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WHITHER OTHER SYSTEMS OF MEDICINE ?

India, like other ancient civilisations of the world, had several highly evolved and sophisticated systems of medicine long before the advent of the so-called modern or allopathic system. Historical forces, such as the Greek and Muslim migration into the subcontinent, brought with them yet other systems which flourished and grew, with a mutually beneficial cross-fertilisation of ideas and techniques. Alongside these 'formal' systems of Ayurveda, Unani and Siddha (formal in that they had written treatises and established universities for teaching and training), was the rich, varied and location-specific lore of folk medicine and folk psychiatry, based on local plants, herbs and belief systems. Tribal medicine, and the home remedies of 'Ajji cha batva' (grandmother's purse) fall into this category. Another vital source of indigenous health care were the traditional midwives or 'dais', who not only performed the important function of birthing, but also abortions, in addition to advice and aids for contraception.

There is considerable controversy regarding the role of these systems and their practitioners in history, and indeed about the impact of the arrival of western medicine on them. Some scholars argue that the latter was primarily responsible for the atrophy and decline of traditional medical systems, even stating that the British sought to systematically destroy them on the grounds that they lacked 'scientific' bases and were filled with superstitious nonsense and positively harmful remedies. Others feel that this is too simplistic a view, and that some of these systems were in decline long before western medicine arrived on the scene.

This indicates the need for critical research into the social history of the pre-allopathic systems of medicine. We need to understand their interaction within the socio-political context of different historical periods. What, for instance, was their ideological framework, and how did this reflect contemporary socio-economic and political structures? The question of 'scientificity' is also often raised. But it can be established that even pre-allopathic systems were scientific, if the term means posing questions, seeking their answers through methodical study (using the means available at the time) and accepting a thing as true only

if the same result is repeatedly derived. But this spirit of enquiry and experimentation seems to have gradually declined. Why this happened, whether it was the lack of concurrent technological development to facilitate it, or due to socio-cultural, economic and political forces, is what must be determined.

In this context, it is worth considering exactly how one measures the role of a given medical system, and how one assesses whether it has declined, remained or grown. One must address this question at two levels: first, at the level of theory. What is the extent and nature of growth of the theoretical base, both in depth and breadth, over a period of time? Second, at the level of practice, are the practitioners of a system growing in number, and hence the number of recipients of that type of care?

Evidence shows that upto Independence, the availability of allopathic treatment was largely limited to the cities and towns, and that too mainly to the higher socio-economic groups. If this was the case, then certainly the practice of other systems was not seriously affected since the majority of people, especially the poor, continued to rely upon them. But at the level of theory, the 'formal' systems at least seem to have suffered from stasis and decline, and perhaps because of the following two reasons: one, state patronage by Indian monarchs, which had provided the chief source of support for theoreticians and researchers, was not forthcoming from the British. Two, the growing intellectual domination of western science and thought, especially among the Indian elite, reduced the legitimacy and credibility of nonallopathic systems.

This situation did not change drastically even after Independence. The commitment of the post-Independence leadership to 'modernising' India, to promote (Western) science and technology in the country, and to provide 'modern' health services to all, ensured that state patronage would continue to be given to allopathy, whose practitioners had by then become a powerful lobby along with the pharmaceutical industry. Only the residue of the Swadeshi movement, and those leaders (like Gandhi) who were fervent advocates of indigenisation, ensured the allocation of some limited

resources for the development and strengthening of other systems of medicine.

Notwithstanding this, the status of traditional systems is fraught with confusion and subject to periodic swings. The major trends, however, seem to be the following:

The 'synthesis' school of thought which argues that the best of each system—including allopathy—should be studied and combined to create a 'National System of Medicine' (this manifests the heavy influence of the Chinese model). The 'purists' feel that this is both impossible and fatal to the future of traditional medicine. Fatal because it would result in the irrevocable decay of the non-allopathic systems, since allopathy would dominate both theory and practice; and impossible because the conceptual frameworks of the different systems are inherently incompatible, and thus they cannot be studied or evaluated using an alien methodology. Each system must be left severely alone to go in its own direction. Still others argue that the whole question of 'system' is irrelevant; what is needed is a safe, effective and affordable range of therapeutics for use in mass health care. If traditional medical systems have useful remedies which fit the bill, then they should be utilised without recourse to philosophical arguments. Finally, the 'modernists' within traditional medicine feel that the only way to restore their legitimacy is to apply the techniques of modern science to research and standardise these therapies and remove the cloak of mysticism from about them.

These differing and sometimes warring schools are scrabbling for a slice of an already minute cake. The last four decades have witnessed the growth of a plethora of indigenous medical schools, professional bodies, and research centres.

At the same time, these indigenous institutions, their teachers, students, researchers and administrators, generally suffer from an inferiority complex vis-a-vis their allopathic brethren. A 'keeping up with the Joneses' syndrome thus develops, based on the rationale that by acquiring the characteristics of allopathy, the indigenous systems will regain recognition. One example of this is the widespread use of allopathic drugs by indigenous practitioners, made possible by the relatively easy availability and rapid action of these drugs. Non-allopathic practitioners argue that with the spread of and exposure to allopathy, people have become impatient with the slower-acting indigenous therapies which, if

properly prescribed and taken, demand more from the patient (like dietary and life-style changes) than allopathic treatments. This is also an interesting comment on the marketing strategies and ethics of the allopathic pharmaceutical industry. Another sign is the 'me too' phenomenon in the growing indigenous drug industry, which is developing, producing and marketing non-allopathic drugs and pharmaceuticals at a rapid rate—particularly vitamins, tonics and restoratives.

Therefore, while the indigenous medicine infrastructure is larger and stronger than it was at independence, it suffers from the same diseases which afflict modern medicine in India—commercialisation, mystification, professionalisation, rising costs and curative bias. The only difference, perhaps, is that its controlling elite is more fragmented and less cohesive in its functioning and goals.

What, then, is the role of the various indigenous system in a people's health system? Should they all be clubbed together or does each one have a distinct and separate role? And what of Homeopathy, another imported system which has taken firm root in India and provides an important alternative especially in urban areas? Obviously, all these questions must be researched and cannot be fully answered at this point, but we can review existing information to throw some light on them.

For instance, it is useful to look at the ways in which people actually utilise these different systems (where they are available) at grassroots level, to see if these use-patterns provide some clues. A few studies of this type were undertaken in the 'fifties' and the 'sixties' in Punjab, UP and Karnataka. Interestingly, most of them found one common thread: people's use of alternative health care sources was highly rational. By and large, allopathy was used for acute conditions and for those diseases where it offered known cures—such as TB, malaria, and infectious diseases. Ayurvedic, Unani and herbal treatments were sought for chronic ailments like skin diseases where these systems offer far more effective therapies than allopathy. And home remedies or folk cures were resorted to for simple self-limiting complaints like colds, coughs, diarrhoeas and fevers. Of course several factors like cost, distance, attitude and behaviour of the providers influenced (perhaps more strongly than cure-effect alone) the choices people made. But essentially, the strengths, weaknesses and relative benefits of each system seem to be perceived quite clearly by people.

Unfortunately, there is a growing feeling (though little documented evidence) that this situation has undergone considerable change in the past decade or two. One of the main reasons is the greater penetration of allopathy into rural areas as a result of the overproduction of MBBS doctors who find private practice un lucrative in the saturated city market and opt for rural areas as comparatively profitable. This phenomenon has resulted not only in increased availability of allopathy in the rural private sector, but also an exposure to its rapid-fire remedies. Thus more and more people have been 'hooked' onto treatments which are either wrongful applications or overuse of valuable, even life-saving interventions. The prime examples are the preference for injections over oral medication and the demand for overnight cures which bring their own costs through widespread drug-resistance and toxic side effects.

What then are the tasks ahead of us if we wish to rid indigenous and other systems of medicine of their present ills and make them part of a radical people-based health care system?

First and foremost, it is clear that no changes within these systems nor in their role in health care can occur without corresponding changes in the role and nature of allopathy. The battle on both these fronts must be based on similar strategies: major structural changes in the socio-economic-political system which controls and shapes (or distorts) all of medicine and health care.

Within the health care sector, the following steps would then perhaps bring us closer to the goal: first, demystification and popularization of all medical knowledge, regardless of system. This may in fact be easier with traditional medicine, whose basic concepts are closer to people's beliefs and health culture than those of modern medicine. Second, the trend of professionalisation must be reversed. Since a significant part of indigenous therapeutics is based on herbs and dietetics, they lend themselves to decentralised cultivation, production and distribution. Axiomatically, the commercialisation of traditional drugs and pharmaceuticals, particularly for producing useless vitamins and tonics, must be stopped. This should only be permitted where the economy of scale and geo-climatic limitations favour centralised production, and that too for really useful remedies which are needed for mass health care. This will keep indigenous medicines within people's reach, and discourage the growing consumerism

which is being cultivated by vested interests in order to market phony, expensively-packaged medicaments. Finally, a massive re-education of the people is necessary to wean them from dependence on the rapid-fire cures which unscrupulous practitioners (especially of allopathy) have used to win their faith.

Finally, there is one more important issue which must be examined with reference to indigenous systems of medicine: the question of gender bias. Sexism in indigenous systems is a completely uncharted area which demands exploration. Much has been written about the gender-biases in the theory and practice of modern medicine, but how do other systems view women? This question must be studied at three levels: 1) Is there a gender bias in the conceptualisation of women's health and disease in other systems? 2) Is there a sex-distinction in their therapeutics and in the delivery of care to women? and 3) Is there discrimination against or decimation of women practitioners of indigenous systems, including folk and tribal medicine? And if so, are pressures arising from within the system, or from the spread and influence of allopathy?

There is an urgent need to study these questions and, if necessary, sensitise non-allopathic systems to the special health problems and needs of women. This is all the more crucial since traditionally, popular medical knowledge and wisdom was largely the preserve of women, but this rich resource is being eroded and lost. Organised medicine systematically discredits it, without offering an adequate substitute. Thus women are losing their traditional source of self-care (especially poor women), but with nothing to replace it but a growing dependence on a health system which throws them its crumbs.

In this issue, we present articles which focus on the debates and controversies about traditional medicine, its role and relevance. Dhruv Mankad attempts a dialectical analysis, using the Chinese experience as an illustration. Sujit Das and Smarajit Jana's analysis presents a contrasting view. Ravi Pathak describes the grass-roots practitioners' perspectives. We have also reproduced two articles from *Social Science and Medicine*, Roger Jeffrey's which gives an historical account of the policies towards indigenous healers, and Catherine Mac Donalds' which examines the political economy of traditional systems. In addition, we present Anant Phadke's article which looks at the role of doctor's

organisations in the context of their recent struggles (this article was held over from the previous issue). We hope these articles will stimulate further discussion and research.

— Srilatha Battiwala
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A DIALECTICAL APPROACH TO TRADITIONAL MEDICINE

A Lesson from the Chinese Experience

dhruv mankad

The main protagonists in the debate on traditional medicine are the 'traditionalists' and the 'modernists'. The former argue that traditional medicine was suppressed by the colonising powers and should now be revived; the latter feel that traditional systems are inherently inferior to modern medicine which is more 'scientific' and therefore the best choice for the future. But both views, the author contends, are rooted in contradictory philosophical standpoints, and attempts to find a dialectical approach, using the history and development of Chinese medicine as an illustration. The discussion is in three parts: the first critiques both standpoints and contains a general discussion of the dialectical approach; the second and third parts attempt to illustrate the concrete application of this approach in Chinese medicine.

Extensive debates, often eluding any resolution, have been going on especially in the erstwhile colonies, regarding the exact status of traditional medicine as a science. On the one hand it is argued by the 'traditionalists' that traditional medicine has been suppressed by their respective colonisers and this has led to its decline. It should be extended institutional as well as financial support and developed further. On the other hand, the 'modernists' argue that modern medical science has made tremendous strides in knowledge regarding the human body, its diseases and their treatment. Thus, they consider it naturally superior to traditional medicine. The former reject modern medicine as being culturally alien and hold traditional medicine as having exclusively developed within the culture and thus the only appropriate system of medicine (cultural relativism). The former favour development of modern medicine only, as being the only scientific medicine devoid of any cultural and ideological factors (neutralism). Both views are rooted in two contradictory philosophical standpoints.

In this paper, we shall endeavour to identify the two standpoints, analyse them in the light of the nature of scientific knowledge and find a dialectical approach to this problematic; using Chinese medicine as an illustration.

The paper is divided into three parts. Part I deals with general questions on the nature of scientific knowledge and analyses the two standpoints mentioned above and contains a general discussion on a dialectical approach to this problematic. Part II and III deal with the concrete application of such an approach as seen in the development of Chinese medicine. Part II deals with the historical background and philosophical basis of medical science in People's Republic of

China and socio-economic and political determinants informing upon its development, while Part III deals with the current implication of the policy of combining western and traditional medicine in the People's Republic of China.

1. Nature of Scientific Knowledge

Like any other science, medical knowledge too, has not developed in a unilinear, orderly, from a lower to a higher level-evolutionary fashion, but its history reveals a zig-zag path of development interspersed by many breaks and jumps. In other words, science, instead of developing from a primitive level to its modern state by a careful, logical, screening of available 'objective' facts and later rejection of those not found to be true, has, having proceeded in one direction, taken an entirely different path later. No direct, internally consistent logical connections may be found between these paths. The essential aspect of these breaks and turnabouts has been the transformation of world-views, the sudden shifts in the attitude towards nature and the man-nature relationship. That is to say, these breaks are essentially philosophical in nature.

These breaks were the consequence of a struggle between different, often contradictory schools of philosophy. In this struggle, the school which fulfilled the ideological needs of the ruling class dominated the rest.

Now, if science is defined as a rational body of knowledge gathered by human beings during the social production of their material (and non-material) conditions of existence, then science (not with a capital S—the modern bourgeois science having an absolutised abstracted existence in the capitalist society) has been with human society since its very

inception. So has been medical science. An outgrowth of animism, wherein all diseases were seen as a result of inflictions of evil spirits, it was one of the earliest sciences. Human being's intercourse with nature produced on the one hand empirically verifiable facts having an objective existence, and a universal truth value. It also produced various concepts, thought categories and logic specific to natural science with which these facts were organised and various levels of generalisations were achieved. These specific thoughts, categories and logic are influenced by thought categories and logic of thinking process in general. That is to say that they are rooted in philosophy. In fact, for a long time science was indeed a part of philosophy.

Now, at different points in history, both in time and space, this non-cognitive component is influenced by different cultural and ideological factors and is thus shaped differently. This may even result in establishment of different "facts" in different cultures. (Here one is disregarding the question of validity and truthfulness of these 'facts'). Thus, for example 'geomancy' the Chinese science of wind and water which determines placement of house and tomb with respect to features of landscape and aesthetics of land use, has no counterpart at all in western science (Elzinga and Jamison, 1981). The development of both the facts—the content and the concepts, thought categories and logic with which they are organised—the form—takes place in an interpenetrating, dialectical fashion, each deriving support from the other. Many a times the development of facts comes into sharp conflict with the concepts leading to either transformation of the concepts themselves or to distortions of facts by ideological rationalization of the conceptual form. What happened to Ayurveda in India during the Medieval period was the latter. The anatomical, pathological and pharmacological insights gained by generations of experimenting physicians were distorted by the use of concepts like Karma Siddhanta, divine will, and transmigration of souls etc. On the other hand, the scientific revolution of the 17th century Europe was an example of the former when entirely new forms of logic was developed by Comte, Descartes, Bacon, Newton and other philosopher-scientists.

While the ideological rationalization of Ayurveda suited the purpose of the Brahmin-dominated, varna-jati based feudalism in a decadent state, the scientific revolution in Europe was in response to the growing strength of the European commercial and industrial bourgeoisie.

Thus the factual component and the conceptual component of scientific knowledge exist in a dialectical relationship, under constant tension and under the influence of ideological and other factors operative in the culture and the historical period of its origin.

This view is debated from two standpoints, positivist and cultural-relativist.

