THE GROWING IMPORTANCE OF TRADITIONAL, ALTERNATIVE AND COMPLEMENTARY MEDICINE IN INDIA

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Introduction

India, with its kaleidoscopic variety and rich cultural heritage, is proud of some unique medicinal forms that look at health, disease and causes of disease in completely different ways. Best known as the Indian System of Medicine or Alternative Medicine, its main focus is on holistic health and well-being of humans.

Classical alternative medicines have been successfully used to treat many diseases for centuries. Of these, Ayurveda is the most ancient medical system with an impressive record of safety and efficacy. It is thought to have originated in Vedic times, around 5,000 years ago, and has evolved through intuitive, experimental and perceptual methodologies in India. The main objective of Ayurveda is to promote health and prevent ailments so as to relieve humanity of all categories of misery - physical, mental, intellectual and spiritual.

Homeopathy arrived in India in 1810, when some German physicians and missionaries visited Bengal and distributed their homeopathic remedies. In 1973, the Central Council of Homoeopathy was established by the Government of India. The Siddha medicine is a form of south Indian Tamil traditional medicine and its concept is traced back to the Sangam period (500BCE-500CE) in India. Other components of AYUSH such as Yoga and Naturopathy are now being practiced by young and old alike to promote good health.

The Indian Systems of Medicine and Homoeopathy (ISM&H) were given an independent identity in the Ministry of Health and Family Welfare by creating a separate department in 1995. Renamed the Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH, which means 'long life') in November 2003, the department is entrusted with the responsibility of developing and propagating officially recognised systems - Ayurveda, Yoga, Naturopathy, Siddha, Unani, and Homoeopathy. This was done due to the explicit recognition of the contributions these ancient and holistic systems can make towards human health. These systems have a marked superiority in addressing chronic conditions and offer a package of health promotion and prevention interventions.

Apart from AYUSH, there are other medical practices adopted locally, especially by the rural people, which vary from region to region and are known as Local Health Traditions (LHT). Local health traditions refer to health promotive, preventive and curative methods

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having general acceptance and prevalence among households of different socio-economic strata. While these have common roots with the indigenous textual systems, they do not necessarily conform exactly to different ancient health systems and their texts. They may be practiced by the households themselves as 'home remedies' or through the services of various traditional and folk practitioners. Although they have no legal sanctity, they are time tested through people's experiential knowledge. Other than the home remedies, various forms of informal providers via Traditional Health Practitioners (THP) Folk Healers (FoH), Faith Healers (FH), Dais and TBAs are catering to people's health needs.

The study for this paper makes reference to the report of the National Rural Health Mission (NRHM 2010), the Status of Health and Local Health Traditions under NHRSC (2010), the Result Frame Document for the Department of AYUSH (2010-2011), the Steering committee report of the Government of India (GOI), documents from the Central Bureau of Health Intelligence, all under Ministry of Health, other Government of India Publications from the Ministry of Health, Government of Kerala and a Review of Healthcare in India by Cehat, India. The field survey data, inference and the conclusions drawn are not direct findings, but have been based on the author's analysis of extracts of surveys executed and the committee reports by the department of Ayush, National Rural Health Mission under the Government of India and other agencies listed in the references.

Supply and uptake of AYUSH

Infrastructure

There is a wide network of stand-alone AYUSH facilities in most states, ranging from one institution per 17 thousand persons in Uttarakand to a low of one for over 100 thousand in Jharkhand and Bihar (see Table 1). With co-location (meaning co-locating AYUSH medical facilities with those of conventional modern medical hospital so as to provide choice of treatment for patients), the ratio of service institutions to population has improved significantly to 1:12 thousand in Uttarakand and 1:14 thousand in Orissa (from 1:33 thousand) to 1:60 thousand in Andhra Pradesh (where the stand-alone ratio was 1:76 thousand). Relative to allopathic facilities, the number of AYUSH service institutions has become greater than those of allopathy in a few states: Kerala, Tripura, West Bengal and Orissa. Though the total AYUSH services still remains low in many states, the ratio is steadily improving. The population covered by AYUSH is much higher than that covered by the allopathic system.

