have undergone formal training in their own disciplines. The possibility of using such

practitioners in the implementation of State/Central Government public health programmes, in order to increase the reach of basic health care in the country, is addressed in the NHP- 2002."

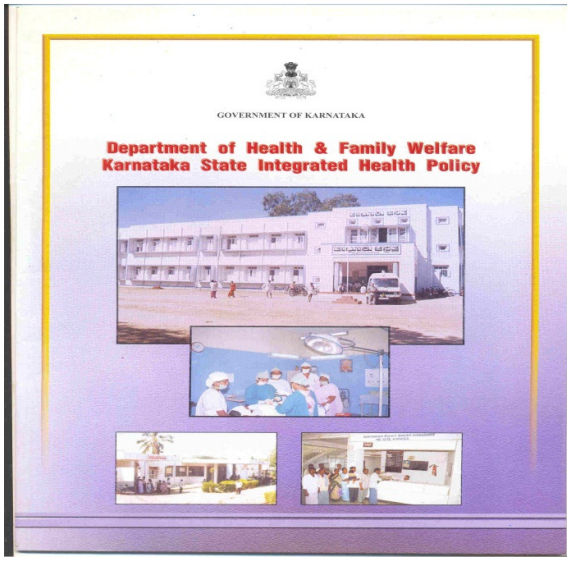
2.29 <u>ALTERNATIVE SYSTEMS OF MEDICINE</u>

- **1. Under the overarching umbrella of the national health frame work, the alternative systems of medicine – Ayurveda, Unani, Siddha and Homoeopathy – have a substantial role. Because of inherent advantages, such as diversity, modest cost, low level of technological input and the growing popularity of natural plant-based products, these systems are attractive, particularly in the underserved, remote and tribal areas.**
- **2. The alternative systems will draw upon the substantial untapped potential of India as one of the eight important global centers for plant diversity in medicinal and aromatic plants. The Policy focuses on building up credibility for the alternative systems, by encouraging evidence-based research to determine their efficacy, safety and dosage, and also encourages certification and quality-marking of products to enable a wider popular acceptance of these systems of medicine.**
- **3. The Policy also envisages the consolidation of documentary knowledge contained in these systems to protect it against attack from foreign commercial entities by way of malafide action under patent laws in other countries. The main components of NHP-2002 apply equally to the alternative systems of medicines. However, the Policy features specific to the alternative systems of medicine will be presented as a separate document.**

Karnataka State Integrated Health Policy – 2003

<u>Indian Systems of Medicine and Homoeopathy</u>

"However, ISM&H have been neglected in health planning and provisioning of resource by the state. In future this will be compensated for and reversed. They will receive increased state support and resources to promote optimal growth according to their own genius. They will be involved more in health decision making and in provision of health services, possibly being located within the same premises as modern medicine, so that people can freely exercise a choice."



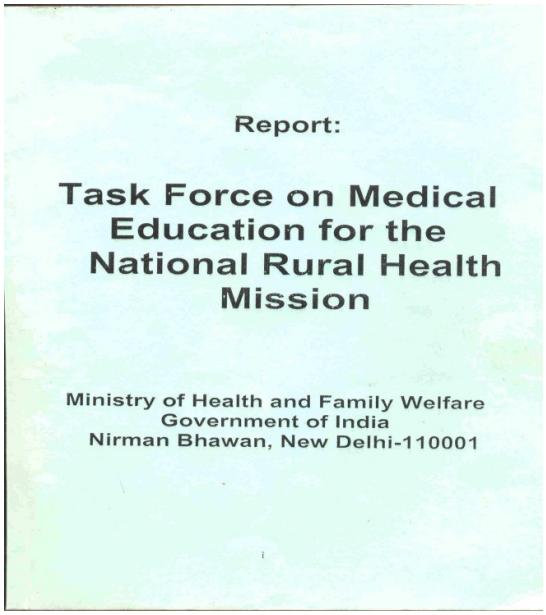
Task Force on Medical Education – NRHM (2006)

SOME RECOMMENDATIONS

1. Short-term course for Training Community Health Practitioners for Providing Primary Health Care (3 year BSc., in Health Sciences)

This course will be also available to AYUSH graduates and pharmacy, denstry, nursing graduates (2 year variant module)

2. In Training for Public Health also to be available for AYUSH graduates



and finally…..

- National Policy and Programmes on Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH)
- Report of Task Force on mainstreaming of AYUSH systems in XI Plan
- Roadmap for mainstreaming of AYUSH under NRHM

THANK YOU

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Government policies for traditional, complementary and alternative medical services in India: From assimilation to integration?

The traditional, complementary and alternative medical (TCAM) sector in India is constituted by a multitude of systems and traditions. Of these, 6 are formally recognized by the government: Ayurveda, Unani-Tibb, homeopathy, yoga and naturopathy, Siddha and Sowa- Rigpa, often collectively known as AYUSH. It is estimated that there are as many registered practitioners of TCAM (approximately 700 000) as of western medicine in India—TCAM constitutes a large part of India's flourishing private outpatient market.1,2 TCAM practices frequently approximate local health traditions and beliefs more closely than western medicine, an important factor contributing to their popularity.3–5

Even as TCAM has been mainstreamed, de jure, by the institution of the national department of AYUSH, a national AYUSH policy, and boards and councils in the states, de facto government policies in India have vacillated between general neglect and sporadic assimilation of TCAM practitioners in the health services. Various government schemes, such as the National Rural Health Mission (NRHM), have created intermittent opportunities for TCAM practitioners, typically entailing replacement of allopathic services.6 In these settings, the dominance of the allopathic sector makes TCAM providers vulnerable to power imbalances, with adverse consequences for the integrity of their knowledge systems, and on the quality of the services provided.2,3,7 Consequently, for the most part, Indian TCAM practitioners function outside the mainstream health architecture, disconnected from financial protection and regulatory mechanisms, with attendant negative repercussions on patients.