Positivist Standpoint

The basic tenet in positivist philosophy is that the scientificity of a proposition lies in its anchorage in empirical statement of facts. Therefore, the central part of a positivist programme is to build a theoretical structure which is understood in term of its interlinking with empirical statements. It does not allow for any hypothesis which cannot be or has not been verified empirically and objectively. This absolutisation of empiricity and objectivity results in a narrow delimitation of what can be called a Science. In particular, theories operative in premodern knowledge producing practices such as alchemy or Ayurveda that does not match upto some piece of modern science, falls outside its realm. They are not even considered as hypotheses yet to be verified.

Francis Bacon advocated a ruthless rejection of old 'idois' inherent in all the preceding knowledge systems but his methodology reinforced all of them by absolutising the objectivity of scientific knowledge. The attitude of positivism towards all the other knowledge-producing practices can be summed up, in his own words :

"It is idle to expect any great advancement in science from the superinducing and engrafting of new things upon old. We must begin from the very foundations, unless we would revolve forever in a circle with mean and contemptible progress" (Bacon, 1620).

This fetishism of facts has had the obvious consequence of converting science into scienticism with the metaphysical principles of objective consciousness basing itself in an alienating dichotomy of observing subject and observed object, the invidious hierarchy of nature which places man at the top and legitimises an experimental inquisition of nature, the mechanistic imperative that says that everything that can be known should be known and that such knowledge should be utilised regardless of consequences (e.g. genetic engineering unnecessary and unethical human

experiments—DM), the extension of instrumental domination of nature to man himself" (e.g. excessive reliance on medical technology in health care) (Elzinga and Jamison, 1981).

Such a perspective when applied in medicine means that those traditional medical sciences which have not adopted the positivist principles of objectivity are considered unscientific. The theoretical concepts and prescribed therapies of these sciences not having been tested under the modern, laboratory—'Controlled'—conditions are rejected as invalid. Concepts like acupuncture points or *trishosha* in Ayurveda, which have no counterpart in modern medical science, are considered as non-existent. Even when, as in the case of acupuncture points, the functional if not the anatomical existence of a point, is demonstrated, it is not accepted. Thus the most 'advanced' scientific mode of enquiry into nature ends up by denying nature itself if it does not fit into its theoretical straitjacket.

Cultural Relativist View Point

From the other end, the opposite view point considers that the general concepts of sciences, the value promoted by them and the 'ideal' of what constitutes valid and proper knowledge differ from culture to culture. The cultural relativists argue that modern science is the cultural artefact of the west while ayurveda, astrology and others are oriental sciences. Thus, every science is considered to be an ethnoscience, having a theory, a logic and verification techniques of its own, specific to itself and thus, incommensurable. For example, they argue that the efficacy of ayurveda must be assessed by the principles laid down in ayurveda only i.e. on its own terms, and not on the terms dictated by modern science. They rule out any 'objective' assessment standing outside the premises and logic of ayurveda. They point out that "it is only when domination over nature is considered the highest ideal for civilization that we find western science becoming the universal standard for measuring the achievement in all the other cultures. However if we take the unity of man and nature as a predominant positive value, the Chinese and other cultures' scientific tradition stand out as more advanced". (Alvares, 1979).

While sympathising with the eagerness to do justice with the achievements of pre-modern societies including those of Egypt, China and India, one must be wary of the dangers of slipping into an extreme form of such relativism—a position denying the basic equality of human experience and

universality of certain scientific findings independent of geographical and cultural factors. Though it is true that science and technology of various civilisations should be understood on their own merits and not as abortive developments towards modern western science or worse as mere fiction, one must be cautious of how one formulates this point. "There is a danger ... of denying of the fundamental continuity and universality of all sciences. This could be to resurrect the ... conception of the various non-European civilization as totally separate, immiscible thought patterns ... a series of different views of the natural world, irreconcilable and unconnected." (Needham, 1954).

Thus, from the opposite end, the relativist view reinforces the positivist view that pre-modern and non-European sciences are different from modern science and thus incompatible. They differ only in their views regarding the relevance of these sciences. The positivists consider them as unscientific and thus irrelevant, while the relativists maintain that each are relevant only in their own culture.

This assumption of a basic incommensurability also implies that one must deny the contribution of these cultures to the universal body of knowledge, which is international. It also imparts a closeness to knowledge, the boundaries being limited by the culture. In fact, modern science is 'ecumenical', in the sense that historically speaking science is a product of diverse cultures and thus a common property of human kind. Secondly, this assumption denies any possibility of mutual exchange, thus legitimising elitist doctrines in each of these sciences. It also rationalises the doomsayer's conservative prophecy depicting modern science an uncontrolled and uncontrollable monster causing all the wars and social ills of our time. The only alternative such a view of modern science leaves is a total withdrawal into inner reality, an escape into 'privatised mystical experiences' aimed to create an 'inner' revolution. Thus, positivism and cultural relativism absolutise and/or universalise the form of scientific and technological development without considering the social context and the content of the various stages of its development

A Dialectical Approach

A dialectical approach to the problematic assumes that a) all knowledge is universal and humankind's common property; b) no scientific theory or methodology is perfect or unchanging and thus 'inherently' superior; c) science develops under the influence of a philosophical basis.

generated within the framework of various socio-economic, political and cultural factors in interaction. Therefore, even though direct comparisons may be difficult, because theoretical systems in each cultural setting were different, nevertheless mediated comparison is possible.

This could be done "by testing out the theories of traditional sciences in the light of modern concepts, without absolutising the latter and by studying how and how much the former had succeeded in discovering natural processes and in putting them in service of humanity" (not in order to achieve mastery over nature or human beings but for the benefit of all). Such a view opens up a possibility of integrating western and traditional sciences and a mutual exchange between the two. Having evolved under different historical and cultural conditions each embody different sets of strong points and limitations. The aim of such an integration is to reinforce each other's strong points and do away with the limitations.

Such an integration can contribute to the advancement of human knowledge in three ways:

- regional traditions embody useful concrete techniques, for example traditional herbal and mineral remedies that work without the side effects of many chemically manufactured drugs.
- regional traditions preserve an important body of data which can serve as a base for furthering existing fields of modern scientific research — examples are records of astronomers and meteorologists.
- regional traditions can open up new perspectives and avenues for modern scientific research, as in the case of acupuncture which has stimulated international neurophysiological research. (e.g. work on mechanisms of pain inhibition) (Elzinga and Jamison, 1981).

Such an endeavour demands a change in the world view and in the attitude towards history of science.

Only a dialectical understanding of the history of science, its relationship with philosophy and social context can produce the required 'break'. Such a conscious re-evaluation of the history of science also reveals a different future vision of an integrated science, wherein all the pre-modern and non-European sciences would find that their legitimate contributions have transformed the existing scientific knowledge and in turn have transformed themselves.

The most widely discussed illustration of such a process is Chinese medicine. A change in the

implicit world view of existing medical science—both modern and traditional—led to an integration and development of both the sciences. The most notable product of this development is acupuncture. In order to study how this happened we shall briefly trace the history of Chinese medicine.

Historical Background of Chinese Medicine

Chinese medicine is one of the oldest known medicines. Very little is known about its origin but like stone age medicine elsewhere it must have begun as a primitive medicine. Archaeological evidence shows that the earliest inhabitants of the Yellow River Valley were people of the Stone Age and like the religious beliefs of other tribes of Stone Age, animism and demonology must have been the characteristic feature of their religion. We may safely 'assume' that they believed in the spirits of the dead, and worshipped natural events like thunder, rain etc. Their medicine too must have consisted of witchcraft, sacrifices and oblations. The situation changes later, during 1200-300 B.C. when their religion enters the age of philosophy. From being direct and immediate response to the multifarious problems including illhealth faced by the primitive being, it enters a stage where the Chinese human being has formed a metaphysical view of the universe, of man and nature relationship. Medicine too is influenced by this change. Witchcraft gives way to institutionalised medicine using processed drugs. It is seen that during the Chou dynasty, (1100-250 B.C.) physicians incharge of internal medicine, surgery and veterinary medicine were appointed (Wong, 1979).

The oldest legendary figure in Chinese medicine is Shen Nung (2757 B.C.) who is venerated as the father of medicine and is considered to be the inventor of drug lore. The oldest treatise extant is *Huang Ti Nei Ching Suwen*. (Yellow Emperor's Inner Classic). Though *Nei Ching's* period is around 2000 BC, the treatise is supposed to have been written around 200 BC. It is believed to have been written by several anonymous authors over the period. It is a theoretical exposition of the basis of health and illness, closely related to the cosmological ideas taking shape during the philosophical period. It lays down the basic principles of anatomy, physiology, etiology of diseases and their treatment (Wong, 1979).

Chinese medicine begins to assume a rational, scientific character during the Han dynasty (200 BC-220 AD) with Tsang Kung, Chang Chung King and Hua To as central figures. Tsang Kung lived

around 170 BC and left records of personal observation of twenty five clinical cases. Chang Chung King's treatise of fever marks a new era in Chinese medicine. He has described many types of fevers including typhoid fever in this treatise and it contains one hundred and thirteen prescriptions. With this treatise, the diseases were studied more from clinical standpoint—signs and symptoms, course of an illness, treatment and actions of a drug rather than from the point of view of the theories of diseases as was the case during earlier period (Kuttumbiah 1971). This transition shows that a scientific outlook was permeating medicine in the grips of speculative philosophy.

The third important text is *Pen Tsao* which describes useful plants, animal and mineral substances and their applications. Unlike *Nei Ching* it is a practical text and has undergone many additions over the centuries as the experience of the Chinese physicians of using herbs and minerals accumulated. This period saw a great intellectual flowering in China. Confucius and Han Fei belong to this period. Though a surgeon, Hua Tu is claimed to have discovered anaesthesia and to have performed some major and minor operations like laparotomy, venesection etc., this aspect of medicine had fallen into neglect during the later period for reasons discussed elsewhere.

Although the pharmaceutical traditions of *Pen Tsao* expanded, the *Nei Ching* remained less emendable because of its classic and semireligious status. Both, the Chinese feudal rulers and the physicians themselves looked upon it as a divine gift. After the Han dynasty, this resulted in Chinese medicine becoming not stagnant, but backward looking toward the sources of classical antiquity and hence continuing to develop within the theoretical framework based on the philosophy of that period.

This backward-looking character of Chinese medicine made it particularly vulnerable to the cultural aggression of the imperialists during the 19th century. During the rule of various imperialist powers overwesternization was stressed and rivalry was set up between Chinese and Western medicine. Maligning the former as unscientific and a 'stumbling block' to the development of modern medicine they barred practitioners of traditional medicine from city hospitals and medical colleges. The Kuomintang government in 1929 put forward measures to abolish Chinese medicine. Among these were "restrictions on the practice of medicine by traditional physicians, a ban on setting up schools of

traditional medicine and on publishing books and periodicals on Chinese medicine" (Li and Tsai, 1977).

It was in the face of Nationalist Blockade, during the liberation war, that efforts were made by the Chinese communists to utilise the locally grown herbs. In 1940, when liberated zones were established, this pragmatic step was taken up as a conscious policy of utilising indigenous medicine. (Liberated Zones were those areas in China where the Communist-led Revolutionary Committees had usurped political power from the Kuomintang government). This policy received official recognition when Mao Tse-Tung in his famous speech in 1944 at the Yen-an conference on culture and education, urged the doctors to work with and elevate the scientific level of traditional practitioners in order to better serve the people (Mao, 1965). However, after liberation in 1949, the communist government continued to have traditional practitioners as auxiliaries to the modern medical forces. The directive of unifying the two systems of medicines was probably interpreted as giving the traditional practitioners some training in modern medicine. It was only in 1955, when efforts were made by the communist party to raise the status of traditional medicine. Traditional doctors were brought to city hospitals and clinics. Special wards were set up for acupuncture and herbal medicine. Modern doctors were urged to learn from their traditional colleagues.

By 1958, thirteen new colleges for traditional medicine were opened. Over 50,000 students apprenticed themselves under distinguished traditional physicians. In 1955, a well-equipped Chinese Medical Research Institute with both modern and Chinese doctors on its research staff was setup. The entire body of knowledge was to be investigated.

In other words true integration of the two systems of medicine at theoretical as well as practical level was the goal.

The praise and support to traditional medicine reached its acme during the Great Leap Forward (1958-59) period. This period was characterised by over-enthusiastic policies of collectivisation of individual agricultural plots, formation of communes etc. This resulted in a reduction in the production of foodgrains and led to subsequent famine in some areas. With the retreat of its extreme policies, emphasis on traditional medicine also declined. Although the policy of combining the two kinds of medicine showed some triumphs notably in the

fields of resetting of fractured limbs using mobile splints, (Sheng, 1977) no major theoretical breakthrough towards a new synthesis was in sight.

With the advent of Great Proletarian Cultural Revolution, traditional medicine again came to the forefront. This period was probably the most turbulent one in the contemporary history of China. In 1966, the Chinese youth led by Mao, rebelled against dogmatism, bureaucratism and elitism of sections of the Chinese Communist Party, the government and other institutions. With the decentralisation drive, provinces and communes assumed responsibility of health services. Self reliance was the official policy, which meant depending upon local resources which often in rural areas meant traditional medicine and using locally grown herbs. Since then, by using combined traditional and modern medicine, many breakthroughs at both theoretical as well as applied level, have occurred especially in acupuncture analgesia, treatment of deaf, mute and blind (Chen 1973) and in nonsurgical treatment for conditions normally requiring surgery (e.g. perforated peptic ulcers) using acupuncture and traditional herbal medicine (Wu, 1977).

Thus, it should be noted that the introduction of modern medicine in China was not as a consequence of a natural transition from traditional Chinese medicine nor was it as a result of any 'inherent' superiority of modern medicine.

(It should be kept in mind that modern western medicine in 1929 when Kuomintang sought to suppress the traditional Chinese medicine, had in its therapeutic armamentarium a few herbal tinctures, like Belladonna and Gum Acacia, few mineral preparations like Arsenic and Mercury and dangerous procedures like purgation and leeching.) It was forced upon the colonial people. Ideological struggle has played a dominant part in the development of medicine everywhere and in China in particular.

This raises an important ideological question as to how the dominant philosophy of Chinese communists could reconcile with that of the traditional Chinese medicine. The answer lies in points of congruency between the philosophical basis of Traditional Chinese medicine and the Chinese interpretation of the dialectical materialist philosophy.

Philosophical Basis of Chinese Medicine

Chinese medicine assumed a scientific character in a period characterised by flourishing of great

schools of philosophy: legalism, Confucianism, Taoism, Yin-Yang and five element school and Naturalism. Developments in medicine have been influenced by all of them to some extent, but its scientific theory owes a great deal to the last three.

Although differing in many ways over their general world-views, there are certain common points regarding man-nature relationships, in all the philosophical schools of this period. Man is conceived of not as a master of nature nor as its slave but as an integral part of a cosmic system having harmony and order. Confucianism admits a hierarchy of heaven-man-earth where all the human and earthly events are willed by heaven which imparts to it harmony and order. In other schools, motive force of the cosmic order is considered as spontaneous internal self-movement rather than mechanical impulses from outside. This tendency to analyse phenomena in dialectical logic is reinforced by the Chinese language, it is claimed. Rigid 'A or not-A' categories are avoided (Needham, 1976).

According to ancient Chinese philosophy, in a healthy body there should be free flow of *Chi* (the basic principle of the entire universe) which is governed by the interplay of two opposite forces, the *Yin* (negative) and the *Yang* (positive). Disease results from their imbalance. *Yin* and *Yang* themselves evolved from nothingness which was the grand beginning of the Universe. Quantitative transformation of *Yin* into *Yang* or vice versa causes change.

Yin and *Yang* subdivide into five elements—water, fire, metal, earth and wood. Since the human being is conceived of as a product of Heaven-accumulated *Yin*, and Earth-accumulated *Yang*, the human being too, contains the five elements. *Yin* and *Yang* are not considered to be absolute and static.