Health infrastructure signifies the investments and priority accorded to create the infrastructure in public and private sectors. This comprises service infrastructure and education infrastructure. The service infrastructure in the Indian system of medicine and homeopathy hospitals, sub centers, PHC, CHC, has grown significantly in the last few years (see Table 2). Medical care facilities under AYUSH, i.e. dispensaries and hospitals, were 24,289 and 3,277 respectively as of 1 April 2010.

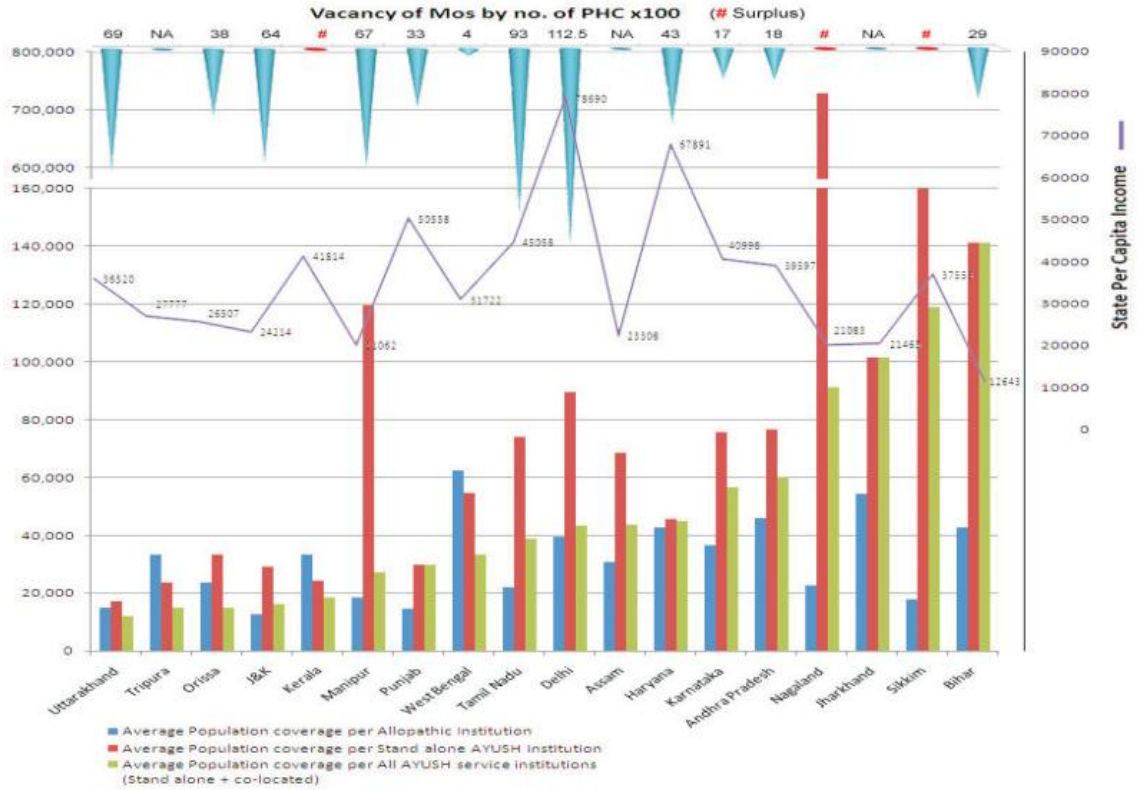

Table 1: Average population coverage per AYUSH service institution by allopathic institution coverage, average s tate per capita income and vacancy position of allopathic doctors in PHC (source: AYUSH Report 2010 by National Health Systems Research Centre, Ministry of Health & Family Welfare, Govt of India).