As India moves towards universal health coverage, it has become critical to consider the value of TCAM practitioners as widely utilized and preferred providers of primary care. Moving away from erstwhile ad hoc and assimilative approaches, a more inclusive model of 'integration' presents itself as a policy alternative for the Central and state governments. Integration, as opposed to assimilation, implies wholesale policy and health systems reforms to enhance the participation of TCAM providers in the mainstream health system.8

Successful experiences of TCAM integration in other countries hold the following key lessons for Indian policy.

1. Attentiveness to health goals and to stakeholder needs. Integration serves multiple public health and societal goals, including: enhancing access to care by expanding the reach of publicly provided or stewarded services;9 optimizing the roles of TCAM providers, including enhancing performance, improving the quality of care provided and mitigating potential harms;10 and promoting the development of alternative systems of knowledge.
2. Comprehensive, multi-level reform. Integration implies several steps at all levels of the system—changes in policy design and oversight of the health workforce; changes at the administrative level through the creation of organizational structures for mobilizing and training the health providers in question, and providing stewardship to enable them to perform their roles; promoting basic and operational research; and engaging TCAM providers in essential health services.9
3. Reorienting systems values. Integration has an operational component, but also implies a broader political and cultural transformation9 in which the role of appropriate, scientifically upheld TCAM practices is universally acknowledged, and communities of providers are drawn into the mainstream of the national health agenda, in service of shared goals.

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AYUSH in India

Background

The Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) is a part of the Ministry of Health & Family Welfare of the Government of India.
Department of Indian Systems of Medicine and Homoeopathy (ISM&H) was created in March,1995 and re-named as Department of AYUSH in November, 2003 with a view to providing focused attention to development of Education & Research in Ayurveda, Yoga & Naturopathy, Unani, Siddha, Sowa Rigpa and Homoeopathy systems. The department is charged with upholding educational standards in the Indian Systems of Medicines and Homoeopathy colleges, strengthening research, promoting the cultivation of medicinal plants used, and working on Pharmacopoeia standards. (Department of AYUSH website, accessed at http://indianmedicine.nic.in/)

Objectives:

- To upgrade the educational standards in the Indian Systems of Medicines and Homoeopathy colleges in the country.
- To strengthen existing research institutions and ensure a time-bound research programme on identified diseases for which these systems have an effective treatment.
- To draw up schemes for promotion, cultivation and regeneration of medicinal plants used in these systems.
- To evolve Pharmacopoeial standards for Indian Systems of Medicine and Homoeopathy drugs.

Bodies under AYUSH

Organisations under the control of the Department of AYUSH are:

1 Central Research Councils

(a) Central Council for Research in Ayurvedic Sciences (& siddha, Sowa Rigpa) (CCRAS) http://www.ccras.nic.in/
(b) Central Council for Research in Unani Medicine (CCRUM) http://www.ccrum.net/
(c) Central Council for Research in Homoeopathy (CCRH) http://ccrhindia.org/index.asp
(d) Central Council for Research in Yoga and Naturopathy (CCRYN) http://www.ccryn.org/
(e) Central Council for Research in Siddha (CCRS) http://crisiddha.tn.nic.in/contact%20us.html

They are established as autonomous organizations registered under Societies Act, to initiate and guide, develop and coordinate scientific research in different aspects of respective systems, both fundamental and allied. These Councils are the apex bodies for research in the concerned systems of medicine and are fully financed by the Government of India.
The research activities of the Research Councils are monitored and reviewed periodically in order to ensure that the research is focused and that it is undertaken in a time bound manner. The outputs of the research studies are disseminated among educationists, researchers, physicians, manufacturers and the common man.

2 **Statutory Regulatory Bodies established by the Central Government to regulate education and practice** (Professional councils)

(a) Central Council for Indian Medicine (CCIM)) [accessed at CCIM website http://ccimindia.org/index.html]
(b) Central Council for Homoeopathy (CCH) [accessed at CCH website http://www.cchindia.com/index-2.html]

Functions of Regulatory Councils:
(i) To lay down standards of education, comprising curricula, requirement of hospitals, faculties, equipment, clinical exposure and examination pattern;
(ii) To ensure adherence to laid down standards;
(iii) To maintain a Central Register of practitioners;
(iv) To recommend to the Central Government for recognition and withdrawal of medical qualifications awarded by Universities;
(v) Consequent upon amendment to the Central Council Acts, the Central Government is vested with the powers of granting permission for opening new colleges, increase of admission capacity and starting of new or higher courses of study.

Total 290 and 185 colleges/institutions have been permitted by CCIM and CCH respectively to undertake UG /PG courses and these colleges are affiliated with 57 recognized universities through out the country including two exclusive Ayurveda universities and six Health Universities (as of 1.1.2010). There are 47 State Boards of Indian System of Medicine and Homoeopathy for registering AYUSH practitioners possessing recognized medical qualifications. All states have different organizational structures w.r.t. dept of AYUSH.