The *Yin* and *Yang* concept is an example of conceptualisation in terms of contrariness, unity and transformation of opposites. One contemporary Chinese author maintains that dialectics in ancient China dealt with the interinfiltration, interdependence and mutual supplementation of *Yin* and *Yang*, the opposites of a contradiction.. (and) self adjustment of the system, which keeps the whole organic structure dynamically balanced. The keynote of the five Elements theory is that there is *Yang* in *Yin* and *Yin* in *Yang* functioning together and that, therefore neither of them alone can generate new things. (Li Zehou 1980).

Thus, like dialectical materialism, the philosophy of traditional Chinese Medicine, too deals with transformation, contrariness and unity of opposites. The Chinese medicine operated within such a conceptual framework. And with this concept, it sought to analyse and explain various observations regarding the human body, its diseases and their treatment. The only tools available to them were their five senses and the accumulated experience. This limits the validity of the empirical evidence available in support of such theoretical concepts. Now, the support or its refutation, is sought by intergrating the traditional Chinese medicine with modern medicine. Its analytical and experimental techniques as well as its empirical methodology is to be utilised for the purpose.

Generally, the philosophy of traditional Chinese medicine encouraged scientific enquiry. But historically, as Chinese medicine has come under the influence of different schools of philosophy at different times and places, its progress has not been a smooth one. For instance, under the influence of Confucianism, the official philosophy of the feudal ruling classes of China, Chinese medicine degenerated into dogmatism. For, although all the philosophical schools conceptualise the contradictory nature of reality, they differ greatly in tackling this contradiction. Confucianism propagates balance and harmony—the unity of opposites, Taoism opposition and revolt—the contrariness of opposites, and Legalism transformation of harmony into disharmony and vice versa in a cyclic fashion. Each world view represents a class ideology, with Confucianism being feudal, the ruling class ideology during the classic period (Elzinga and Jamison 1977). "Confucianism blocked the germination of new ideas and hamstrung the development of scientific discoveries in China " (Ren Jiyu 1980).

To understand how and why this process took place we shall have to go into the socio-political factors which influenced the rise of Confucianism, its subsequent pernicious effects on the development of Chinese medicine as well as the overthrow of this ideology.

Socio-Economic and Political Factors Influencing Development of Medicine in China

In the last section we saw that the traditional medicine in China was developing under a theoretical framework under the influence of Confucianism, Taoism and Naturalism. But it was Confucianism which set its stamp on it. Confucianism stressed balance of opposites in a contradiction thus

legitimising the stability and order of the feudal hierarchy in Chinese society. It was the official ideology of the feudal state, with the result that new ideas which could disturb this balance were not encouraged and scientific enquiry was stifled. "This backward trend was due primarily to the decaying feudal relations..... But stifling effect of Confucianism on man's urge to explore also contributed to the virtual halt in the march of science That feudalism held on so obstinately in China must be accounted for in part by the drawbacks of Confucianism" (Ren Jiyu, 1980). In concrete terms, it meant that analytical and experimental techniques not only did not develop but were looked down upon because they involved a work of manual nature quite like that of artisans who were considered low down in the feudal social order. For the physician to attain any social prestige and economic rewards, he had to be identified with the classically learned literati who constituted the social and political elite in feudal China. A similar situation existed in medieval India also (Chattopadhyay, 1977). The prestigious Confucian doctor was not a physician in the real sense because he acquired the necessary knowledge by reading medical classics and treated others only out of humanitarian motives. Full time medical practice as a profession was considered unworthy of gentry status and mandarinates. Yet amongst the ordinary folks, many practitioners continued to base their medical practice on experience and direct observation.

This has had all the adverse consequences for further development of medicine. It not only retarded surgery a messy business which even medieval European physicians left to lower class barber-surgeons, but also inhibited the development of supportive physical and biological sciences. (Crozier, 1973).

Thus it was no wonder that the radical movement that developed in China after World War I, rejected traditional medicine as a part of decadent feudal culture and society. Ever since then, traditional medicine, its rejection or its support, has become a political issue in China.

Several factors led to it being restored to a prestigious position. Firstly, having been faced with Nationalist blockade in the Liberated Zones, Chinese communists were forced to rely upon the traditional practitioners for medical care. Moreover, in the struggle against feudalism, traditional practitioners as artisans were considered allies of the proletariat

and the peasantry. Having gained some useful lessons during this period, the Chinese Communist Party after the liberation applied them in practice. There was an extreme shortage of trained medical personnel and traditional practitioners were too important a human resource to be rejected outright. Moreover, traditional medicine, after having been shed of its feudal ideology, was put forward as a symbol of national heritage. In the struggle against imperialism, this played an important part in rallying the people around the communists.

During the Great Leap Forward, when there was a drive to demystify technical expertise, traditional medicine with its folklorist features was particularly suited for the purpose. With 'mass line' (the term used by the Chinese communists to denote their stress on the wisdom of the masses—the peasants and the workers) in ascendancy, scientific knowledge was not considered to be a monopoly of highly educated. During the Cultural Revolution too with its anti-expert political line, modern medicine associated with its western trained specialists came under severe attack and traditional medicine of common folk-peasantry got a new boost.

Thus, the traditional physicians have now been reinstated to a prestigious position. They are encouraged to study modern medicine and along-with their modern counterparts, to undertake research in various aspects of traditional medicine, using modern scientific methods.

In concrete terms, the integrated medicine now being practised is drastically different from either its original classical form or the conventional modern medicine.

III. Current Status of Medicine in China

Restoration of traditional medicine for the Chinese never meant rejection of modern medicine. Modern medicine continues to dominate all the aspects of medical care. In medical care, training and research, modern scientific methodology continue to be applied but now traditional theoretical and practical diagnostic and therapeutic knowledge is sought to be integrated with it.

For the Chinese "combining Chinese and western medicine does not simply mean addition of the one to the other and certainly not replacing Western Medicine... by (its) native counterpart or vice versa. What is meant is the organic combination of the two medicines filling the weaknesses of the one with the strong points of the other raising the level of both, eventually evolving a new medical

science incorporating the best features of both" (Li and Tsai, 1977).

Integration in Medical Practice

In medical practice throughout China more resources are now allocated to traditional medicine. Special wards have been constructed in the existing hospitals and new clinics have been set up. The traditional doctor now has a major role in OPD and with no loss of reputation is now calling for x-ray films and laboratory investigations, and when needed, western consultation (Grey, 1971).

* Rural health centres are staffed by both the traditional and modern doctors both of whom having received some training in the other system. There is considerable co-operation between them in day to day practice.

Barefoot doctors rely heavily upon traditional therapeutics including acupuncture. A barefoot doctor's manual lists around 533 traditional medicines. (Sidel, 1973). Reports indicate that model hospitals (usually Red Army hospitals) stress combined use of both the systems. One hospital reported that since 1969, 70 percent of the cases were treated in this way (Crozier, 1973). Diseases claimed to have been treated in this fashion include jaundice, pulmonary tuberculosis, inflammation of kidney (nephritis), inflammation of veins (phlebitis) severe burns, facial paralysis and fractures.

The most spectacular results by using combined traditional and modern medicine are in conditions where previously surgery was required, for example in perforated peptic ulcer (a condition where due to interaction between the inner lining of stomach and the acidic juice therein, there is first a small ulcer on the inner lining of the stomach, which may later burst to become a hole through the stomach wall with gastric juice sprayed over into the abdominal cavity causing severe inflammation of the abdominal lining). In such a patient, complaining of severe pain in abdomen, the modern doctors ascertain the part affected and the kind of disease the patient has by careful history taking, clinical examination, x-ray and laboratory investigation. "The ability to accurately determine local pathological changes is the advantage of Western medicine's method of diagnosis. Where it falls short however, is in understanding and analysing the functioning of the patient's body as a whole." (Wu, 1973). The Chinese doctors then ascertain the general status of the patient by traditional

method. After a careful study, a method has been developed using traditional and modern indicators like temperature and pulse and so on to judge the size of the hole and extent of fluid exuded. If the hole is considered to be large and fluid abundant, then the patient is operated upon, otherwise he or she is treated with acupuncture and herbal medicine. (Wu, 1973).

The other prominent breakthrough achieved by using the combined methods is in the field of acupuncture anesthesia and treatment of fractures.

Theory and practice of acupuncture has undergone significant changes as a result of self-evaluation on the basis of modern scientific concepts. Older theories and principles not verified in practice have been relegated to secondary importance. For example in diagnosis and prognosis, greater emphasis is placed on effective acupuncture points and their relationship to the autonomic nervous system and less on the theoretical aspects of Yin-Yang, the meridians and the Five Elements (though the latter are not entirely rejected.) (Chen, 1973).

Thus, in late 1950's Chinese medical workers reviewed their experience of acupuncture in relieving toothache and sore throat. They applied the experience to replace anesthetic drugs in minor operations like tooth extractions and tonsillectomy and achieved some success. The technique gradually improved with more points being discovered. Now success has been achieved with placing needles only on the ear, nose and face (Chen 1973). Many major operations like abdominal and chest surgery have been performed using acupuncture anaesthesia.

Another achievement has been in the field of treating deafmutism and blindness, using acupuncture (Chen 1973). Traditionally certain points were considered forbidden for deep insertion. But experiments showed that deep needling of these points produced return of the power of speech and hearing. Acupuncture therapy is combined with high quality speech therapy.

Acupuncture has also been used successfully in treatment of toothache, tonsillitis, jaundice, epidemic influenza, voice paralysis and polio (Chen, 1973).

Similarly, in the field of treatment of fractures, combined therapy is found to be superior (Sheng, 1977). The fracture is diagnosed using X-rays. The broken bones are realigned using acupuncture anesthesia. Then, the fracture is managed by tying

standardised bamboo splints used traditionally around the fracture site. Quite unlike the extensive immobilisation method of modern orthopedics, this method advocates combined rest and movement. This has resulted in better healing, and greater recovery of function, particularly of old, complicated fractures. The time of immobilisation is also greatly reduced.

No discussion on Chinese medicine today can be complete without the mention of prevention and treatment of mental illness in China. Quite unlike the western method based on Freudian thinking, the psychiatric care in China is based on the belief in man's ability to change given a sympathetic environment and education and re-education' (Sidel R, 1973), (Ho, 1974).

Since the Cultural Revolution, with increased emphasis on integrating traditional medicine, the western trained doctors have altered their psychiatric service to include traditional methods and political techniques. The methods currently in use are self-reliance, collective help, drugs, acupuncture, heart to heart talks, follow-up care, community ethos, productive labour and teachings of Mao. Thus the process involves hospital and community care, individual and group relationships, professional and nonprofessional help, mutual help and self-reliance and traditional and Western medicine. Here again one clearly sees a tendency to avoid stressing on either of the opposites.

Integration in Medical Research

Scientific research in China is guided by four principles (Stuttmeir 1973) (1) Research must serve production and solve practical problems generally. (2) The indigenous, social, economical and intellectual — both contemporary and traditional experiences must be tapped. (3) Research must involve the masses and should not be a monopoly of the professional elite. (4) It should be an integral part of Chinese way of life. Struggle for scientific experiment, struggle for production and class struggle are considered three major tasks of a revolutionary society. Medical research too, derives its orientation from the above principles.

The most outstanding feature of medical research in China is the concept of systematic co-operation built around small research projects. Research units having common interests work together regardless of their affiliations. For instance, production of new antibiotic 'Qingdmycin' according to the New China News Agency, was a result of combined

efforts of 36 agencies. The central body responsible for the medical research in China, the Chinese Academy of Medical Sciences maintains linkages with 24 different research institutes. The research areas include various specialities in the medical field like epidemiology and microbiology, surgery, pediatrics, pharmacology; areas in community and social medicine like environment, nutrition, labour hygiene, labour protection, occupation health, basic sciences like Medical Biology and traditional sciences like acupuncture, moxibustion and Chinese medicine.

Research in traditional medical sciences is organised under the Academy of Traditional Chinese Medicine. Its areas of research include medicine, surgery, acupuncture and pharmaceuticals. The diseases studied successfully include asthma, bone fractures, 'high blood' pressure, tuberculosis of bone, leprosy etc (Stuttmeir, 1973). The unique feature of this Academy is the inclusion of western trained doctors in its research staff who have undergone training in traditional medicine. In 1966 there were around 200 such doctors out of a total research staff of 300 (Stuttmeir, 1973).

Another notable feature of medical research in China, is the combined use of traditional and modern diagnostic and therapeutic principles. In one instance 10 patients having a skull fracture with a large blood clot under the skull bone were selected on the basis of severity judged by modern diagnostic methods including x-rays. Then they were treated with intravenous mannitol and Chinese medicine. Conventionally, the blood clot would have had to be removed surgically. But this clinical trial showed that 9 patients recovered fully, the blood clot having been absorbed (Qiu Xiang et al, 1981).

Medical research also includes exploring the scientific basis of acupuncture. Based on extensive observation and research, it has been found that generally meridian system of traditional acupuncture corresponds with the neural pathways. But modern knowledge of anatomy and physiology of the nervous system cannot fully explain the theory of meridians. For example, on stimulating certain parts of limbs with heat, corresponding areas of the ears become sensitive to pain. Certain other unexplained physiological changes induced by acupuncture have also been demonstrated. For example, putting a needle through certain points in the body of a normal person causes increase in the number of white blood corpuscles and enhancement

of the process of devouring of wastes and bacteria by these white corpuscles. Hormones too may be playing a part in this process in which different levels of the central nervous system have been found to be involved. (Chen, 1973).

What is most revealing about the philosophical aspect of medical research is that dialectical principles are often used in achieving solution of a research problem. For example from the principle "the law of unity of opposites is the fundamental law of the universe" in the words of a Chinese doctor 'we drew a number of conclusions: immobilisation and movement are equally important, fracture healing and functional recovery ought to be mutually complementary... None of these aspects should be stressed to the neglect of the other. On this basis we formulated... new principles for the management of fractures" (Sheng, 1977).

Conclusion

Medical science developed in China under the influence of conflicting world-views, which represented the ideological requirements of the ruling classes or sections thereof. This struggle between contradictory philosophies was reflected in the sudden changes in direction which characterise the uneven course of development of medicine in China. Factors other than those intrinsic to science, played an important often determining role in shaping its course. The medicine that emerged after a conscious policy of integration was applied, reflected a change in the dominant worldview to one which is more organismic as opposed to mechanistic—a world-view implicit in bourgeois science.

Science and philosophy, two dialectical poles of a knowledge system, develop in an interpenetrating, mutually dependent fashion under the influence of the socioeconomic and cultural-ideological factors operative in a particular mode of production during a historical period. As Engels put it:

"Natural scientists... are still under the domination of philosophy. It is only a question of whether they want to be dominated by a bad fashionable philosophy or by a form of theoretical thought which rests on acquaintance with the history of thought and its achievements. Only when natural science becomes imbued with dialectics will all the philosophical rubbish... be superfluous, disappearing in positive science" (Engels, 1976).

Only a conscious appraisal of the history of medical science keeping in view the above perspective can provide a future vision of a new Integrated Medicine.

In this way by emphasising equally empirical observation and dialectical concepts, on positive science and dialectical philosophy and by combining the traditional and modern medicine, Chinese medical science has contributed significantly to 'humanity's broad onward march.'

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POLICIES TOWARDS INDIGENOUS HEALERS IN INDEPENDENT INDIA

roger jeffery

Policies towards indigenous healers in independent India show considerable continuities with policies followed in the British period, varying according to the sex of the healer. Traditional birth attendants (dais) have been offered short periods of training by the State since 1902, whereas until recently male healers (vaid and hakims, and later homoeopaths) have been treated with official hostility. Current plans include the training of religious and ritual healers in psychiatric services as well as the employment of indigenous healers in new community health schemes. These changes are assessed in the context of a political economy of health services. This article is reproduced from 'Social Science and Medicine' 16:1835-1841, 1982.