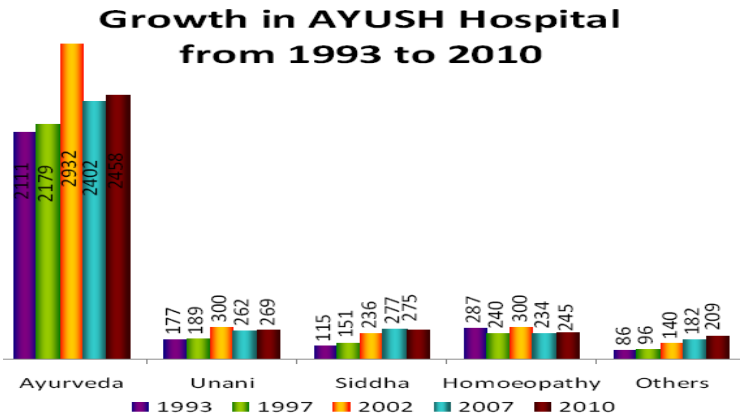

Table 2: Growth in AYUSH hospitals from 1993 to 2010 (source: Department of AYUSH, Govt of India).

Doctors

The ratio of population to doctor has improved in many states since co-location. The AYUSH doctors continue to be two to fifteen times fewer than the allopaths, with the exception of Orissa that now has more AYUSH doctors than allopaths in the public system. There is parity in salary structure between the AYUSH and allopathic doctors in only a few states.

Service delivery

Utilization of AYUSH services varies widely from state to state. Utilization of the stand-alone services varies greatly across states, from an average of 8 patients per facility per day (pfpd) to 78 patients. In the co-located services, outpatient departments (OPD) attendance ranged from 1- 4 pfpd in 8 states to over 45 in 1 and over 75 in the exceptional Tamilnadu and Andhra Pradesh where OPD attendance is similar to the stand alone (see Table 3). In 14 of the 18 states, 80-100% of households reported use of Local Health Traditions (LHT). They are most commonly used in the poorest regions which also have the poorest services in the public and private sectors.

The high utilisation of AYUSH services and LHT in states such as Tamilnadu and Kerala refutes the argument frequently made that people resort to them because of inaccessible or unaffordable general modern health services. These are the states with the best-functioning public systems of free health care. It indicates, rather, the community's 'felt need' for services other than those of the modern system. The pluralistic health-seeking behaviour reflects the inherent strengths and limitations of the various systems, thereby indicating a demand for AYUSH services that remains unfulfilled in the other states due to poor quality of services and/or poor coverage.