3) National Institutes set up by the Central Government to set benchmarks for teaching, research and clinical practices.

a) National Institute of Ayurveda, Jaipur (NIA)
b) National Institute of Siddha, Chennai (NIS)
c) National Institute of Homoeopathy, Kolkata (NIH)
d) National Institute of Naturopathy, Pune (NIN)
e) National Institute of Unani Medicine, Bangalore (NIUM)
f) Institute of Post Graduate Teaching and Research in Ayurveda, Jamnagar, Gujarat (IPGTR)
g) Rashtriya Ayurveda Vidyapeeth, New Delhi (RAV)
h) Morarji Desai National Institute of Yoga, New Delhi (MDNIY)

There is a constant endeavour of the department for upgrading these National institutes into Centres of Excellence. Among the eight, three National Institutes are under Ayurveda system. The upcoming North Eastern Institute of Ayurveda and Homoeopathy (http://neiah.nic.in/), Shillong is also among them.

4) Drug Manufacturing Unit (manufactures classical Ayurveda and Unani drugs)

(a) Indian Medicines Pharmaceutical Corporation Limited (IMPCL), Mohan, Uttaranchal (a public sector undertaking)

5) Laboratories [functioning as Standard Setting- Cum-Drug-testing Laboratories]

(a) Pharmacopoeial Laboratory for Indian Medicine (PLIM)

(b) Homoeopathy Pharmacopoeia Laboratory (HPL)

6) Others: (Department of AYUSH website, accessed at http://indianmedicine.nic.in/)

- Pharmacopoeia Commission for Indian System of Medicine: For Standardisation and testing of Drugs, various agencies have been put in plan by the Government of India. Four different Pharmacopoeia Committees are working for preparing official formularies / pharmacopoeias to evolve uniform standards in preparation of drugs of Ayurveda, Siddha, Unani and Homeopathy and to prescribe working standards for single drugs as well as compound formulations.

- A Drug Quality Control Cell is working in the Department to deal with the matters pertaining to licensing, regulation and control of drugs and the spurious manufacture of Ayurvedic, Unani and Siddha Drugs and other matters.

- Traditional Knowledge Digital Library (TKDL) www.**tkdl**.res.in/ : In collaboration with the Council for Scientific and Industrial Research (CSIR), AYUSH set up a Traditional Knowledge Digital Library (TKDL) in 2001, to prevent grant of "bed"patents on traditional knowledge and biopiracy, further the digital library is being developed on codified traditional knowledge on Indian systems of medicines such as Ayurveda, Unani, Siddha And Yoga. As an important measures nearly 8,05,000 Ayurvedic formulations, 98,700 Unani formulations, and 9,970 Sidha formulations have been transcribed in patent application format in five languages: English, French, German, Spanish and Japanese.

- The **National Medicinal Plants Board (NMPB) www.nmpb.nic.in/** functions under the Department to coordinate activities relating to conservation, cultivation, marketing, export and policy making for the development of the medicinal plants sector.

- The Department also manages the CGHS Ayurveda Hospital at Lodhi Road, New Delhi.

Summary of Infrastructure Facilities under AYUSH as on 1/4/2010

Facility	Ayurveda	Unani	Siddha	Yoga	Naturo-pathy	Homeo-pathy	Sowa Rigpa	total
Hospitals	**2458**	**269**	**275**	**4**	**24**	**245**	**2**	**3277**
Beds	**44820**	**4894**	**2576**	**35**	**661**	**9631**	**32**	**62649**
Dispensaries	**15353**	**1146**	**541**	**59**	**97**	**6958**	**135**	**24289**
Registered Practitioners	**478750**	**51067**	**9217**		**1758**	**246772**		**787564**
UG Colleges	**254**	**39**	**7**		**10**	**185**		**495**
Admission Capacity (UG)	**11927**	**1757**	**350**		**385**	**12371**		**26790**
PG Colleges	**64**	**6**	**3**			**33**		**106**
Admission Capacity (PG)	**1110**	**75**	**126**			**1073**		**2384**
Total AYUSH Colleges	**256**	**40**	**8**		**10**	**187**		**501**
Total Admission Capacity	**13037**	**1832**	**476**		**385**	**13444**		**29174**
Manufacturing Units	**7494**	**414**	**338**			**398**		**8644**

[Source: AYUSH in 2010, Planning & Evaluation Cell, Dept of AYUSH, MOHFW,GOI. http://indianmedicine.nic.in/index2.asp?lang=1&slid=632&sublinkid=225]

Comparison with Non AYUSH (allopathic sector)

Facility criteria	AYUSH Sector	Non AYUSH Sector
Hospitals	3371	11,289 (2008)
Beds	66272	4,94,510 (2008)
Dispensaries	22014	
Registered Practitioners	754985	696747 (2007)
UG Colleges	479	289 (2008)
Admission Capacity (UG)	27265	32815 (2008)
PG Colleges	110	
Admission Capacity- PG	2402	
Total AYUSH Colleges	485	
Total Admission Capacity	29667	
Manufacturing units	9173	

Data Sources:

2008: http://cbhidghs.nic.in/writereaddata/mainlinkFile/Health%20Infrastructurs.pdf

2007:http://cbhidghs.nic.in/writereaddata/linkimages/Health%20Human%20Resources4484269844.pdf

2010:http://mciindia.org/InformationDesk/MedicalCollegeHospitals/ListofCollegesTeachingMBBS.aspx

Medical Pluralism in India

In addition to AYUSH (Ayurveda, Yoga & Naturopathy, Unani, Siddha & Homeopathy) which represents the tradition of codified, textual health knowledge systems other than the allopathic system, Local Health Traditions (LHT) represent the practices and knowledge of the common people and folk practitioners who follow an oral tradition of learning and passing on of the knowledge. As distinct from AYUSH, Local Health Traditions (home remedies and dietary practices for health; folk practitioners including herbalists, bone-setters, massagists, traditional birth attendants and faith healers) too have been recognized for their usefulness and people's access to them.