Introduction

Many discussions of the potential role of indigenous healers in health systems ignore the historical dimension, apparently assuming that the proposals are novel and practicable. No-one should make this mistake in India, where there is the work of Leslie and Brass to draw attention to shifts in policy from 1820 onwards.¹ In this paper I want to elaborate on a small part of this topic by looking at official policy with respect to indigenous healers in the context of theories about the dynamics of relationships between indigenous and cosmopolitan medicine.

There are, in essence, three views of these relationships in India. The first is the naive scientific: that the process is one in which the indigenous systems are steadily giving ground to the onward march of science, with only the areas where Western medicine is ineffective remaining for the indigenous practitioners. This was the dominant view of the British doctors in India; it remains common, though many Indian doctors express guarded sympathy and support for the relevance of indigenous medicine. The second view is the agnostic anthropological, best expressed in Leslie's phrase describing Asian medical systems as 'coexisting normative institutions', in which cultural processes of change are not simply unidirectional (with indigenous medicine being affected by cosmopolitan medicine but not vice versa) but multi-directional, with no predictions of necessary future patterns.² The third view is the political structuralist one, in which the superiority of Western medicine follows not from its scientific advances but because it is more closely linked to the class interests of the political leadership in the country.³ I shall explore some of the strengths and weaknesses of these positions by taking a closer look at policies towards indigenous medicine in

India, tracing the links between the British period and post-1947 policies, with particular focus on policy proposals made (and to a lesser extent implemented) since 1971.

Two caveats should be entered here. Firstly, there may be no clear relationship between official discussions of indigenous healers and the situation 'on the ground'. In particular the official mind tends to see the systems of indigenous medicine as discrete and discontinuous, whereas Leslie's model of healers occupying positions which shade into one another seems more plausible.⁴ Secondly, there is a great deal of regional variation, not only pre-1947 when the Native States could follow policies radically different from those of British India, but also since Independence, when health policies have been constitutionally the sphere of the States.

The British Period

It is customary to see 1835 as a major turning point in British attitudes to Indian culture. This was the year of Macauley's *Minute* on educational policy, where he argued that European culture should provide the curriculum of schools and colleges. This strengthened the opposition to schemes which attempted a mixing of European and Indian cultures, or were designed to restore Indian culture to its presumed glory. In medical education it meant that the Calcutta 'Native Medical Institution' founded in 1822, would no longer teach aspects of *Ayurveda* (the Hindu medical scriptures, especially those of *Susruta* and *Caraka*) nor of *Unani* (the medical doctrines derived from Greek medicine and more closely linked to Muslim culture). While this move had obvious significance, it did not mean a total ban on such teaching, nor on co-operative relationships between the British Raj and indigenous practitioners as a class. As Hume has demonstrated, for example, in Punjab the Provincial Government employed

hakims (Unani practitioners) in the 1860s and 1870s, usually as vaccinators and health extension workers, and the University of the Punjab offered courses in *Ayurveda* and *Unani* medicine until 1907.⁵

One reason for the tolerance displayed by the State is that its own services, and practitioners trained in its medical schools and colleges, had a minimal impact before the end of the nineteenth century. The first four medical colleges (Bombay, Madras and Lahore following Calcutta by the 1850's) produced too few graduates to make much impact on the setting of practice for most indigenous healers, and were mostly employed in the growing State bureaucracy — in the army, the jails, the railways and so on.⁶ The 1872 Census of Bengal, for example, enumerated only 3769 physicians, surgeons and doctors, but over 23,700 'Gobaidyas' and 'Kabirajes' (*vaid*s, or *Ayurvedic* practitioners) and over 400 *hakeems*.⁷ Prior to the establishment of the Indian Sanitary Commission in the 1860s there was no commitment by the State to provide health care services for its citizens, and there was a slow extension of that commitment beyond plague control and the provision of dispensaries. There was an awareness of the strength of the indigenous groups: plans to introduce medical registration in the 1880s were dropped because the Western doctors were too weak to defeat the expected hostility from the *vaid*s and the *hakims*.⁸

A change to greater hostility can be dated from about the end of the century. By this time the cream of the Western doctors in India — the Indian Medical Service, (recruited in Britain though 5% Indian by 1913) was more conscious of its claims to a scientific legitimation: the number of Indian medical graduates and licence-holders was substantial, and they were offering a real challenge to the primacy of indigenous healers in the major towns; and there was the growth of a new middle class which provided new financial opportunities for both groups.⁹ The early twentieth century saw considerable political conflict as the rising bourgeois nationalist movement embraced the cause of Indian cultural renaissance as well as the idea of science. The Indian National Congress included leading indigenous practitioners in its ranks as well as modernisers like Nehru. Even within the Imperial Government there were those willing to lend their prestige to new private medical schools, some of which combined indigenous and Western techniques in 'integrated' courses. The general argument used was that it was necessary to improve the training of indigenous practitioners

because "for many years to come they will constitute the medical attendants of by far the largest portion of the Indian community".¹⁰

As Indians gained positions in Ministries after 1919 they were expected to implement policies based on this kind of view, but their scope was limited by severe financial restrictions and their impact was further reduced by pressures from the Indian Medical Services, whose members provided the senior medical civil servants. The new Legislative Councils supported the 'Indian' systems of medicine on both patriotic and economy grounds, but Ministers in several Provinces (e.g. Punjab and Bombay) resisted this and used their limited funds to attempt to bring 'modern scientific medicine and surgery within reasonable reach of all', spending only small sums on research into the indigenous systems and for improved training.¹¹ As a result, relatively few indigenous medical colleges were given State patronage; the schemes of medical registration excluded those who had not received Western medical training; and the Government of India restricted its activities to an investigation into the pharmacopeia of indigenous drugs.

With the rise of medical registration for the cosmopolitan doctors after 1912, the pressures on indigenous medicine increased. Doctors who offended the imported British ethical codes and collaborated with indigenous practitioners, either in their new colleges or in daily practice, were threatened with deregistration. The wedge between cosmopolitan and indigenous medicine was driven deeper by the disputes over the recognition by the General Medical Council in London of Indian medical degrees, which occupied much of Indian medical politics in the Inter-war period.¹² When the Indian Medical Association was established the early leaders, also prominent in nationalist politics, called for the admission of indigenous practitioners (if they were 'sincere'). By the mid-1930s, when these leaders were being incorporated into the new Indian Medical Council and other positions of influence, they had already drawn back from these positions because such policies might lead to a loss of their international recognition. Indigenous practitioners were first registered in Bombay in 1938, but they were on a separate register from that of the cosmopolitan doctors. They were accepted on the basis of experience or apprenticeship, and only after a 4 year delay was qualification to become the only means of registration. The Bombay Government was well ahead of other Governments, and even here an amendment in 1949 weakened their

legislation and admitted new practitioners on the basis of experience. Nevertheless, the Bombay Act was held up as the model for legislation after 1974.

The inter-war period thus showed gains and losses for indigenous practitioners. On the one hand, there was the establishment of colleges, rather than the less respectable *guru chela* form of apprenticeship which had previously been the sole training method. Several of these colleges were well-funded, especially in Delhi, Madras and the Princely States of Mysore and Hyderabad, for example. The indigenous practitioners also had the support of the reports of special Government committees set up to consider policy towards them.¹⁴ On the other hand, their subordinate position relative to cosmopolitan medicine was reinforced by registration patterns, and previous strategies of raising status (e.g. by procuring a scientific facade through joint teaching and practice with cosmopolitan doctors) had received a severe blow. The weakness of the indigenous practitioners was partly a result of their own internal divisions. Not only were there the two main groups separated by linguistic, theoretical and religious differences, but there was also the newer group of homoeopaths, established particularly strongly in Calcutta and Bengal. In addition, each group had a variety of career patterns, usually locally specific, with little agreement about diagnosis or techniques. Often a noted local teacher would prepare his own commentary on the traditional texts, and a school which grew up around one teacher would deride and vilify that around another.¹⁵ These divisions particularly affected elite practitioners, whereas the average healer might be very different—but evidence about them before the 1960s is slight and highly unreliable. Finally, there was the growing

ideological split between those who wanted *integrated* teaching of cosmopolitan science and indigenous therapeutics, and those who considered the *pure* indigenous training sufficiently scientific. This divide dominates the post-Independence debates.¹⁶

Different patterns affected female healers—whose history still has to be told. The presumption is that all indigenous healers were male and this is certainly implied by the medical texts and most official comments. However, many female healers were recorded in the early Censuses, (see Table 1) and some modern fieldwork reports refer to female healers.¹⁷ To be sure, few of these would have had access to the "high culture" learning of the elite male practitioners, but that was true of many of the male practitioners too. The main reason why female healers were invisible to male enquiries was probably that their clientele was almost entirely female. The only group who do appear in the historical discussions are the traditional birth attendants (*dais*), who are recorded separately in the nineteenth century Censuses, and in several early discussions of caste, midwifery is described as the hereditary occupation of the women of particular untouchable castes.¹⁸

Apart from sporadic training by missionaries in the middle of the nineteenth century, the first serious attempts to train indigenous midwives came in 1902 when money raised in Queen Victoria's memory was put into a fund for this purpose.¹¹ A sum of Rs 40,000 was available each year, and training followed a scheme first developed in Amritsar in which the *dai* was paid a fee for attending the classes and was expected to attend regularly, to report cases, and to call in the teacher when she had difficult deliveries. Simple examinations were held, and the successful completion of a course

Table 1 Practitioners in selected provinces, 1901 Census

		Bengal	Bombay	Madras	N.W.F.P. Punjab	UP
With a diploma, licence or certificate	M	4123	1172	507	946	711
	F	170	43	19	78	50
Without any diploma etc.	M	33899	3648	17441	7198	6750
	F	1258	243	1501	665	789
Midwives	M	144	—	—	—	312
	F	21036	1891	4753	6422	11341
Compounders, nurses etc.	M	2016	2127	2599	2602	1854
	F	945	705	328	315	324
Total medical	M	41912	6770	21267	11225	9941
	F	23480	2882	6609	7511	12517

Notes: These are recorded as 'actual workers': dentists, oculists and administrative personnel (including members of the IMS) are included in the total but not in the other categories shown: vaccinators are included with compounders etc.; and the figures include some feudatory States.

could lead to a diploma and to registration. There are no complete figures for the numbers being trained in any year, but it is clear that a limit was set by the shortage of female doctors or of public health nurses (lady health visitors) to carry out the training. These schemes were based on the following assumptions; that institutional deliveries were very unpopular amongst Indian women (they remain so today); that midwifery was a hereditary occupation amongst certain low castes (the situation is almost certainly more complex than this); and that the *dai* was expected to deal with the menial, polluting, aspects of the delivery. Several features made it acceptable for the State to become involved in *dai* training, in particular, there was no band of Western personnel whose interests were threatened by such training. The *dais* themselves were so poor and of such low status that they could be persuaded into training schemes with relatively little difficulty; and few people thought that the *dai* had any skills worthy of being retained. In all these ways the male healers were different, and this largely accounts for the different policies pursued with respect to them.

Policy After 1947

One of the most obvious ways in which the Congress Governments after 1947 followed the precedents established by the British Raj is in the sphere of health policies. The new Government of India had two sets of proposals to deal with the health problems of the new India: those provided by the National Planning Committee, established by Congress itself in 1938; and those of the Bhore Committee, established in 1943 by the British to plan for reconstruction after the War was over. There was considerable agreement—for example in the proposal that the health service should be free at the point of contact for patients—but where they differed, the post-war Governments followed Bhore rather than the NPC. This was particularly true with respect to the training of part-time village level health workers—a corner-stone of the NPC proposals but totally ignored by Bhore. On relationships with the indigenous healers both reports were ambivalent, but Bhore was more hostile. The NPC resolved that

An attempt should be made to absorb the practitioners of the Ayurveda and Unani systems of medicine into the State health organisation by giving them further scientific training where necessary. Medical training in every field should be based on scientific method.²⁰

By contrast the Bhore Report pointed out that the indigenous systems had nothing to say about public health, preventive medicine, obstetrics or advanced surgery, and described the systems as archaic and out-side the onward march of world science. Bhore's policies involved

a country-wide extension of a system of medicine which, in our view, must be regarded as neither Eastern nor Western but as a corpus of scientific knowledge and practice belonging to the whole world and to which every country has made its contribution.²¹

Proponents of the indigenous systems were able to exploit the ambiguities of these proposals by claiming that science was not the preserve of the cosmopolitan doctors since *Ayurveda* was already scientific; and that only racial bias and a lack of objectivity prevented cosmopolitan medicine from learning from the Indian systems.²²

The debate over these issues became heated over the first 10 years of Independent India. The 1946 Health Ministers' conference endorsed the Bhore proposals, and ignored the NPC proposals, with the sole exception of its resolution on indigenous practitioners. This was elaborated to include expenditures on

- (a) research into the indigenous systems;
- (b) the establishment of new colleges and schools;
- (c) the establishment of post-graduate course in Indian medicine for graduates in Western medicine;
- (d) the absorption of *vaid*s and *hakims* after scientific training where necessary, as doctors, health workers etc.;
- (e) the inclusion of departments and practitioners of Indian medicine on official boards and councils.²³

In the face of this strong political pressure, the Government of India followed British precedents and established a committee, under a cosmopolitan doctor (Chopra); most State Governments were similarly slow to act.

By 1947, then it is possible to discern three main organised groups contesting the medical domain in India, the cosmopolitan doctors with a stranglehold on the medical bureaucracy, the 'pure' indigenous practitioners; and the 'integrated' practitioners. A fourth, less organised group campaigned, at least in the 1970s, for the freedom

of unqualified and unregistered practitioners to practice as cosmopolitan doctors. (This group probably best represented the interests of the majority of practitioners in India at the time.) The three main groups have all failed to achieve their own preferred solutions, and most of the issues have recurred again and again in the main policy-making arenas. There are four main topics on which battles have been fought: (1) whether to incorporate indigenous practitioners in the State medical service, or whether to train a separate cadre of community health workers; (2) how to register existing practitioners and those graduating from the indigenous colleges, and how to prevent unregistered practice; (3) whether indigenous colleges should include Western scientific training and an introduction to cosmopolitan therapeutics; (4) whether access to 'allopathic' medicines should be restricted to those registered on the 'Western' medical registers. There were subsidiary issues—for example whether State funds should be used to support training in the indigenous systems or indigenous hospitals—which were agreed in the early period: in fact something under 5% of the Plan health expenditures have been allocated to the indigenous systems of medicine, though these allocations have been consistently underspent.²⁴ I shall deal with the four more important issues in turn.

1. The Incorporation of Indigenous Practitioners: The cosmopolitan doctors were opposed to any such involvement. In the immediate post-Independence debates they had the support of Nehru and his Health Minister (Rajkumari Amrit Kaur) in arguing with Bhore that all practitioners should have the basic MBBS qualification; if they then chose to practice other forms of medicine that would be up to them—as is the case in the UK. In general it was argued that it was impossible to *integrate* the various systems without causing chaos. However, this was the solution which Chopra proposed: his report recommended that all students should be taught the elements of all systems (like the Chinese solution, at least during the 1970s).²⁵ Once again the international standing of Indian doctors was used as a powerful argument for rejecting such a move; and the variety of skills and backgrounds of the indigenous practitioners was seen as a reason why no more than perhaps 2% of them could be used in the national health services. While the Government of India thus expressed its hostility, the States were free to act on their own, since health was constitutionally their affair, subject to certain ill-defined constraints with respect to standards of medical

education, and health Ministers made their autonomy clear in 1954.²⁶

In addition, it was clear that the training of auxiliary medical personnel was regarded as a preferable alternative means of extending rural medical care. A scheme proposed in 1952 was discussed in the 1954 Central Council of Health and in general, those supporting the health auxiliaries were those opposed to the involvement of the indigenous practitioners.²⁷ However, this proposal was refined and reduced over the next few years, until it was dropped completely.