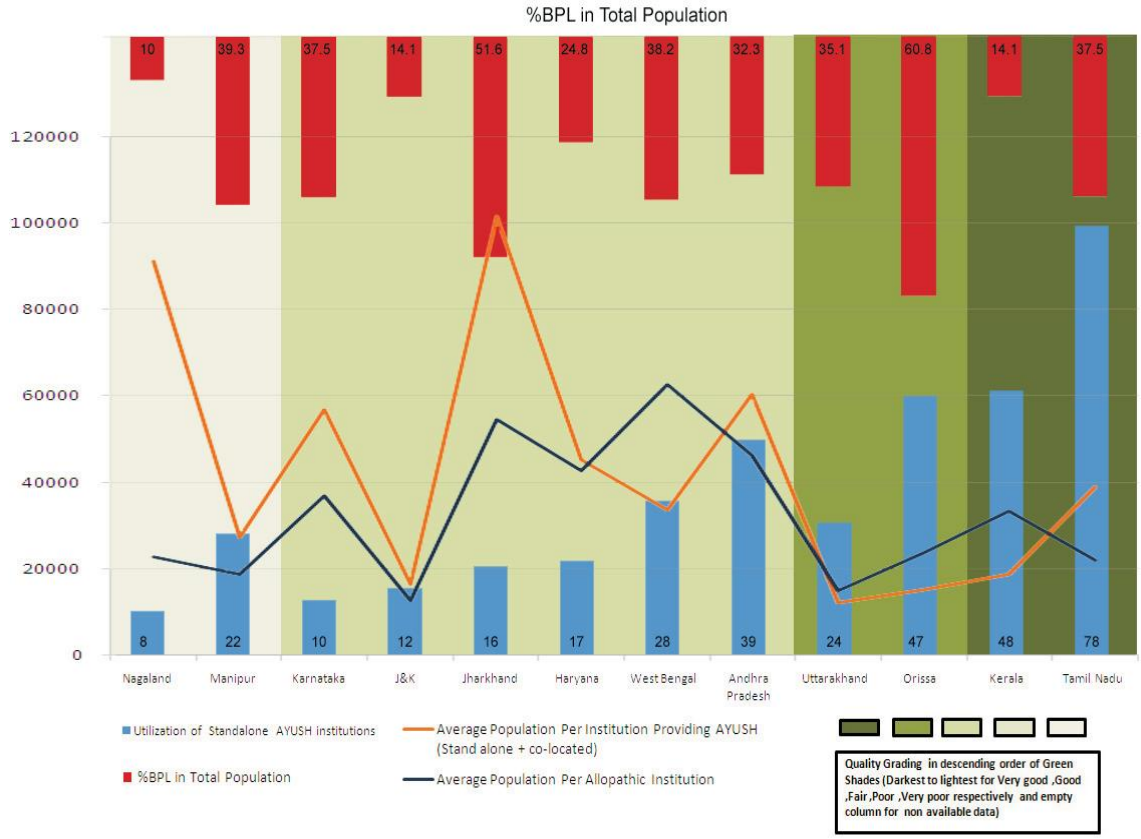

Table 3: Average OPD attendance as patients per facility per day by the quality of AYUSH services, coverage of AYUSH and allopathic services and % BPL in the State (source: AYUSH Report 2010, National Health Systems Research Centre, Ministry of Health & Family Welfare, Govt of India).

Quality of service has its impact on utilization of public facilities. Three tendencies emerge clearly. The quality of services, based on the level of satisfaction of results, encourages utilisation of the public services, as in Kerala and Tamil Nadu with quality of services being considered by users the highest, while in the states with 'fair' quality the patient utilization rate is intermediate to low. Secondly, there is no link of utilisation rate with the coverage of allopathic services. Even in states that have a similar coverage by allopathic and AYUSH services, utilisation varied according to their quality gradient. Thirdly, there appears to be no relationship between utilisation behaviour and the proportion of people living below the poverty line (BPL). For instance, the lowest percentage of BPL is in Jammu& Kashmir, Kerala and Nagaland states, but the utilisation is varied. Within the same quality grading, Tamilnadu and Kerala have the same overall utilisation of AYUSH services but the BPL proportion in the population varies widely (14% in Kerala and 37.5% in Tamilnadu state. The findings indicate extensive use of LHT by the patients using both allopathic and AYUSH treatments. There is a wide variation in the percentage of use of LHT in various states from 12% in Delhi to 82% in Orissa. Of the 18 states reported on, the average usage rate of LHT was around 50%.

Based on perceptions among health care providers, the study indicated that most allopathic doctors were of the view that AYUSH systems are not redundant and suggested ways of strengthening them. They also mentioned home remedies as useful, often advising them in combination with allopathic treatment to their patients. Regarding LHT, the AYUSH as well as the allopathic doctors expressed the need for research and documentation of some common health practices and also quoted a few.

AYUSH used for acute and chronic conditions

An important finding is that AYUSH and LHT are in use for both acute and chronic conditions. In general, only serious emergency conditions are excluded from resorting to AYUSH services. LHT were being used for the early stages of any disease, and for chronic conditions. The AYUSH and LHT treatments were also largely continued when taking allopathic treatment. Among the users of AYUSH services, it was acute everyday problems such as cold and cough, fever, diarrohea, difficulty in breathing for all age groups that were treated this way. Jaundice and chikungunya were also mentioned frequently. For health promotion and prevention functions, specific usage of the Siddha facility for increasing children's immunity and health of the mother during pregnancy is a special finding.

AYUSH treatment is used more frequently for chronic illness (joint pain, skin problems and respiratory disorders, as well as high blood pressure, heart disease, diabetes) than allopathic treatments. Regarding practice of combination treatment and cross referral between different systems, the Allopathic and AYUSH doctors have both listed several conditions for which treatment of different systems is combined. They also list conditions where AYUSH providers refer to allopaths and others where allopaths refer to the AYUSH. However, the allopaths did not always record their referrals to the AYUSH doctor in their prescriptions ; such cross-referral was done verbally and in an informal way. 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 treatments found cost-effective, safe and easily accessible into common standard guidelines for treatment.