The traditional systems were the medical system prevelent in India, being practiced by private providers much before the public system started their services. The Allopathic services reached the people initially through the public system which was then accompanied by the private sector services. Before the introduction of modern medicines, disease treatment was entirely managed by herbal remedies. It is estimated that about 80% of the world population residing in the vast rural areas of the developing and under developed countries still rely mainly on medicinal plants. Medicinal plants are the only affordable and accessible source of primary health care for them, especially in the absence of access to modern medical facilities. Studies reveal that there are more traditional medicine providers than the allopathic providers especially in the rural areas (WHO 2002).

Currently, there are around 1 million village-based and community supported traditional healers in India. Local communities have been managing malarial fevers, diarrhea, primary health care issues & conditions, maternity care and health problems of domestic livestock with the help of ecosystem specific plant resources. Local traditions developed as ecosystem and culture specific systems having universal out look and wide interactions (WHO 2002)..

Folk healing practices

- The folk practices, (not only medical) were once an integral part of our day-to-day life and culture.
- They were improved on the basis of everyday life practical knowledge and changing customs and socioeconomic relations of the society.
- They were inseparably related to the customs, traditions and beliefs of the concerned society.
- Every community had its own unique set of medical practices and methods for improving the quality of life.
- Still they had a wider perspective about the world around them and the philosophic outlook about the relationship between man and nature.
- It formed a civilisation that was capable enough not only in absorbing the new knowledge but also in making some contributions to it.

At the same time they were very focused in area of practice. For example, there were people who exclusively treated boils. Like this we had and still have bonesetters, poison healers, birth attendants and healers for specific conditions like child hood diseases, eye diseases, jaundice etc. They mainly used herbal drugs available in the neighborhood and later on, the medicines available in the market as a result of trade relations with distant lands.

Historical, sociological and epistemological evidence have led to conclude that folk healing traditions have symbiotic relationship with Ayurveda, Siddha and Unani systems.

Link between codified & folk medicine (continuous interaction)

- Dispersal of codified knowledge in the lower strata of society, which already practiced folk medicine. As a result some part of the codified knowledge was absorbed to become a part of the folk practice.
- Practices in the folk culture were appropriated in to the theorized system of knowledge during course of time.
- The codified and folk practices as extant at present cannot be taken apart from each other.
- A local child health practitioner with little knowledge of Sanskrit may use exotic raw materials originate in the Himalayas for his medicines.
- And a practitioner of the codified system may be using treatment procedures and formulations that are not mentioned in the Sanskrit texts.

CAUSES of decline

In colonial India, the British introduced western medicine as a cultural, intellectual and political tool for supremacy. While western medicine was provided with all the infrastructures and legal support, indigenous medicine was deemed unscientific and illegal and hence inferior. They couldn't ban it due to the insufficient infrastructures of the western system at that time.

Also there were internal factors that hastened the process of decay such as stagnation of knowledge and non-availability of quality medicine being the main reasons. The lack of experimentation and relating to new ecological and social changes that occurred after the composition of the classical texts led to the method of treatment losing touch with current practices/conditions/reality.

Also the change in the educational system (especially the erosion of the gurukula system) led to the loss of its organic link with the community. Most of the time the practices are not documented and the knowledge are lost with the death of the person who practiced it.
This leads to the loss of a valuable set of knowledge, which was the result of perhaps centuries of social and cultural development of the particular region.

Current Scenario

The organic relationship of the folk practices with the sociological development of the community is lost in the process of development. The folk practices are no more a part of the lifestyle of the society. The cheap and cost effective treatment available in the locality using locally available herbs is no more available. This leads to increase in medical expenditure of the poor and greater dependency on modern medical system.

But they remain in some hamlets through isolated individuals who practice them. Folk traditions survive given their organic link with our lives, and their continuous renewal based on practical experience. Folk traditions are the result of centuries of assimilated knowledge and interaction, which are the intellectual property of the community concerned.

A recent study (Priya 2010) had some very significant related findings as below:

- 55% of the Allopathic doctors advised home remedies in combination with Allopathic treatment to their patients.
- The ASHAs across the states had good knowledge about local medicinal plants and advised herbal remedies to people in the community. However, their level of responses was lower than from the household interviews in the community.

- Across the states, awareness regarding medicinal plants was found to exist in 47-100% households, and about food items having medicinal properties was found to exist in 54-100% households.
- More than 75% of home remedies used for diarrhoeal disease, anaemia and diabetes, as well as in convalescence and maternal and child health (MCH) conditions, were validated across the states and were found to be useful and effective. *This is generally indicative of the strength of people's knowledge and its links with the indigenous systems suggesting that it should be the base to build upon as a positive resource.*
- The conditions for which combination or referrals were listed by the doctors tend to tally very well with the people's perceptions and use. This triangulation is a strong basis for further examination and inclusion of those found cost-effective, safe and easily accessible into "multi-pathy" Standard Guidelines for Treatment.