The early 1970s saw a resurgence of discussions concerning the inclusion of indigenous practitioners. This followed the 'Gharibi Hatao' election success of Indira Gandhi in 1971. In 1972 the Minister of Health announced a scheme to enlist registered medical practitioners in *Ayurveda, Unani, Siddha* and homoeopathy after a short period of training (4 months), to provide them with a kit containing medicines for common ailments, and thus "to provide medical services to the entire rural area within as short a time as possible, say about three to four years".²⁸ Apparently this scheme received the strong backing of the Prime Minister, and sanction by the Task Force of the Planning Commission, but when the Health Minister was replaced after nine months, little more was heard about it. However, in retrospect, it can be seen as forerunner of schemes proposed in 1975 by the Srivastav Committee, and in the plans currently being implemented, which are loosely based on the Janata Government proposals made in 1977. The Janata manifesto called for the organisation of "a cadre of medical, paramedical community health workers (CHW) among whom the trained practitioners of indigenous systems of medicine will be a part".²⁹ In practice, it was decided that the community should choose who was to be the new CHW and they were merely to be advised that the use of an existing indigenous practitioner would be wise. In fact the choice of the CHW has been a highly political decision, heavily influenced by the doctors who were to do the training, and it seems that relatively few CHWs are, in fact indigenous practitioners, whether trained, registered or not. Once again, the offer being made to the indigenous practitioner (fulltime or part-time) was not very attractive, since he would be recruited at the bottom of the medical hierarchy. However, the training schemes included the possibility that the CHW be trained or equipped in indigenous techniques

and therapeutics, and some States recruited indigenous graduates to do the training.

There was no suggestion that the CHW should be a trained *dai*, which is not surprising, given the low estimation of these women. Nor were women with other backgrounds chosen in spite of the experiences of various voluntary schemes which suggested that women were more reliable, acceptable and suitable for this work. Instead, a new *dai* training scheme was introduced, which was essentially just a return to the earlier schemes which had been allowed to lapse in the 1950s. Like the CHWs, they were to be trained at the rate of 1 per 1000 population, and there may have been a feeling that this was the women's proper place. Unlike the CHWs, however, the trained *dais* were not to be given a regular honorarium but only compensated if they referred women to ante-natal registration. So far no evaluation of the *dai* training has appeared, though one is planned for 1981.

The impact of the latest schemes is thus two-fold. On the one hand, it has meant the inclusion of more indigenous practitioners into State employment; on the other hand, it has created a new band of practitioners who see themselves as potential doctors. Voluntary schemes have also been unwilling to involve the local indigenous healers except in a peripheral way. Once again, the stated reasons have been that the indigenous healers are not relevant in the services which are regarded as high priorities — maternal and child health, or community health services, and there is undoubtedly some strength in this argument.

2. What to do about registering or banning unqualified practitioners: The years following Independence also saw debates about the proper course of action to follow with respect to unqualified practitioners, with moves to outlaw their practice being seriously considered in 1955 and 1959. The discussions in 1955 were inconclusive: another committee was established (the Dave committee) and its report in 1958 (recommending the continuance of integrated courses and the establishment of country-wide registration schemes) was left for States to decide whether to implement.³⁰

The 1956 Act which re-established the Indian Medical Council (now called the Medical Council of India) prohibited unregistered medical practice, but the Government of India advised State Governments not to implement that clause. In 1972, after a whole series of discussions in the Central

Council of Health, States were advised to follow Kerala's proposal to amend their legislation so that those practising 'modern medicine' for at least 10 years would be registered on a separate list and allowed to continue (but be barred from prescribing dangerous drugs, doing surgery, obstetrics or radio-therapy). No further unqualified practitioners would then be allowed to practise. The Indian Medical Association called this a "quacks' charter", and managed to prevent any move on this front — but they could not prevent unqualified and unregistered practitioners from continuing to provide 'modern' medical services.³¹

The 1950s and 1960s saw the slow but steady extension of registration schemes designed to register those currently practising indigenous medicine, but to forbid any new practitioners who had not gained registrable qualifications. As with the model for this legislation, the 1938 Bombay Act, there was considerable pressure against the enforcement of the penal clauses and moves to pass later amendments to include a new set of unqualified practitioners.³² Even after the 1970 Central Government Act establishing a central policy on standardising the registration of indigenous practitioners, some States were still registering on the basis of experience only, while others insisted on the acquisition of a registrable qualification.³³ By 1977 there were 93 colleges providing *Ayurvedic* education, with a total intake capacity of over 3600 per year; 14 *Unani* colleges with an intake capacity of 485 per year; and one *Siddha* college with 50 places a year.³⁴ However, the total registered as practitioners on the basis of institutional qualifications was much greater than this suggests. It would appear that registration boards take a relatively lenient view of claims to qualifications, or that there is massive double registration (see Table 2).

Table 2.

Registered practitioners in Indian systems of medicine and homoeopathy, 1977

	Institutionally qualified	Not institutionally qualified	Enlisted
Ayurveda	117765	105344	—
Unani	10262	20138	—
Siddha	1559	16569	—
Homoeopathy	19.871	74166	51397
Total	149457	216217	51397

Source : *Pocket Book of Health Statistics of India 1978*, Central Bureau of Health intelligence, New Delhi, 1979.

3. Whether indigenous training should be 'pure' or 'integrated': Immediately after Independence the supporters of 'integrated' medicine were successful in several parts of the country in establishing colleges and ensuring that the qualifications of their graduates were registrable. However, the counter-attack came fairly quickly. At the 1954 meeting of the Central Council of Health, representatives of most of the North Indian States (including Bihar and UP, the largest) supported the move by the Bombay Government to introduce 'pure' training in Indian medicine. Again the supporters pointed to the 'popularity' of the indigenous practitioners; the tendency in the integrated courses to spend too much time on Western medicine; the incompatibility of the indigenous and the cosmopolitan systems; and the availability of indigenous graduates for rural practice. The opposition argued that science was universal; that it was a crime to allow the 'unscientific' to practise in rural areas simply because they were cheap; that there was an absence of senior *vaids* or *hakims* to take teaching positions; and that indigenous practitioners actually used Western drugs and treatments.³⁵

These disputes have largely been won by the supporters of the 'pure' school, and by 1975 there was increasing concern expressed by and about the estimated 50,000 integrated practitioners, whose anomalous position with respect to registration and to drugs legislation left them particularly exposed.³⁶ However, to a considerable extent this was a Pyrrhic victory; most graduates appear to perceive their training as second-rate and it is widely argued that they actually practise using cosmopolitan drugs. In other words, the attempt to reach parity of status has not yet been successful.

4. How to control the use of 'allopathic' drugs: Finally, in spite of an agreement in 1958 that only those with Western medical qualifications would be permitted to prescribe the drugs listed in the 1945 Drugs Rules, this too was not implemented. This was complemented by an apparent unwillingness to make serious attempts to enforce general controls on pharmacists and pharmaceutical companies, so that there is little or no effective control over access to any drugs in India. This alone tends to nullify almost all the other decisions with respect to indigenous healers. As Neumann and others have shown most 'unofficial' healers, whether registered as *vaids* or not, tend to prescribe largely from the cosmopolitan pharmacopeia.³⁷ With relatively free access to these drugs, there are continually new practitioners becoming established

on the basis of experience. Indian political culture seems to accept as legitimate the claim that they have rights to a livelihood in this way. One of their strongest arguments is that they provide services where cosmopolitan doctors are unwilling to go — in the rural areas. Nevertheless, many of them actually practise in urban areas, but through their links with politicians they seem to be able to prevent punitive action against themselves and to be able to make powerful political cases for the amendment of hostile legislation.³⁸

Conclusion

One of the difficulties of making clear assessments of the nature and effect of Government policy with respect to indigenous healers is that there is no clear line being followed. On the one hand, it is clear that indigenous medicine is essentially marginalised, with many of its practitioners part-time, dealing with a limited range of ailments, drawing heavily on the cosmopolitan pharmacopeia and perceiving cosmopolitan medicine as superior. Government policy, particularly in terms of employment and expenditure, reinforces this trend. On the other hand, there is a trend towards greater respectability, with the extension of registration schemes, the recognition of indigenous contributions by the international agencies and in CHW training, and some steady expansion of employment. The failure of attempts to suppress or control unqualified practitioners, and the loop-holes in registration schemes, mean that the cosmopolitan and qualified indigenous practitioners alike are threatened by 'unfair' competition which is outside their control, so that the formal commitment to the modernisation of medical care in India is very different from the reality.

There seem to be a few threads which can be drawn out of this, however. Firstly it is clear that indigenous practitioners of all kinds do provide an alternative which the Government has to come to terms with whenever its legitimacy is weakened. The greatest advances have come in the period when the new Republic was being established; when Congress was reasserting its supremacy after its losses in the late 1960s; and during the Janata regimes since 1977. Secondly, it is clear that the alternative solution to the problem of providing a cheap extension of Government health services to rural areas — the employment of para-medical personnel or community health workers — has been preferred. This has been premised on the idea that they will be more controllable, and less likely to claim the status of 'doctor' — when of course

this is the major complaint of the cosmopolitan doctors and the major aim of many CHWs.

In terms of the arguments with which I opened this paper it is clear that all of them have their weaknesses. Indigenous practitioners are not dying out, they are infiltrating Government and retaining considerable popular appeal, even in urban areas. On the other hand, their impact on cosmopolitan medicine is a great deal less than the influences the other way, and the indigenous systems remain subordinate. Yet to argue that cosmopolitan medicine alone meets the needs of the ruling class is also inadequate, since the very political support which the practitioners can generate by virtue of their positions means that politicians woo them assiduously, even if they no longer have a coherent ideological position which commands much support. It is much easier to see how women healers are being marginalised and excluded from positions of influence than to draw clear pictures of the nature of the changes amongst the men.

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SYSTEMS OF MEDICINE: ROLE AND RELEVANCE

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While traditional medical systems passed their peak centuries ago, modern medicine has not entirely replaced them. The issue of traditional v/s modern medicine, the authors argue, is essentially an ideological one, governed by political interests; this is illustrated by the variance in the official, semi-official, and progressive views on the subject. Even the Chinese experience, the authors say, demonstrates this. Systems of medicine, as such, in their opinion, are irrelevant in the context of a people-oriented and egalitarian health system, in which they will comprise merely a set of therapeutics. Thus the entire debate on the role of traditional medicine is academic.

The historical development of health care in the western societies has been analysed and explained in various ways. Those analyses bear relevance to the Indian situation to the extent that western medicine (allopathy) had been introduced and developed by the colonial power and after independence, it developed rapidly with State patronage. Traditional systems, however, passed their peak of development long ago, but existed and persisted in Indian society.

Among the traditional systems, the oldest one, Ayurveda, reached a very high level of development. Ayurveda is the fore-runner of Indian scientific development and the father of materialist philosophy. Ayurveda is a comprehensive body of knowledge in medical science having well developed or rather too highly developed theoretical foundation based on empirical data, scientific methodology of observation, experimentation and analysis, and disciplined norms of practice. Ayurveda asserts that all things living and non-living are products of natural matters; disease is the result of material change in the body due to interaction with natural matters; and therefore could be corrected to an extent with the help of natural matters (drugs). Charaka-Samhita declares, "There is nothing in nature without relevance to medicine". There is nothing supernatural about natural and human events. In ancient society, the dominant ideology of the all-powerful ruling class was totally and oppressively anti-materialist. Materialist heretics actually had no right to live. That is why, all extant source books of Ayurveda are found to be camouflaged with enormous amount of metaphysical and religious garbage with a view to project an appearance of conforming to the dominant ideology. (Chattopadhyay, 1977). But what now exists and is practised as ayurveda or sidhha is not the ancient dynamic science of ayurveda but a decadent form which absorbed the alien metaphysical interpolations

as truth and degenerated. The other major existing system Unani, the legacy of Greco-Arab medicine, is no different.

The scientific basis of modern medicine developed later. Starting from the 19th century, it developed on the shoulders of physical and biological sciences in the 20th century — achieving a tremendous speed after the 2nd World War. It has been argued that British colonialism brought along with it destruction and decay of the indigenous systems of medicine (Banerji). But there is little data available to substantiate this view. Others claim that modern medicine did not make much impact except with limited urban population; the largest section of the population still depend on indigenous systems, which is dealing more or less satisfactorily with many of the health problems of the local people. (Bannerman et al, 1983)

Although the state health care service has been built on the principles of modern medicine the indigenous systems including homoeopathy have been receiving state patronage in the later period. Budgetary allocation on the development of indigenous systems and homoeopathy has been increasing since the fourth plan period and the number of their practitioners as well as infrastructure have now reached impressive proportions.

	Total No. of Regd. practitioners	Admission capacity	Hospital Beds	Dispen- saries
Ayurveda	2,32,247	3,306	9,783	12,027
Unani	22,756	535	627	986
Sidhha	18,190	75	—	426
Homeopathy	1,09,493	7,513	2,249	1,782
Modern Med.	2,68,712	10,934	4,86,805	17,455

Source : Health Statistics of India; CBHI, Ministry of Health & Family Welfare, GOI, 1983. Figures are incomplete due to lack of information from a few centres.

To this figure if we add the number of various paramedical personnel e.g. Pharmacists, Nurses of different categories, MPHW, LHV, Health Assistants and Supervisors, CHG, midwives, one may arrive at the conclusion that India does not need any more doctors at all for a comprehensive health care delivery system (ICSSR-ICMR, 1981). Still the official view, which is inherently wary to admit failure, is that the state health services have been unable to meet the actual health needs and priorities of the people, have been hospital-based and cure-oriented neglecting the preventive, promotive, public health and rehabilitative aspects of health care, and benefiting only the upper crusts of the urban population (GOI, 1982).

The Question of Different Systems

The official view :

The rising aspiration of the masses and increasing demands of medicare from the disease-ridden people, particularly incensed by the glaring difference in the standard of medicare between the haves and have nots, have so far been chiefly instrumental for increasing allocation in the state health sector. People have also become aware of the discriminatory availability of the state service. The government, therefore, has to admit the existing reality which is self-condemnatory and with the view to find a way out, advocated promotion of indigenous and homoeopathic systems of medicine. To provide ideological cover, a large number of virtues of those systems have been discovered and invoked, e.g. rich heritage, glorious achievements and cultural compatibility (GOI, 1982). The government realises that if the grievance of the larger section is contained by providing them with low-cost non-allopathic systems, the absolutely necessary but costly provision of modern medicine for the affluent urban section can be safeguarded. But, the life-saving contributions of modern medicine cannot be entirely withdrawn from the people. Hence, the question of integration. It has been recommended that the practitioners of the non-allopathic medicine must have a 'basic knowledge of human anatomy, physiology and other necessary medical knowledge'; research should be carried out with modern equipment and diagnostic methodology, so that it becomes acceptable to the modern scientific world; modern technology be introduced for the manufacture of traditional medicine and specific standards be adopted to ensure quality of raw materials and manufactured products. For integration of the indigenous and modern systems, the services of non-allopathic practitioners should be integrated,

at the appropriate levels, within specified areas of responsibility and functioning, in the overall health-care delivery system (GOI, 1981 and 1982).

The leaders miss the point that if the above measures are implemented, nothing remains of tradition and the very indigenous character is wiped out. They also forget that the non-allopathic systems have little to contribute towards preventive, promotive, public health and rehabilitative aspects of health care. But then, their concern is not so much for traditional systems as for availability of some acceptable form of medicare for the uncovered population.

The semi-official view :

The study group of ICSSR-ICMR recommends that there should be a national system of medicine with 'synthesis', and not 'integration' of different systems; practitioners of indigenous systems be utilised in the national system; each system be allowed to retain its own identity and grow according to its own genius; in medicare institutions patients be offered choice of systems; in course of time all training institutions of medical and health personnel will teach one and same system of medicare with individual systems being offered as specialisation courses at the post-graduate level; and in the same breath, 'in course of time medical graduates from any medical college would be able to provide such multi-system care' (ICSSR-ICMR, 1981). Earlier an official committee also recommended a national system of medicine and health services, in keeping with our life systems, needs and aspirations. (GOI, 1975).