Reasons for utilisation of AYUSH and LHT
Previous experience of getting cured, belief in the traditional system, side effects of the allopathic medicine, perceived effectiveness in chronic diseases, ease of use and no other health facility available were the commonly-cited reasons why the LHT were found useful. The study also showed that most households across the states had knowledge of medicinal plants about food items having medicinal properties. More than 75% of home remedies used for diarrhoeal disease, anemia and diabetes as well as used in convalescence and MCH conditions were validated by the methods used across the states.

Current trends

Supply increases
The educational infrastructure in the country has shown good growth and at present there are 314 medical colleges in the modern system of medicine and 495 AYUSH colleges out of which 95 are run by Government and 397 privately. The country produces over 30,000 doctors in the modern system of medicine annually and a similar number of AYUSH practitioners.

A vast health care infrastructure in the government, voluntary and private sector has been created and is manned by people trained in the country. Personnel costs form a major portion of the investment in health service delivery. According to the Planning Commission, India faces a shortage of 600,000 doctors, a shortage felt more acutely in rural areas given that two-thirds of all medical personnel are concentrated in urban areas. To address this gap in manpower, some states have made rural service compulsory for health professionals and preference is given for those opting for rural services in postgraduate courses. The health ministry proposed a three-year bachelor of rural medicine which includes study of AYUSH and surgery course to cope with the shortage of doctors in rural areas. This rural degree course (Bachelor of Rural Medical Science) has already been approved and is expected to commence in 2011 in many states with Gujarat, Karnataka, Punjab taking the lead; once implemented, the number of doctors in AYUSH is expected to double at least.

Medicine production
The states with better developed AYUSH services also tend to have built up a greater capacity for production of medicines, both in the public and private sectors. As of 1.4.2010, there were 8644 AYUSH drug manufacturing units (licensed pharmacies) in the country. Out of these, 99.6% of licensed pharmacies were controlled by non-government bodies, and only 0.4% of licensed pharmacies were in the Government sector.

The market for AYUSH was estimated at 1792 m$ (including drugs, over-the-counter and wellness products, treatment and herbal extracts) in 2009 and has been growing at 20 per cent yearly. It is expected to reach 3640 m$ in 2014. The hospital business has historically grown at 12 per cent per annum and is expected to grow faster in the coming years as the

Government is putting a lot of effort towards cost-effective health solutions through the AYUSH programme.

AYUSH medicaments, medicinal plants and their by-products constitute an important part of the Indian Foreign Trade. Since 2003-04, a continuously growing trend has been observed in India's foreign trade with respect to AYUSH-related items in respect of export, import and net value addition. AYUSH products accounted for 0.34% of export (724 m$) and 0.03% of import (78 m$) of India. All of India's balance of trade has always been negative since the ninth plan period (1996-97), while AYUSH-related products always have shown a positive balance of trade, indicating that AYUSH products play a significant role in the country's foreign trade.

Medical insurance facilitates development of AYUSH

Till 2009 there was no medical insurance for AYUSH. Government also has been reimbursing the AYUSH treatment charges in a restricted way. Now this sector is under consideration for liberalization. HDFC ERG (an insurance company which is an arm of Housing Development Finance Corporation - HDFC, one of India's largest banking and insurance companies) has recently launched a medical insurance policy which pays (up to 20% of the sum insured) for medical expenses for inpatient treatment under Ayurveda, Unani, Siddha or Homeopathy, and many other insurance companies are expected to follow. Since the policy was launched recently, no data about the number of policy holders or beneficiaries is available.

Medical tourism

There is a clear domination of AYUSH in medical tourism; in fact the medical tourism in India started with AYUSH. The medical tourism industry, according to the Confederation of Indian Industry (CII), is expected to be worth USD 4 billion by 2017. India has a potential to attract one million health tourists and more than 70% for alternative medicines. Patients from various countries are becoming medical tourists to India for low-cost and health-restorative alternative treatments through a combination of Ayurveda, Yoga, acupuncture, herbal oil massage, nature therapies, and some ancient Indian healthcare methods - such as Vedic care, an alternate healthcare service. Cost advantage is the attractive aspect of Indian modern medicine which is 10-15 times lower than anywhere in the world. The CII-McKinsey report suggests that medical tourism could fetch as much as $2 billion by 2012. Government has also taken the initiative to promote AYUSH as part of medical tourism.