CHALLENGES FACING TRADITIONAL HEALTH SCIENCES OF INDIA

- The resource base is largely of plants, around 6200 species. There are also around 400 species of medicinal fauna and around 70 different metals and minerals that are used by TM in India.The biodiversity including wild populations of several hundred species are under threat.
- While the private sector including 9000 licensed industries with an estimated total turnover of around Rs. 6000 crores (around 1 billion Euro) have grown, there is insufficient data on the impact of AYUSH on the communities' health, as well as the lack of involvement in public health.
- Increasing interest by multinational pharmaceutical companies and domestic manufacturers of herbal-based medicines is contributing to a significant economic growth of the global medicinal plants sector. However, a large proportion of medicinal plant research is focused on nutraceuticals, chronic and metabolic disorders (diabetes, cardiovascular, etc.) and other diseases like HIV/AIDS, malaria, etc. Whereas, the common diseases of resource poor communities such as diarrhoeal diseases and acute respiratory tract infections (ARI) are often not addressed.
- Moreover, unlike the rural communities who use fresh/dried plant material or their crude extracts, the industry lays importance on isolation of active principles or standardized fractions since crude extracts are not patentable. However, it is often seen that a crude extract is more active compared to the isolated active fractions.

WAY FORWARD - Integration or pluralism?

• Modern societies world over are moving towards accepting pluralistic healthcare regime
• It is evident that no single system of healthcare has capacity to solve all the health needs of society
• India's Traditional Knowledge Systems can contribute significantly to medical pluralism
• TM can provide original global solutions in several systemic disorders and in preventive & promotive health.
• TM can provide health security via ecosystem specific plants to rural households.
●There is a need to discuss the local practitioners, and plan about efforts to mainstream these practitioners too.

At the same time, open minded scientificity is needed. *It would be inappropriate to expect the traditional systems to be validated by the scientific framework.Iinstead there is a need for evolving new disciplines to look at these innovatively and holistically. Trans-disciplinary research is largely for communication and not for validation. There is a need to combine both the reductionist and the holistic ways of researching.*

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A POLICY ANALYSIS ON INTEGRATION OF AYUSH AND LOCAL HEALTH TRADITIONS IN A FRAMEWORK OF UNIVERSAL HEALTH COVERAGE

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The Indian medical domain has been described as "an eclectic 'non-system' of knowledge and practices deriving from the continuous interplay of indigenous and introduced traditions" (Lambert, 1995). Notwithstanding this continuous interplay, since Independence, policymakers and other health system actors have attempted to -and largely succeeded in -developing a discrete architecture privileging allopathic medicine over other systems. Most recently, however, attempts have been made at combining the strengths of practitioners from these other systems of medicine under a coherent policy framework, particularly in the movement towards Universal Health Coverage in India. This background paper first summarises policymaking on integration of systems of medicine historically. It then undertakes a policy analysis with an emphasis on progress on the agenda of the Eleventh Five Year Plan, drawing attention to gaps in policy design and implementation with which we must all contend.

Introduction

India boasts almost as many registered practitioners of **A**yurveda, **Y**oga & Naturopathy, **U**nani-Tibb, **S**iddha, **H**omeopathy and Sowa-Rigpa (AYUSH, roughly 7.52 lakhs) as of allopathic medicine (around 8.17 lakhs) (Central Bureau of Health Intelligence, 2010). If these numbers alone reflected an integrated workforce, India could boast a doctor: population ratio far surpassing the World Health Organisation's 1:1,000 norm, i.e. roughly 1 doctor per 770 Indians.[a]

Certainly, as many have pointed out, such is not the case. Support systems for AYUSH providers in the domains of education, training, and regulation are severely lacking (Priya & Shweta, 2011) . There is a predominating environment of allopathic dominance such that AYUSH providers are sometimes subordinated, or otherwise redundant in the public system (Sheikh & Nambiar, 2011) . Official recognition of AYUSH providers has been inadequate until recently with a resultant preponderance of practitioners in the private sector (Working Group on AYUSH for 12th Year Plan, 2011).

A Short History

India's historical trajectory along these lines is marked by an initial syncretic interest at the cusp of independence, at which point then mainstream Galeno-Islamic and Ayurvedic systems began to encounter modern allopathic medicine (Arnold, 2000; Ebrahimnejad, 2009; Kumar, 2010). This is followed by official neglect and consequent de-legitimisation of these very systems of medicine post-independence (Amrith, 2007; Mushtaq, 2009). At the turn of the 21st century, policymakers made intercalated overtures between assimilation and integration through the creation (in 1995) and rechristening (in 2003) of an eponymous Department in the Ministry of Health and Family Welfare.

A number of strategies have been developed 2005 onwards as part of the National Rural Health Mission (NRHM) on "mainstreaming AYUSH." This includes the provision of AYUSH medications at the multiple levels of health service delivery (village, sub-centre, Primary Health Centre (PHC) and Community Health Centres (CHC)) and upgradation of PHCs to having an AYUSH doctors in addition to the existing allopathic doctor (National Rural Health Mission [NRHM], 2005) . Such practices, rather than examples of integration, may be better described as substitution and replacement of AYUSH providers for allopathic providers in the face of great shortages. However necessary, such practices tend to ignore the merits of AYUSH and local health traditions and may perpetuate a legacy of stifling indigenous health

[a] This figure does not account for practitioners unrecognised in the ambit of AYUSH systems (eg. Local health traditions like the Khasi in Meghalaya) and in the informal sector (eg. bonesetters).

systems and knowledge (Khan, 2006; Sujatha, 2011) . As a consequence, for the most part, Indian non-allopathic practitioners typically function outside the mainstream health architecture, even when explicit attempts at integration are underway.