It is clear that these recommendations are full of self-contradictions and wishful thinking that these cannot be taken as anything but hasty remarks. But one point is obvious. The observers are anxious that somehow the non-allopathic systems be supported and given a place, whatever that may be, in health care service.

The WHO, has since come out as another champion of traditional systems. Facing the reality of shortage of personnel and provisions of MM, and the existence of a large number of practitioners of other systems, the WHO calls for integration at appropriate levels but also suggests selective scientific training for personnel and scientific biomedical research into their therapeutic materials.

The above views, while talking about cultural compatibility, commercialisation and high cost of modern medicine have introduced another ideological

point that health is essentially an individual responsibility (GOI, 1975), and that community participation is the process by which individuals and families assume responsibility for their own health and welfare and for those of the community. (WHO-UNICEF, 1978).

The non-official progressive view :

Essentially the progressive views on the question of non-allopathic systems evolve from their critiques of modern medicine. There is no such thing as medicine in general; medicine is always articulated in a given social formation and the mode of production of that social formation gives rise to its corresponding medicine; thus we can only speak of feudal medicine, capitalist medicine, or communist medicine; thus, modern medicine, is capitalist medicine. It has a dual function : (a) dominance and control, exercised to maintain the exploitative relations of production, and (b) useful and needed function, which is necessary in any society, to contribute to the care and cure of the working population. These two functions are not separate but, rather, the control function is exerted through the useful function (Navarro, 1983). Modern medicine is mechanistic and reductionist giving rise to professionalism and mystification, establishing the domination of a class of elite health professionals who propagate, reinforce and maintain bourgeois ideology (Waitzkin, 1984). Perhaps the most profound, impact-making critique is that of Ivan Illich. His analysis of clinical, social and structural iatrogenesis, leading to growing medicalisation of life exposes the negative effects of modern medicine in a telling manner. (Illich, 1977). Modern medicine, based on the paradigm of clinical medicine, even at its most progressive limits persists as an individualistic, class-biased and ideological mode of diagnosing, treating and preventing illness, and is necessarily inadequate as it ignores the socio-political and economic determinants (Turshen, 1977).

To obviate the negative effects of modern medicine, a number of prescriptions have been offered, the promotion of traditional systems of medicine being one of them. The Chopra Committee (1948) recommended the use of indigenous systems at the lower level and synthesised medicine at the higher levels of medicare, and it has been lamented that had these recommendations been implemented at that time, it would have resulted in a drastically different system of medicine. (Jesani & Prakash, 1984). Though the present official view, is veering round to these recommendations, there appears to be little prospect of the development of a drastically

different system of medicine. While emphasising the alien identity of modern medicine and cultural compatibility of indigenous medicine, and recommending maximum use of self-care procedures and various home remedial measures, services of traditional healers of various systems, and community-selected primary health workers, Banerji concedes a central scientific core in modern medicine and seeks its separation for correct application in Indian care system (Banerji 1982). Others, while deprecating unnecessary polemics between different systems, call for 'a coherent synthesis of the valid elements of the different systems of medicine into a modern scientific health science', and argue that simplified scientific analysis of drugs and remedies of different systems and their propagation among the people will result in self-reliance of both the people and drug availability. "Ayurveda can continue to provide valuable ideas for research in basic and applied biomedical research. But this would be possible when Ayurveda undergoes a basic transformation. Ayurveda has to become Ayur-Vigyan (Science)" (Vaidya). Another intensely vigorous view is the Report of the Committee on the Indigenous Systems of Medicine. Even after a long period of neglect due to absence of State patronage and well over a century after the introduction of western medicine which became the sole recipient of state help, the indigenous systems of medicine were not only serving the need of over 90% of our people, but doing so much more effectively and economically than western medicine" (Government of Madras, 1923). This view denounces the attempt of synthesis by placing the indigenous remedies under scrutiny of modern science and, asserting that the present location of different systems is due to the political process, urges clear identification of a system of medicine that can meet the needs of our people (PPST, 1984). In respect of tribal societies, it is claimed that tribal medicine which is actually based on ancient ayurveda, is competent enough to meet the local needs and for the protection of cultural identity and with the objective of self-reliance, entry of modern medicine should be barred (Shankar, 1985).

The Chinese connexion

All these views almost uniformly draw inspiration from the Chinese model which is hence, discussed separately. The Chinese policy, a few years after revolution, of integrating the traditional medicine and practitioners into the mainstream of medical education and health care service, received worldwide publicity and almost universal

appreciation. It has since been hailed as a success. Attempts have, therefore, been made to introduce this policy in several Third World countries with disastrous failures which have later been explained as due to difference in socio-political-economic structure. But the actual Chinese model has seldom been painted clearly and truthfully.

The basic aim of the Chinese health care service in the fifties was to maintain, develop and raise *production* both in rural and urban context i.e. agriculture and industry. It has been repeatedly stressed in the health policy of the government and the party that the principal aim of health work is to ensure industrial and agricultural production. This fact may embarrass the strident critics of capitalist medicine and health care which is accused of pursuing the very same aim. Agriculture being the mainstay of the economy, organised rural health care is practically non-existent, health personnel and infrastructure being miserably inadequate, the earlier Mao Tse Tung thought has been invoked, "... to rely on modern doctors is no solution. Of course modern doctors have advantages over the doctors of the old type, but if they do not concern themselves with the sufferings of the people, do not train doctors for the people, do not unite with the thousand and more doctors and veterinarians of the old type in the Border Region and do not help them to make progress, then they will actually be helping the witch doctors and showing indifference to the high human and animal mortality rates". Mao's reference to witchcraft is very real. Joshua Horn's own experience told us that the services of the traditional practitioners was available only to the rural elite, because they were highly professionalized and expensive and the herbal medicines were also very costly. The overwhelming majority of the poor villagers had actually to depend on the village quacks and witch doctors in pre-revolutionary China (Horn, 1971).

Integration of Chinese medicine with modern medicine is only a part of a whole comprehensive health care service. This policy is based on the principles of modern medical science and operated through indigenously available technology, and infrastructure. 'Mass line' in preventive work and environmental protection, emphasis to maintain production, integration of traditional doctors for man-power mobilisation in medicine, comprehensive coverage of population, rapid production of health personnel, and political dominance in health administration—are the basic elements. Regarding integration, the policy adopted at the First National

Health Conference (1950) was based on the attitude that in view of the shortage of doctors and medicine, Chinese traditional medicine should be utilized (because it was there and readily available rather than because of any inherent value it had). In the policy of 'unity and reform' the stress was on reform of the traditional system by the western. When this attitude failed to bring the desired results, the political command intervened and the campaign for superiority of Chinese culture and glorious tradition of Chinese medicine was launched which enhanced the social status of the traditional practitioner and resulted in more widespread use of herbal remedies. "Even when herbal remedies were not very effective, they were of considerable importance as they still provided the peasant with some support, whereas if it had been decided that only modern drugs should be used, he would have none at all as expenses would have placed any drug therapy out of reach. The use of herbs for the purpose of psychological support — though not explicitly admitted in the Chinese press — is not much different from the wide variety of placebos offered to patients daily in industrialised countries". (Wilenski 1979).

From the beginning of the sixties, the enthusiasm towards traditional systems ebbed, and professionalism and elitism again started gaining dominance; even the traditional practitioners were concentrated in the larger country towns and served on the basis of private practice. Mao's intervention at this stage on the eve of the cultural revolution reversed this direction. In his famous June 1965 directive Mao said, "Tell the Ministry of Public Health that it only works for 15 per cent of the entire population. ... The Public Health Ministry is not a people's Ministry. It should be called the Urban Public Health Ministry or the Public Health Ministry of the privileged or even the Urban Public Health Ministry of the privileged. Medical education must be reformed. ... A vast amount of manpower and materials have been diverted from mass work and are being expended in carrying out research on the high level, complex and difficult diseases, the so-called pinnacles of medicine. As for the frequently occurring illnesses, the widespread sicknesses, the commonly existing diseases, we pay no heed or very slight heed to their prevention or to finding improved methods of treatment. It is not that we should ignore the pinnacles. It is only that we should devote less men and materials in that direction and devote a greater amount of men and materials to solving the urgent problems of the masses. ... We should keep in the cities those doctors who have been out of

school for a year or two and those who are lacking in ability. The remainder should be sent to the countryside". (Mao, 1977)

The large numbers of the health professionals, since sent to work in the rural areas soon realised that they could not handle the vast burden of rural ill health and also they could not hope to return to urban institutions without an alternative rural health service. Soon emerged the barefoot doctor who is neither a paramedic nor a doctor's auxiliary, but a part-time doctor trained in diagnosing and treating, without assistance, common or recurrent diseases prevailing in the locality. The scheme succeeded for the chief reason that medicare infrastructure had since been organised on the basis of universal coverage right up to super-speciality at the top most level with efficiently functioning referral system. But the recent trend is a shift towards greater professionalisation and medicalisation of the health system, higher education of the barefoot doctors, greater emphasis on higher quality of medical education with the return to seven-year curriculum, and more research centres, modern hospitals, specialists and technologically sophisticated interventions (Rhode, 1983). China now takes pride in letting us know that she, in 1982, has 9,52,000 doctors of modern medicine compared to 2,90,000 of traditional medicine and 2000 senior doctors of modern medicine also trained in traditional medicine. While in the year of liberation, there were 10,000 fully trained and 30,000 partially trained doctors of modern medicine and 5,00,000 traditional practitioners. (Wilenski, 1979).

The culture issue :

Concern for Indian culture is the common issue in the agenda of the advocates of the traditional or integrated systems. "Perhaps the simplest and most useful formulation of the concept of culture is to say that it is acquired or learned system of shared and transmittable ways of adjusting to life situations. A common characteristic recognized in all treatises on culture is *change*, a capacity to shift, accumulate or loose components, which makes culture far more flexible and variable than are the somatically determined patterns of behaviour" (Simmons & Wolff, 1954). Culture is not a rigid frame, inert model, or static dogma of guidelines governing community or individual conduct. Culture is built up on complex interactions — involving physical, environmental, ideological, political, and predominantly economic. Economic relations i.e. relations of production, exchange and consumption, find expression in cultural and social responses,

and changes in the economic relations bring about profound changes in the cultural matrix. Tradition is not culture. Tradition is the vestiges of earlier cultural trends, and ideologically influences the present and future trends. Just because the peasant lives with the bullock cart for generations, he should not be taken as culturally bound to the bullock cart, or demands to remain so. Adherence to witchcraft and ideological allegiance to the metaphysical theory of health and disease do have their roots in economic relations and is a reflection of the stage of development of the productive forces and superstructure. While on the one hand, the capitalist onslaught on the tribal ways of life does produce disastrous consequences, on the other, the urge to protect the tribal identity gives rise to irrational obscurantism which is anachronistic to progress and inadequate to meet the need. Such an urge often leads to the proposition that western medicine is not essential for India's particular needs and we are entitled to a separate scientific medicine relevant to our social-cultural-historical context (Bajaj, 1985).

A carefully planned study of health behaviour of rural population of India has revealed "that the response to the major medical care problems was very much in favour of western (allopathic) system of medicine, irrespective of social, economic, occupational and regional considerations. Accessibility of such services (modern medicine) and capacity of the patients to meet the expenses were the two major constraining factors" (Banerji, 1974). In contrast, the observations of studies conducted in 1951-52 in villages of Rajasthan and UP reveal that the villagers largely rejected the western medicine in favour of witchcraft and traditional remedies (Carstairs and Marriot 1955). This profound change has occurred not only due to the remarkable curing and life-saving remedies of modern medicine but also from economic changes in all spheres of rural community life and consequent politico-ideological changes. A study by 13 social scientists in the Toudshan commune health clinic of Kuangtung province, China, concludes that incorporation of indigenous medicine into the organised health care service is a rational move on political, ideological, technical, socio-medical and economic grounds but concedes that 70 percent of patients opt for western medicine. Medicine bag of the barefoot doctor carries 80 percent drugs of modern medicine (Lee, 1982). In Shangdon province, China, the number of x-ray examinations increased by 80% in the rural areas in 4 years ('76-80'). Of the total 4111 x-ray machines in the province, 3824 are situated in rural and district hospitals (Feugetal 1984). The

assertion of cultural compatibility of traditional medicine in India appears to be a myth. The Government of West Bengal has for some years appointed homoeopathic and ayurvedic practitioners in the rural health centres. In all such Centres they not only remain idle but usually their services are utilised for other purposes. No quantitative study is available on the practice of use of modern drugs and implements by the non-allopathic practitioners. Journal of the IMA (June, 1985) published a letter from one Dr Buch who complained that the existing govt rules precluded him from recruiting 15 Ayurvedic graduates, who he interviewed, for a TB hospital at Keshod, Gujarat, which had been suffering from extreme dearth of doctors, even though all those Ayurvedic doctors were practising MM in the nearby villages. He lamented, "Why we continue to waste our national resources on such education which our youth decline to practise in future?"

The other issues :

Mystification : is more pronounced in the traditional systems which draw sustenance from metaphysical philosophy and fatalistic belief regarding health and disease, isolated from environmental and socio-economic-political determinants. In contrast, the body of knowledge of modern medicine is not only universally accessible but, shorn of its avoidable terminology, this knowledge can be and has been mastered by non-medical personnel. Because of its integral relationship with other physical and biological scientific disciplines, modern medicine has largely been demystified at the higher functional level. The mystification of the practice of modern medicine is not an isolated phenomenon but is prevailing in all other professions including even the legal profession which does not depend on science and technology. This mystification is a feature of market economy and an instrument of exploitation and profit. Demystification at the level of practice can be brought by change in the economic relationship and not by replacing with more mystified traditional systems.

Professionalism : which also is utilised for profit and exploitation is similarly a feature of commodification of medicine and has little to do with systems of medicine. With the gradual diminution of the commodity character of medicine, China has curbed professionalism to a great extent. On the other hand, in post-revolutionary Cuba, professionalism has been encouraged and strengthened in a State monopoly health system but that did not pose any constraint in the way of establishing

an egalitarian health care service. Though professionalism prevails in Cuba to an absurd extent (only doctors are entitled to give injections), still Cuba has made remarkable strides in raising the health status of the people and the health system is free from professional exploitation.

Individualism, Mechanicism, Reductionism, Class-bias, Commodification, etc : These are not peculiar to any system but owe their roots to the economic base and the dominant ideology. Rather it can be conceded that modern medicine is least endowed with these vices because it has opened up the possibility of taking a materialistic and holistic view of health and medicine, owing to large expansion of the data-base and knowledge-base of the natural sciences and social sciences; growth of socialisation of production is bound to develop socialisation of medicine. Choice of systems of medicine has little relevance to this change.

On the other hand, a rational view towards all these elements should also be evolved. One who vigorously attempts to expose the bias of capitalist medicine against people's interests, may run the risk of making a fetish of these elements. Individualism, mechanicism, reductionism etc. are not touchstones that turn everything they come into contact with ugly. In all social functions, some practice of mechanicism and a reductionist analysis are inevitable at the micro-level. Given the operation of socialist analysis and policy in the health care programme of a socialist society, at the micro-level it is reduced to providing treatment for sick individuals who, having similar socio-economic background, may happen to differ widely among themselves in respect of physical, psychological, behavioural characteristics as well as in the quantity and quality of their responses to medical intervention. Indeed, the situation is necessarily reduced to taking a mechanistic, individualistic and interventionist approach in performing the instant task of attending to a sick individual who is not only a number as featured in the policy and programme making at the macro-level, but also a human being possessing a distinct personality and capable to respond to and interact with, employing his own judgement, the medical provisions earmarked for him by the organised society.