Increasing government supply

From the eighth plan onwards, the Government started allocation for AYUSH in its Plan Outlay and progressively increased the allocation from 0.02 % to 0.18 % of total allocation: however, even this allotment is meagre (see Table 4).

Total investment in health and family welfare, AYUSH and health research for the current health plan (2007-12) is Rs.1,40,135.00 crores (31,390 m$). Even after the formation of a full-fledged department of AYUSH, the allotment in the current plan is 2.7%, the least among all the departments of the Ministry of Health and Family Welfare.

Plan Period	Allocation for AYUSH	% of Total Allocation
Eighth Plan 1992-97	108.0 (24 m$)	0.02 %
Ninth Plan 1997-2002	266.35 (60 m$)	0.03%
Tenth Plan 2002-07	775.0 (174 m$)	0.05%
Eleventh Plan 2007-12	3988.0 (893 m$)	0.18 %

Table 4: Five Year Plan outlays for AYUSH (Source: Planning Commission of India, National Health Profile 2010, Central Bureau of Health Intelligence, Govt. of India).

The seriousness on the part of the Government to give thrust to AYUSH is reflected in the Result Framework Document by the AYUSH Department for 2010-2011, which details the key objectives in implementation of AYUSH and the priorities amongst these, success indicators and targets with the due weightage for each item. The document shows that the set targets have been fairly achieved for the year 2008-2009 and 2009-2010. Enthused by the success and to give further thrust to AYUSH, a much higher target has been set for the 2010-2011, 2011-2012 and 2012-2013 periods. Government has taken steps to enhance institutional support to AYUSH. Emphasis was laid on implementing schemes that address the thrust areas identified by the Department in consultation with the Planning Commission, such as upgrading educational standards, quality control and standardisation of drugs, improving the availability of raw material, research and development and building awareness about the efficacy of systems domestically and internationally.

Photo 1: Preparation of AYUSH packets for free distribution to patients at Government Ayurveda Hospital, Vijayawada, Andhra Pradesh State, India (source: The Hindu Newspaper, 28th March 2011).

Conclusions and prospects

A major finding of this study has been the high utilisation and valid knowledge of LHT and AYUSH that are an integral part of the lives of large sections of the population across the states even in the present time. Another important finding is the rational prescribing practice of a majority of AYUSH practitioners within the public system, validated by the principles and texts of the AYUSH systems. This shows the efficacy of traditional medicine, based on time-tested evidence. Only 10-20% prescriptions were found to be outside the AYUSH references in most of the states. A third finding is the positive perception about AYUSH of 70% allopathic doctors and 55% for LHT and the practice of informal cross referral by many of them. All these reflect a strong 'demand' for AYUSH and LHT as systems valued for themselves and not merely as substitutes for allopathy. The study reflects the community's 'felt need' for services other than of the modern system. It is indicative of the strength of people's knowledge and their links with indigenous systems suggesting that it should be the base to build upon as a positive resource in healthcare delivery which should be taken into consideration while drawing up health policy.

Another important point is that the Government has been steadily increasing plan outlay for AYUSH from and strengthening the institutional support to AYUSH services. This marks the shift in Government strategy for recognizing and giving thrust to AYUSH. Immediate steps are needed to capture, protect, and commercially exploit the natural resources, medicinal plants, traditional medicine and their related intellectual property rights for overall sustainable growth and development.

The study makes us believe that societies, especially those of developing countries like India with limited resources, could significantly improve the healthcare means at their disposal by exploring the scope of these systems of traditional medicine. Looking at the growing demand for health care delivery, it is imperative that there is communication between the experts of all systems, appraisal of the available information, sharing of research experiences and evidence-based results that can provide a better understanding of the strengths and weaknesses of allopathic and complementary systems, which include the entire spectrum of traditional, time-tested systems and can solve the problem of healthcare delivery needs. Balanced modalities of integrated medicine, if well implemented, would make India a global leader in health matters.

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