Concurrent to NRHM, various pilot or research projects in collaboration with non-allopathic practitioners have also been initiated and/or studied by international players. Examples include the Saathiya Youth Friendly network for reproductive health access, ORS and diarrhoea management and zinc therapy in Uttar Pradesh (Vyas, 2008) , as well as and sexual health and HIV interventions with the urban poor in Maharashtra (Schensul, Mekki-Berrada, Nastasi, Saggurti, & Verma, 2006) . From these examples, we can infer the efficacy of integration in relatively small-scale vertical programs.

Endorsement of integration is reflected in discussions of Kerala's health system (Mehta, Akhauri, & Bharti, 2010)), and the larger - arguably globalised (Sujatha, 2011)[b] - imperative put forward by the World Health Organisation a decade ago. So also seems the case with India's Eleventh Plan, whose vision for AYUSH (2007: 109) encompasses the following:

> strengthening professional education, strategic research programmes, promotion of best clinical practices, technology upgradation in industry, setting internationally acceptable pharmacopoeial standards, conserving medicinal flora, fauna, metals, and minerals, utilizing human resources of AYUSH in the national health programmes, with the ultimate aim of enhancing the outreach of AYUSH health care in an accessible, acceptable, affordable, and qualitative [sic] manner.

In keeping with this rationale, in 2011, the High Level Expert Group (HLEG) on Universal Health Coverage called for the "active engagement and participation of appropriately trained AYUSH practitioners" and offered examples of their "optimal utilization." To this end, the HLEG recommended post creation at PHCs, CHCs and district hospitals and the involvement of non-allopathic providers in health promotion and NCD prevention; provisions for skill upgradation and support for career trajectories; and the development of an AYUSH Essential Drugs List (High Level Expert Group on Universal Health Coverage, 2011) .

A Universal Health Coverage framework, therefore, calls for a system-wide focus on meeting health human resource needs across India's different states, epidemiological profiles and local cultural contexts. Evidence suggests that from the perspective of at least South Indian urban Ayurvedic practitioners, this kind of institutional integration is desirable (Nisula, 2006) . Whether this inclination is shared across systems of medicines, states and geographies is the subject of ongoing study.

The rationale for integration and our policy analysis

Overall, drawing from Indian and international literatures, our analysis suggests three broad rationales for integration of systems of medicine in India under a Universal Health Coverage framework:

→ **Enhancing access** to care by expanding the reach of publicly provided or stewarded services;
→ **Optimizing the roles** of providers, including enhancing performance, improving the quality of care they provide, and mitigating potential harms; and
→ **Promoting development** of alternative systems of knowledge.

With these rationales in mind, we undertook a mapping exercise of relevant policy on AYUSH and local health traditions over the past decade or so. The methodology employed in our larger study drew from Yanow's interpretivist policy analysis approach (2000) and Sheikh's policy mapping framework (2011) , drawing attention to the understanding of policy from various perspectives (Walt & Gilson, 1994) . The perspective that this paper examines is that of the Planning Commission in producing the Eleventh Plan, and that of the Working Group on the Twelfth Plan in assessing its progress. This is a necessarily

[b] The tension raised by this author between medical pluralism and integrative health is, in my view, emphasized at the expense of recognizing the tensions and dialectics within each of these views across systems of medicine. This is to say the tension between allopathy and non-allopathy is equally manifest in a medically plural system as it is in one attempting integration.

circumscribed analysis, which I acknowledge. It is, nevertheless, an important first step inasmuch as it intends to help frame discussions at the Medico Friends' Circle meet around pressing policy issues.

Figure 1 describes the rationales for integration, the elements of the Eleventh Plan Agenda for AYUSH categorised by us under them, and notes on their implementation from the perspective of Twelfth Plan Working Group on AYUSH. This analysis is preliminary and is intended to generate discussion rather than draw comprehensive conclusions.

Summary of findings: Design and Implementation
By merely laying out the Eleventh Plan agenda across the rubric of our aforementioned rationales, we see a prioritization of field development by design (7 out of 16 items address this issue). There is also emphasis on public awareness and international outreach on AYUSH systems of medicine, which can generate public demand for AYUSH and, perhaps ultimately, demand for integrated health services. Emphasis on implementing systematic monitoring and evaluation should enable checks to be made on the progress and orientation of integration.

In terms of design gaps, integrating into an already fragmented national health delivery system may replicate, exacerbate, or create verticalised fragmentation of AYUSH service delivery, rather against the imperative of integration. It appears, moreover, that the onus of most of the agenda (items 1-3, 4, 6-8, 10-16) is on the Department of AYUSH. There is less focus on (allopathic) health departments who ostensibly play an equally critical role in ensuring integration functions. Moreover, there is relatively little emphasis in this agenda on advancing non-allopathic systems of medicine other than AYUSH. Even this, the Eleventh Plan suggests, is the mandate of AYUSH research institutions. As the Twelfth Plan Working Group has pointed out (see item 11), this function has not been met by such institutions, but rather by NGOs. Moreover, there appears to be a dominating focus on Ayurveda (especially in the creation of Centres of Excellence). Possible internal hierarchies of Ayurveda over other AYUSH and AYUSH over other systems of medicine may not arise, but certainly should be watched for.