The Real Issue

The real issue is to formulate, organise and develop an egalitarian health care service — with preventive, promotive, curative and rehabilitative

aspects. Such an ideal is realisable only in a non-exploitative economy. Doyal and Pennell have shown that in the Capitalist economy, development of medicine and organisation of health care follow the needs, priorities and prerogatives of economic relations. That is why we find changing emphasis on public health, curative medicine, individualistic medicine, population control and so on in different periods. "It is ultimately profit, rather than a concern to improve overall living standards, which is the most important determinant of economic and social decision-making in Capitalist society" (Doyal & Pennell, 1981). Rejecting the anti-technology, anti-industry and anti-modern medicine stance of Ivan Illich, and acknowledging its positive achievements in the health sector, they argue that modern medicine is neither a value-free science nor an altogether evil force, and that its ill effects could be overcome in a radically changed socio-economic order. Indeed, the idea of changing the character and organisation of discriminatory and exploitative health care by choosing and introducing a particular system of medicine, itself appears to be a mechanistic, instrumentalist and utopian view. True, it is conceivable that mobilising the large number of traditional practitioners and comparatively cheaper herbal remedies under the State sector following the Chinese model, a large section of uncovered population may be offered some form of medicare. But such a view is hardly relevant in the Indian context on two counts. One — unlike China there is no state-monopoly control over the health system in India and hence it is not feasible. Second — it needs to be assessed first, if India lacks in the necessary number of trained personnel in modern medicine for the operation of Primary Health Care Service of comprehensive coverages. Commenting that "the argument in favour of the use of traditional practitioners does not question why even modern practitioners of private medicine have not been properly integrated into third world health care services", Oscar Gish stresses that the major obstacle is not the limited resources or technological deficiency, but the social system which places a low value on the health care needs of the poor (Gish, 1979).

Why then all these debates about traditional systems? Since the political independence of the colonies, in the era of neocolonialism the poverty of the third world masses continue to be a headache of the imperialist camp. 'Economic growth' approach was introduced stating that the primary need is rapid increase in GNP which will necessarily trickle downwards to alleviate poverty. After two decades

when this strategy failed, lately a new 'basic needs approach' has been advocated. Ibrahim Samater has, in an analysis of the strategy and tactics of the controllers of international economy, shown that this new approach is another attempt to contain the growing unrest among the exploited and deprived population of the third world; and that it is also bound to fail because without any change in the property system, in power relations and in the demand structure, the basic needs e.g. food-cloth-shelter-water-sanitation-health etc. cannot be met. The ruling class needs to uphold and maintain the image of the state as the benevolent arbiter for the masses and the state thereby needs to put priority on relief and medicare. Physical ailment, debility, death are extremely sensitive elements with political consequences. The benevolent image of the state distributing medical relief often atones for its other failings. One may be poor or unemployed but when the state is there to save him from death due to illness, the benevolent image brightens. But this benevolence is difficult to mediate through the provisions of modern medicine. The cost is prohibitive and will necessarily erode the profit margin reducing capital accumulation. The only alternative way appears to be the glorification of the achievements of the traditional systems with a coating of the theory of cultural compatibility. The culture of course, refers to poor people's culture — not of those who can afford to purchase modern medicine. The vigorous promotion of traditional systems by official and semi-official circles is not out of conviction in the efficacy and inefficacy of traditional and modern medicine respectively, but out of pragmatic political considerations with the purpose of co-opting and weakening any challenge to the existing exploitative socio-economic order which actually is the cause of the deprivation of the basic needs e.g. health care. An uncritical support to this strategy by the progressive health activists will be a liberal humanist deviation propelled by subjectivism.

From the foregoing it is evident that choice of a particular system or any integrated systems is of little relevance to the demand of a people-oriented egalitarian health system. The traditional system, at their best, can offer a few remedies in curative practice. A comprehensive health system will have to be based on scientific tenets, but while the underlying theoretical pre-conceptions of scientific will need to be critically re-examined to identify the elements of class-bias and mechanistic paradigm, the operative infrastructure should be explored to resist and eliminate the commercialism, mystification, professionalism of the medical practice. Scientific

medicine is a product of modern science developed in the Capitalist regime. While welcoming and practising modern Science and Technology in all fields of social life and economic development, rejection of modern medicine is not only anachronistic but utopian.

The role of traditional systems therefore appears to be limited to effective (organic and functional) remedies for medicare, employed under the same regulatory mechanism as that of modern drugs. Relevance of the apparently unending debate on the choice of a suitable system of medicine is only academic and sterile in the context of our search for a people-oriented comprehensive health care service.

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A SEARCH FOR ALTERNATIVES

Organising Vaidus in Gadchiroli

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Gadchiroli, a predominantly tribal district in Maharashtra is currently witnessing a new experiment in providing appropriate health care. The vaidus, local healers, of the area have come together to revive and even reformulate an ancient system of healing which is fast vanishing in the face of exploitative inappropriate medicare. A report.

Experiments in community health initiated in the seventies have now come to stay. There have been several attempts of evaluating such projects, the latest being by Sumathi Nair (SHR II.2.) With due acknowledgement of the contributions of these projects to community health, their limitations are being increasingly identified. The multiplicity of such models is low due to the requirements of heavy inputs in terms of resources like finance, know-how and skills, drugs, training and referral facilities and personnel and so on. In most cases, the political component of health/life of community is ignored, sidetracked or played down. Most such projects revolve around 'Allopathy' which brings with it its inherent limitations, moreover, although allopathy is the 'least unscientific' method, it remains culturally alien to most people.

It has thus become imperative to search for new alternatives, free from the above constraints. In this article, I wish to describe one such experiment of organising vaidus (traditional health workers) undertaken by the 'Paramparagat Vanaushadhi Vikas Va Samshodhan Kendra' (Centre for Development and Research in Traditional Herbal Medicine) in the Gadchiroli district of Maharashtra. However, neither the author nor activists of the 'Kendra' wish to claim that it is the only alternative. It can, at best, be one of the several alternatives. The form and content of each such attempt could depend upon local conditions and priorities of the experimenting group.

Gadchiroli (formerly a part of Chandrapur) is a predominantly tribal district on the borders of Maharashtra with MP and AP. In the 'fifties' it was a stronghold of socialists when Narayansinh Uike, the first tribal graduate from Vidarbha region of Maharashtra, organised tribals around issues of land distribution, education and atrocities by ruling classes. Recently, some activists of Chhatra Yuva Sangharsha Vahini (the same group which supports the Kendra) have succeeded in organising

large numbers of landless labourers and peasants working under the Employment Guarantee Scheme (EGS). Attempts are being made to launch a broad-based 'Nisarg Bachao, Manav Bachao' (save nature, save humankind) agitation to oppose the proposed Inchampoli dam, which is expected to cause largescale deforestation and evacuation of many tribal villages in the nearby districts. Sukhdevbabu Uike, a follower of Narayansinh Uike and an activist associated with EGS and Nisarg Bachao has recently been elected to the Assembly from this area. All four MLAs from this district belong to opposition parties, much due to influence of activists in EGS and Nisarg Bachao.

The same team of Vahini activists has, for the last three years, undertaken the task of organising vaidus, with a view to evolve an alternative system of healthcare service which can be made available to the needy as and when required. It is not just a revival of an ancient system crumbling against the pace of changing times, but an attempt to evolve a dynamic system challenging the monopoly and mystification of established medical system. It would be integral to the cultural milieu of people and within their reach. It would be a system based on experimentation, experience sharing and an urge to serve the people (and not for profiteering). The team is trying to evolve democratic methods to achieve this object without the use of foreign aid or even possibly full-time workers. Judging by the meagre input of time, finance and people, it would be unjust to pass any judgement about this venture. However, their experiences undoubtedly point towards newer sign-posts in community health.

Vaidki in Gadchiroli Today

Vaidus are traditional experts in diagnosis and treatment of diseases; collection, processing, compounding and dispensing of medicines without any economic incentives. For them, this is a noble service, not a profession. They are mainly responsible

for health care of poor people, patients with chronic ailments and in far-flung areas yet inaccessible to modern health services. The transfer of knowledge is mainly from father to son or to other worthy male member of community. In exceptional cases, where sons are unwilling/unworthy the knowledge is passed on to the daughter-in-law (but not to a daughter as she 'belongs' to a different family). Many vaidus, specially the educated ones, try to enrich knowledge gained from the Guru through experimentation and study of Ayurvedic texts. Vaidus in this area use drugs from plant, mineral and animal origin as well as mantras (chants) for treatment of physical and psychological disorders. They have their specialisation such as asthma, snakebite, veterinary diseases and claim to cure diseases untreated by modern medicine-tetanus, cancer etc. Although it remains to be seen how many of these claims stand scientific scrutiny, there are many instances confirming this skill in diagnosis and treatment. They follow several guidelines laid down in Ayurveda regarding the day, time and season of plant collection, diagnosis of diseases and processing of crude drugs. Some formulations used by vaidus are referred to in Ayurvedic texts.

Current Issues confronting Vaidiki

The processes of 'development' and 'modernisation' have disrupted the socio-economic-cultural fabric which sustained and nurtured tribal life and specially their system of medicine and posed grave threats to their very existence. Like its counterparts everywhere, Gadchiroli has witnessed massive butchering of trees, disruption of the intricate eco-balances triggered by profit-hungry commercial interests hand in glove with government officials. An interesting example of 'modernisation' with total disregard to people's real needs is a dairy recently set up after destroying several acres of rich forest. Its premises have been declared as 'prohibited area' for outsiders. Hence vaidus are denied access to the few medicinal plants which have managed to survive in the compound. It's an agony to watch a patient suffer due to non-availability of a drug whose whereabouts are known, but which cannot be procured. The dairy has not in any way helped the tribals. It has only resulted in a complete drought of milk in the villages.

Large strips of forests are burnt by contractors for a better yield of tembhurni leaves (used for making bidies). Moh trees, of great economic, cultural and medicinal significance are burnt down and truckloads of coal sent to cities. The rich, symbiotic flora is being replaced by large scale

plantations of monocultures of teak and eucalyptus. Many valuable medicinal herbs have become scarce, some extinct. Ironically, such 'modernisation' has encouraged superstitious practices. Due to the depletion of herbal medicines, many vaidus are resorting to more non-drug 'therapies' like mantras, talismans, animal-sacrifices and so on.

'Development' has brought to tribal towns a new exploiting species — 'doctors' who, posing as demi-gods, promise instant relief and cure-alls through miraculous modern drugs, ushering in a culture of injections and antibiotics. The 'modernophilia' has lured people to spend their meagre resources on unnecessary (often harmful) drugs and cultivated in them distrust for their traditional system of medicine. (The is not to deny the utility of modern medicine but to protest against its present misuse).

Even then, established medical professionals often feel threatened by the skill and knowledge of vaidus. There was an interesting case of a veterinary doctor who extracted large sums from people and was still unsuccessful in a number of cases. The cases given up by him were then successfully treated by a young, dynamic vaidu. The people jeered at the doctor, who, in turn, lodged a complaint against the vaidu for practising medicine without registration. However, the village people unitedly stood behind the vaidu and did not allow the police to arrest the vaidu. With growing assertiveness and awareness in vaidus resulting from their organisation, more such attacks from medical establishment are likely to follow.

Vaidus manage to earn their living in difficult summer days by selling crude drugs to traders who take full advantage of the situation. Arjuna bark bought at the rate of 5-10 paise/kg is sold by middlemen to drug companies at the rate of several rupees/kg (that too after considerable adulteration).

The depletion of flora has forced vaidus to spend considerably more time and energy in collecting medicinal plants thus making them increasingly difficult to practise vaidiki merely as a social service. Moreover, people now tend to visit them only when allopathic medicines fail. Even if they are completely cured by a vaidu's medicine, they follow the 'tradition' of not paying him, vaidus too follow the tradition of not asking for payment. In a society where status is increasingly being equated with money, vaidus are fast losing their respectable place in the community. All this has distracted the young generation from vaidiki. In most cases, the

present generation is the last practising one. Various taboos have further restricted the transfer of knowledge e.g. the taboo on allowing a 'shishya' to part with information before his guru's death. Many learned vaidus have died without passing on knowledge to anybody. Thus, some valuable information has vanished for ever. Vaidiki, today stands on the brink of extinction.

Vaidus' Organisation

Organising vaidus has been a great challenge for the group. Professional jealousy and mutual suspicion, complacency, taboos on information-sharing, lack of lively contact with the outside world and prejudices among vaidus obstructed them from coming together. However, there have been some favourable factors too. The growing realisation of the gravity of situation by vaidus, consciousness gained through their experiences (direct/indirect) of organisation of EGS workers or on forest issues the ability of activist to relate individual/professional problems of 'development' and 'ecology' have helped vaidus to come out of their shells and join hands for a common cause. There have been several camps for mutual information sharing and frank discussion on common problems.

There are greater challenges ahead: initiating sustaining democratic processes of decision-making and implementation, evolving short and long-term programmes to give an expression to their organised might, cultivating a spirit of experimentation and enrichment of knowledge, arranging for their continuing education through interaction with other vaidus and experts in the field, carrying out field trials for verification of claims made by vaidus and most important, helping the movement develop independently without dependence on the activist group and yet retain its linkage with the wider struggles.

At present, the vaidus, on their own initiative have decided on the following programme:

- i) To spread organisation to a wider area.
- ii) To organise a series of camps — for information sharing on diseases and remedies discussion on common problems.
- iii) To set up a co operative for storage and processing of crude drugs (processed drugs fetch a much higher price) to directly bargain with drug companies so as to eliminate the middlemen.
- iv) Felicitations of senior vaidus at the hands of reputed vaidyas (ayurvedic practitioners) and making other efforts to create awareness in society about the role of vaidus.

The organising group wishes to try out a scheme

wherein five acres of land obtained from the forest department under the Social Forestry Scheme will be used for cultivation of important medicinal plants. The cultivator will receive a small regular sum of money from the forest department for developing a forest on the land plus a part of the forest yield. This experiment, if successful, would help reduce the shortage of medicinal plants and also provide some monetary benefit. This may help to preserve the spirit of 'social service' intensely prevalent in vaidus. We believe that the spirit of selflessness is the one we wish to develop in tomorrow's society. So, this spirit already present in Vaidus should be encouraged. However, it is not yet clear whether it would be possible to nurture this spirit without their exploitation in present system.

It is difficult to say whether vaidus, long used to confirming to a particular system of healing will be open enough to freely discuss with others their understanding of diseases and drugs and perform experiments with scientific objectivity and make suitable changes in their practice. It also remains to be seen how formation of new forms of mystification of knowledge, and hierarchy could be prevented.

There are no readymade solutions to these problems. However, there is room for hope as experiences reveal the intelligence, innovation, scientific objectivity and passion for knowledge hidden in semi-literate folks. Natthuji's, is a glorious example. An illiterate shepherd boy, he used to leave his cattle for grazing outside the school building so that he could overhear alphabets chanted by school children and revised them with help of friends fortunate enough to attend school. He learnt reading from the names of tins at a grocer shop. He cultivated his interest by purchasing books. He had the guts to experiment on himself and his son to gain confidence about his experiments. Today, he is assertive enough to tell the patient to choose between him and the doctor. It is a pleasant surprise to see him at such an age, scan through books in search of new information. So, when Natthuji says, "Well, it's not impossible to build and sustain vaidus' organisation for peoples benefit", there should be at least some reason for hope.

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POLITICAL-ECONOMIC-STRUCTURES — APPROACHES TO TRADITIONAL AND MODERN MEDICAL SYSTEMS

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Abstract—The paper is concerned with the WHO-UNICEF suggestion to train indigenous healers to be first-line deliverers of medical care. Rather than evaluate this proposal directly, the paper concentrates instead on the factors currently influencing the relationship between indigenous and Western medicine. A framework, viewing the potential health impact of the use of indigenous healers, is constructed through the comparative method. Data reviewed consists of monographs, journal articles, dissertations etc., and considers historical, cultural and political theories of the status of native medicine. The paper concludes that the politics of health care is a greater impediment to the provision of "health care for all" in some types of political economic systems than in others. Thus events in the health care system are seen as influenced by the larger socio-political system. This article is reproduced from "Social Science and Medicine" 15A : 101-108, 1981.