As regards implementation, the Working Group on AYUSH for the Twelfth Plan has pointed out progress on almost all agenda items (with the exception of item 9 and 16, in this preliminary analysis). Implementation is of a wide range and scope for field development items, which is visually evident in just glancing at Figure 1. This is especially so in comparison to relatively more pithy advancements in relation to 'enhancing access to care.' While this could just be a function of syntax, it could also reflect a tacit logic of 'advancing' the fields of non-allopathic systems of medicine in order for them to be part of enhanced care access.

The bulk of current emphasis appears to be on ratifying -through biomedical standards -various traditional medicines as well as establishing and securing production and processing chains to international markets. Less empirical emphasis appears to be placed on developing a two-tiered research framework, or revitalizing and documenting local health traditions. It seems, therefore, that a globalised, biomedical approach towards integration may predominate priority-setting, rather than a more epistemologically pluralist one, as has already been argued (Sujatha, 2011).

Given the precedent of mainstreaming AYUSH under NRHM, moreover, support for recurrent costs seems largely to be the modicum of action on enhancing access to care. Here, it is important to note that Priya and Shweta's (2011) recent study has indicated that co-located services may have wider access but also have poorer quality than stand-alone services. Balancing access and quality of AYUSH services will therefore likely be a major future concern.

With respect to role optimization, the Twelfth Plan Working Group importantly points out the need, articulated by the mid-term appraisal, to engage allopathic providers in continuing medical education on AYUSH. Moreover, the proposed establishment of a Central Pharmacy Council did not materialize and has been removed from consideration. It is not entirely clear what the cause of this modification was, what its implications may be, and what alternatives are being considered around the set of functions the Pharmacy Council would have. This may be an important future question.

Conclusion

Notwithstanding the preliminary nature of this analysis, a few key points seem to be emerging. One, a great deal of emphasis to date has been on the development of AYUSH fields of medicine. This may be an important precursor to establishing demand and an enabling environment for integration of these systems. Yet, this could also result in underprioritisation of other key aspects of integration that may require initial emphasis to evolve efficiently and ethically (eg. workforce integration of existing providers). Moreover, the lack of emphasis on local health traditions and the theoretical foundations of traditional knowledge systems may enable the continued domination of allopathic medicine. Two, it is not entirely clear who will bear responsibility for integration and how evenly this onus is distributed across stakeholders in the health system. Internal hierarchies within the medical domain currently, between allopathic and non-allopathic and within non-allopathic systems of medicine may affect integration efforts. A key step in this area could be curricular reform in allopathic medicine to include non-allopathic elements (AYUSH and otherwise)–as has been the case in China. Third, access and quality concerns have to be balanced in the move towards integration. In some cases, both purposes may be served by a single policy move. For example, statutory councils for AYUSH systems could maintain live, publicly available practitioner registers.

But I have probably been most elusive about the central question undergirding this issue. What does integration really mean for various stakeholders across levels of the system? Is it uniformly desirable (why/why not and for whom)? What could integration look and feel like? Does it mean provision of indigenous medicines and pharmacopeia as part of standard treatment regimens in India and abroad? Does it mean that my national health entitlement allows me to go to any clinic and have the option of meeting an Ayurvedic doctor or allopathic doctor – or for that matter, a Khasi doctor? Does it mean that doctors across systems of medicine have some shared training, accreditation, or competencies? Each of these propositions is problematic and throws up additional dilemmatic questions as yet unanswered in health reform discourses. Our next challenge is, therefore, to ask these harder questions, and venture considered and practicable policy directions to address them in the service of better health for all Indians.

Figure 1. Preliminary Policy Analysis of Eleventh Five Year Plan Agenda against Status of Implementation per Working Group on Twelfth Plan

S No	Rationale	3.2.32 Eleventh Five Year Plan Agenda (2006: 115)	Status of Implementation (Working Group on Twelfth Plan 2011: 10-29)
1	Enhancing Access to Care	Mainstreaming the system of AYUSH in National Health Care Delivery System by co-locating AYUSH facilities in primary health network.	1933 PHCs, 260 CHCs and 83 District Hospitals supported for setting up AYUSH facilities; 6359 state health units given financial support for meeting recurring costs; 31894 dispensaries/co-located AYUSH units supported for purchase of medicines (p22).
2	Enhancing Access to Care	Improving the status of quality of clinical services by creating specialty AYUSH Secondary and Tertiary Care Centres.	370 AYUSH hospitals given assistance for up-gradation of infrastructure and 394 for meeting recurring costs; and 23 State Program Management Units supported for meeting recurring expenditure. (p22)
3	Enhancing Access to Care	Promoting public awareness about the strengths and contemporary relevance of AYUSH through IEC.	30 National and State level Arogya melas and 23 multi-media campaigns on individual and collective strength areas of AYUSH. (p12)
4	Role Optimisation	Training in Public Health for AYUSH personnel is envisaged as an essential part of education and CME.	406 re-orientation training programs for AYUSH teachers and 10 for paramedics; 311 CME programs; 38 other HRD activities; *mid-term appraisal recommended addition of new teaching programme of 50-100 hours on Ayurveda for Allopathic doctors (p20)*
5	Role Optimisation	Restructuring Public Health Management to integrate AYUSH practitioners into the national health care system.	Central Council of Indian Medicine and Central Council of Homeopathy statutory bodies maintain central registers (homeopathy is published); revision of course curricula and 12 workshops on quality education issues; Central Pharmacy Council for IM&H not materialised (p10); 28 proposals of government and NGOs to promote AYUSH interventions in health care approved through March 2011 (p12)
6	Role Optimisation	Upgrading AYUSH undergraduate and postgraduate educational institutions by better regulation and establishing a system for NET type testing of AYUSH teachers and NAAC type assessment and accreditation of AYUSH undergraduate/postgraduate colleges.	120 proposals of AYUSH teaching institutions supported including mainly that for infrastructural development of UG/PG colleges, starting add-on pharmacy/paramedical courses and development of model colleges. (p 22); various institutions have turned over postgraduates, PhDs and diploma holders, held camps, and provided treatment (in Jamnagar, Jaipur, New Delhi, Chennai, Kolkata, Bangalore, Pune, and soon, in Passighat and elsewhere in the North-East) (p13)
7	Role Optimisation	Strengthening regulatory mechanism for ensuring quality control, R&D, and processing technology involving accredited laboratories in the government and non-government sector.	12 State Drug Testing Laboratories, 17 Pharmacies, 34 State Drug Licensing Authorities, 62 proposals of strengthening enforcement mechanism for ASU drugs, 11 proposals of strengthening in-house quality control laboratories of drug manufacturers supported. (p23)
8	Role Optimisation	Establishing Centres of Excellence.	National Ayurvedic Hospital set up in Delhi - has functional OPD (p10); 30 projects for upgrading infrastructure and functioning of private AYUSH centres supported (p13)
9	Field Development	Formulating a two-tiered research framework for AYUSH to interface with modern science while giving due cognisance and importance to development and application of theoretical foundations of the traditional knowledge systems and practices.	No data found
10	Field Development	Promoting scientific validation of AYUSH principles, remedies, and therapies.	Across Councils of research on Ayurveda & Siddha, Unani, Yoga & Naturopathy, & Homeopathy, various research projects undertaken, drug-proving studies conducted, clinical verification carried out, handouts, workshops, and exhibitions held (p15)
11	Field Development	Revitalizing, documenting, and validating local health traditions of AYUSH.	37 proposals supported for project-based NGOs engaged in local health traditions and midwifery practices (p22)

S No	Rationale	3.2.32 Eleventh Five Year Plan Agenda (2006: 115)	Status of Implementation (Working Group on Twelfth Plan 2011: 10-29)
12	Field Development	Improving the status of pharmacopoeial standards by setting up Pharmacopoeia Commission.	Three national institutes and a Pharmacopoeia Commission of Indian Medicine have been/are being set up; Publication of pharmacopeial standards and Standard Operating Procedures (SOPs) of 152 Ayurvedic formulations; Publication of pharmacopeial monographs of 101 single plant drugs and 21 minerals; Publication of macro & microscopic and TLC atlases of 172 drugs; Development of eight community herbal monographs in the format given by European Medicines Evaluation Agency (EMEA) for submission to EU. (p 9)
13	Field Development	Ensuring conservation of medicinal plants gene pools as well as promoting cultivation of species in high trade and establishment of medicinal plants processing zones.	Transcription of 61359 ASU formulations and 1195 Yoga postures done in patent compatible format, access agreement signed with 5 international patent offices. (p15); Support was provided to 39 projects about medicinal plants cultivation, 86 projects on Storage Godowns & JFMCs, for conservation of medicinal plants on 26158 hectares of land, 67 R&D projects, 85 capacity building & IEC activities and for setting up 3123 school/home herbal gardens. (p16) Also, various research councils have sponsored studies on medicinal plants and organised farmers' meets on cultivation and marketing (p25-28); Setting up of nurseries of medicinal plants, land for cultivation, post-harvest infrastructure processing and market promotion units in collaboration with Farmers, Growers Associations, SHGs, Corporates, and Cooperatives (p29)
14	Field Development	Promoting international cooperation in research, education, health services, and trade, and market development.	Deputation of AYUSH experts and officers in 95 international events;17 foreign delegations hosted to explore opportunities of international collaboration; Support provided to 38 experts for presentation of scientific papers in international Conferences; AYUSH entrepreneurs were supported to participate in 17 international exhibitions/fairs, road shows etc.; 12 conferences/research collaborations supported through Indian Missions; 16 fellowships granted to foreign students for studying AYUSH in India; One AYUSH Information Cell set up in Malaysia; 2 AYUSH books translated and published in foreign languages; MoUs drawn/entered in to with China, Russia, SAARC and ASEAN Countries; Indo-US Centre for Research in Indian Systems of Medicine has been set up in the University of Mississippi, USA to undertake scientific validation and development of scientific information on ASU medicines through collaborative research and advocacy; Eight community herbal monographs prepared and submitted to EU (p20); development of common facilities for quality control in industry clusters in Maharashtra, Karnataka, TN, Kerala, Andhra Pradesh, Uttarakhand, Gujarat and Assam; 275 industrial units given incentives to participate in fairs (p21);
15	Field Development	Digitizing India's vast corpus of medical manuscripts in collaboration with the National Manuscripts Mission.	Acquisition/digitization and publication of 23 manuscripts; Publication/translation of 14 books and manuscripts. (p19)
16	Other	Documenting measurable outputs for annual plan as well as for the five year plans that will facilitate designing and implementing systematic ME systems.	Data not found, though NSSO has been finalised to take up the survey on AYUSH-based health seeking behaviour of people and extent of usage among communities (p15)

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