Introduction

Medical need in the developing world

The scarcity of medical service in most of the world is one of the factors affecting the health of the peoples of the earth. Although the outcome of medical care is greatly hampered by poverty, associated problems of malnutrition, poor sanitation, crowding and lack of education, the social and economic gap between the have and the have-not nations extends to the area thought to limit the destructiveness of disease and ill health. Bryant discusses this, perhaps more eloquently than others :

Large numbers of the world's people, perhaps more than half, have no access to health care at all, and for many of the rest the care they receive does not answer the problems they have. The grim irony is that dazzling advances in biomedical science are scarcely felt in areas where need is greatest. Vast numbers of people are dying of preventable and curable diseases or surviving with physical and intellectual impairment for lack of even the simplest measures of modern medicine. Whatever the desires of nations to reach their people with health care, the actual task of doing so is extraordinarily difficult. It is difficult in Malawi, one of the world's poorest countries, and so is it difficult in the United States, one of the world's richest... [1, pp.X 91].

Health expenditures vary from between 56 dollars per inhabitant in the United Kingdom to 20 dollars in Indonesia. Eleven percent of Colombia's budget provides 3.50 dollars per inhabitant while 4.7% of the United States government expenditures means 47.40 dollars per inhabitant for health services. The meaning of this is clear in the preceding tabulation of number of hospital beds, whose definition can range from a canvas cot to an electric-powered special. The preceding and following statistics are from Bryant¹ for the period 1961-1964.

The discrepancy between urban and rural areas can exacerbate the problems of providing care. Part of this is due to personal reference:

The reluctance of doctors to leave the big cities and go out to practice their profession in the rural areas is a long standing basic medical problem which Mexico has in common with all other Latin American countries [2, pp.262]

The result of this reluctance? A difference in the rural-urban physician ratio (1:3000 vs 1:500). This is not just a local phenomena. UNICEF-WHO estimate "that in a number of developing countries less than 15% of the rural population and other underprivileged groups, such as slum dwellers, nomads, and people in remote areas have access to health services".²

Another reason for rural shortages of medical services is lack of resources. Many of the underdeveloped countries are predominantly rural and, as our earlier comparisons showed, lacking financial resources even for urban areas.

Country	Expenditure	(%Budget)	Population/bed
Jamaica	\$9.60	11.0	240
Senegal	3.47	6.6	700
Thailand	0.60	3.4	1280

At the University in Kampala, Uganda, the press of obstetrical patients is so great that the average hospital stay for delivery is less than 24 hr. At Sierra Hospital in Bangkok, Thailand fully half of all hospital admissions, 17,000 of 34,000 in 1 year, are to the obstetrical service. But despite the overwhelming numbers of obstetrical patients in these two institutions in these countries at large, [less than 15% of all babies are delivered by trained personnel [1, pp.41].

Thus, the provision of medical services to all is a problem, particularly so when the lack of resources is coupled with attempts to provide doctor-hospital Western-style services to rural areas.

Indigenous medicine

The previous discussion neglects the presence of medical services in all socio-cultural units. Bryant¹ and Schendel² note the influence of local healers and the belief in magical medicine. Bryant notes that accessibility of care and reduced social distance are also factors in their utilization. Lee⁴ points out that in Hong Kong it is easier to find a Chinese practitioner (4506) than a modern physician (2317). By deduction we realize, when Bryant tells us that only 15% of a nation's babies are delivered by trained physicians, that the other 85% are assisted into this world by someone (usually, but not always, by someone other than the mother). Stromberg stresses the reliance on local healers in Ghana for the 70-80% of the population living in rural areas. He states that the absence of modern health facilities, in Ghana as in other countries, does not mean there is a vacuum in the rural areas,

...as in many other countries, traditional birth attendants, healers, herbalists, and practitioners of various types exist in most villages and treat many diseases and other health problems....thus there is a health care system throughout the country which is consonant with traditional beliefs and practices [5, pp. 15].

WHO-UNICEF³ agree and suggest the different types of indigenous healers may be trained and integrated into the general health system.

This solution seems like a panacea. Given the shortage of medical dollars, personnel, and facilities, problems of transportation, the social and cultural acceptability of new ways, *why not* train indigenous healers to care for the medical needs of their communities? The someone delivering 85% of two countries' babies might benefit from training. Further-

more, most of the medical needs of the world are not complex:

It involves recognizing threats to health that are visible and monotonous: malaria, diarrhea, pneumonia, bilharziasis, hookworm, malnutrition, tuberculosis—or problems that are less a threat and more a personal concern: leg-ulcer, earache, constipation, headache, broken finger, inflamed eye [1, pp. 61].

Given the potential for traditional healers to provide health care that is affordable, accessible, culturally relevant, belongs to the people, and has the possibility for serving as a conduit for new ideas in areas other than medical—what factors influence the relationship between it and modern medicine? There are several theoretical approaches that may be taken. To answer the question, why not utilise indigenous medicine, it is also necessary to investigate the imbeddedness of the current relationship between modern and traditional medicines in the social system. That is, various factors have led to the exclusion of native healing systems from most modern medical systems. What are these factors? How might they relate to the utilisation of native medicine in a modern setting? What happens to the indigenous medical system as a nation Westernises (modernizes, industrializes, develops)? This, then, the factors influencing the utilisation of indigenous medicine, is the focus of this paper. But first, the methodological issues must be discussed.

Toward a framework—the patched-up design

To answer the question, what factors have determined the status of native medicine, requires a comparative approach. Factors thought to be explanatory for one time and place can be shown to be epiphenomenal and hence irrelevant in another. We will find in the next section that the integration of modern and traditional medicines has varied from one country to another. Why? Cross-national comparisons of health systems is one method of looking at health services organisation.⁶ This approach is, however, fraught with difficulty:

Those engaged in the study of comparative health service systems still struggle with problems of theory, method, and standards for cross-national research. In addition, the available data are too often fragmentary, unreliable, non-comparable and subject to political constraints [7, pp. 278].

Elling (see also Elling and Kerr⁸) has introduced a method for cross-national comparison — the method

of contrasting case studies :

Given the controlling character of the societal context, the concluding point of this brief introduction to the contrasting case studies framework will be that inferences about health services organization may be culled broadly from sharply contrasting systems, but it is likely that cross-system applications can occur only between those with somewhat similar levels of resources and similar political structures [6, pp. 268].

The principle behind this is elegant. The *method of difference*, as expounded by John Stuart Mill is one of his four types of evidence that can be used as evidence for a causal relationship, or in our case, to control for extraneous factors. It states that if various situations have all factors in common but one, that may be regarded as the causal factor.⁹ Elling and Kerr⁸ found that this principle could be used to identify countries that are over- and under-performers in health, wealth and education levels being similar. The comparative approach will be used here. In other words, possible explanatory factors will be tested by the method of difference for one set of countries; eliminating these, we will then discuss other factors elsewhere. This approach is not without dangers. Campbell and Stanley¹⁰ discuss the dangers inherent in experimental design. They are critical of this type of comparison, stating that it does not control for the selection of the groups to the initial purported causative factor or the loss of groups from this factor. More simply, there is little way of knowing what additional factors are responsible for the initial conditions. They describe a more refined variety of this model as a patched-up design with an inelegant accumulation of precautionary checks. The defense of this approach is twofold : First the world refuses, at least thus far, to be standardised to the interests of science; second, it must be asked if the lack of strictly comparable evidence is to limit the questions we may ask. This is addressed by McGranahan¹¹, who considers that perhaps cultural and social diversity is too great to permit international measurement. He feels that the need for data in formulating international social policy dictates continued comparative social research. It is the wish of this author that reports of this type, where quantification is deemed unnecessary or impossible, are, if not totally accepted, a stimulus to the further refinement of hypothesis of a broad perspective.

Factors Influencing the Use of Indigenous Medicine

Culture and progress

Galdston¹² differentiates between medicine as the science and art of healing the sick and caring for the well (a body of knowledge), and medicine as the practice of that science and art (the performance of a profession). The relationship or lack of it between traditional medicine and Western medicine is dependent on both parts of this definition. Medicine as a body of knowledge will be discussed in this section; the professions of medicine in the following section. This paper has not differentiated between the various types of native healers or different levels of theoretical complexity of medical systems as suggested by Marchione.¹³ In contrast, Sigerist feels that all systems of medicine contain basic underlying similarities:

There can be no doubt, however, that primitive medicine, as it appears within the various culture patterns, consists of a relatively small number of elements, which are very much the same in all primitive cultures and vary only in their combination [14, pp. 121].

Marchione¹³ states that distinctions between three types of indigenous systems may affect the reaction to it by society and other professions. The next part of this section demonstrates the reverse of relationship suggested by Marchione who sees full-time practitioners of great medicine accommodated and given support while part-time practitioners are ignored, and folk healers tolerated or opposed. We discuss three systems on an equal level of complexity. Thus, this factor is controlled for. Yet, any future attempt to integrate a native healing system into a modernising one would be well-advised to consider the characteristics of the native system, for more practical and mundane reasons.

Most studies of health care systems avoid the traditional (e.g. Weinerman⁷) or give it minimal attention, regarding it as a survival from a more primitive, less scientific, time. Attention is focussed on the scientific progress of medicine such as is suggested by Galdston:

History is a progression of ideas, traced along a circuitous path [12, pp. 3-6].

Garrison¹⁶ is kinder and suggests that folk medicine brings the peace of security against the fear of the unknown. Folk medicine also has its defenders. Dr Bocan Alpha Ba (International

Conference on Health and Health Education) believes that "traditional medicine deserves respect".¹⁶ He states that African doctors turn to traditional arsenals when supplies of Western pharmaceuticals are short. Green¹⁷ comments upon the astonishing technical efficiency of primitive surgery, given the most ancient instruments. Sigerist observes that little medical progress has been shown in some areas:

This history of the therapy of cancer is very dull. The principles we are following today, namely the elimination of the tumor as radically as possible, were discovered in far remote antiquity. Our operative methods are much more efficient than theirs were, and besides the knife we have X-rays and radium to destroy the tumor cells, but we have not found any new principles yet [18, pp. 62].

One view is that traditional structures are inferior in all ways to modern medicine and are used by only the poor or ignorant: Banerji,¹⁸ notes that the inhabitants of his native land prefer allopathic (Western) medicine irrespective of social, economic, occupational, and regional considerations. Cost and accessibility of services were the two major constraining factors. Local healers were used for minor illnesses or when Western medicine failed, Lee⁴, however, points out that in Hong Kong the correlation between utilization of modern medicine and wealth ($r = 0.68$) was in the same direction as between Chinese medicine and the wealth of the area ($r = 0.54$). Furthermore, it seems that people choose rationally between the two on the basis of perceived effectiveness for symptoms. Although the exact statistics were not provided, the younger generation was said to make more extensive use of Western medicine.

An approach that makes the assumed inferiority of traditional medicines more explicit is the historical approach. This approach stresses the evolution of medicine, both empirically and conceptually. Garrison¹⁵ observes that the advancement of medical science is the history of the discovery of a number of important principles leading to new views of disease, to the invention of new instruments, and to the development of a rational scientific concept of disease, not as a demon but as an altered physiology. Kuhn²⁰ critiques this view, rejecting the accretion approach to progress while retaining the concept of the progress of science. This approach fails to note that most medical systems have performed adequately for the cultural level of the

people. Furthermore, some have been medically effective. Bernado Ortiz de Montello found that 16/25 of Aztec drugs produced the desired effects, 4/25 were questionable, and 5/25 were not good enough.²¹ Knowledge, then, is not exclusively Western.

It strikes one as strange that the social and psychological functions of medicine are given stress only for the primitive versions. All medical systems seem to function to allay fear of death and infirmity through professionalism (elitism), and in this sphere shamanism differs little from white-coated magic. On the social level, there is evidence that the theoretical perspective of medicine relates to its functions as integrative institution of society. When society is held together by fear, medicine is synonymous with witchcraft and magic; as religion becomes dominant, disease and sin coincide; later, in a rationalist society, science is the new god: from temple to cathedral to medical center.

Another explanation for the apparent decline of traditional medicine is closely related. It suggests that the populace rejects it in favor of more modern medicine, or is it retained due to their ignorance of poverty? Sigerist¹⁴ suggests that the development of magical-religious medicine in Greece was a result of the needs of the indigent sick. Lee⁴ points out that economic factors influence the distribution of Chinese medicine. Harwood²², Logan²³, Martinez and Martin²⁴, Rubel²⁵ and Snow²⁶ provide evidence of the continuing utilization of native healers by populations of Mexican Americans, Arizona Blacks, Guatemalans, and Puerto Ricans. Schendel² traces this cultural lag to superstition, while Foster²⁷ cites the cultural barriers to change. However, DeWalt²⁸ is able to show that the use of native curanderos (curanderas) in a Mexican village is the result of a rational process of choice related to the nature of the illness.

How important is the progress of medicine as a factor in determining its role in modernising societies? Is it only the internal characteristics of a medical system that determine its fate? A cross-cultural historical study by Leslie²⁹ sheds much light on this topic. He shows that traditional medicine in three countries, China, Japan, and India, sharing somewhat similar cultural factors, had a different fate in each. He shows also that the Greek, Ayurvedic, and Chinese medical systems share similar internal characteristics—they are based on humoral theories, have standardised learned practices, long periods of training, codes of ethics, and claims to social status. Yet their incorporation

into modernising medical systems varied. In Japan, the ruling elite adopted modern scientific medicine as the legally sanctioned system. In China, the incorporation of traditional practices into an essentially Western system occurred. In India, a dualistic, though not completely equalistic, system developed. Thus, neither cultural nor internal characteristics of medicine account for this difference.

Another theoretical explanation for the status of traditional medicine is seen to be the organisational struggles of medical professions:

A characteristic of modernizing societies is the co-existence of modern and traditional professions that claim to perform the same function for the society. As a result of differential support by the dominant classes and their social values and by the academic and political authorities, the modern profession occupies a higher stratification ranking than the traditional professional [4, pp.60].

The theory of professionalism, the organization of medicine, as the explanatory factor, for the survival or lack of survival of traditional medicine will be discussed in the next section.

Theories of professional struggles

Much of the work in cross-national comparisons of health systems ignores the political-economic level of organization intermediate between macro-processes (society) and micro-processes (persons). One notable exception to this is the study by Carboni³⁰ of the formation of a geriatric speciality in the United Kingdom which has not occurred in the United States, to date. Carboni traces this to the division of medical territory by the medical profession in the UK rather than to a more rational, knowledge-based division of labor, an explanation suggested by Stevens³¹, for example. This division, then, was based in political processes within the profession to the end of controlling medical resources (wealth, patients, and control over an area of service). This approach has been offered by Berlant³² as a framework by which to understand the rise of allopathic medicine in the United States. Before examining this approach, it is necessary to mention that the view of individual practitioners may diverge from the organisations perspective. Blum³³ found both acceptance of the significance of local healers and rejection of their existence by physicians in his study of a rural Greek town. One famous healer had even hired a physician and X-ray technician to work as

his assistants. This occurred despite government and professional opposition to quackery.

Berlant³² describes the process by which the AMA organized and defeated its medical rivals. He critiques Parson's characterisation of the medical profession as a normative structure, based on idealised beliefs, regulated by a system of social controls, and whose function is to maintain healthy actors to fulfil social roles. Instead, he uses an historical approach, coupled with Max Weber's theory of monopolisation, to show that many of the practices of the medical profession function to increase the power, prestige, and wealth of the profession collectively, regardless of the benefit to society or the individual patients. Weber's theory of monopolisation states that:

The success of a group is a function of two broad determinants of economic action; the group's tactics of competition (or of conflict) and the conditions of competition. One major but not exclusive condition of competition in modern society is the state, which exercises both authoritative and de facto domination over groups within its territory [32, pp.17].

The tactics of the AMA will be discussed here; the role of the state in the next section. The elimination of external competition is accomplished by two means, according to Berlant.³² The first, which he sees as the dominant methodology employed by the AMA, is to bring the "force and prestige" of the legal and political community to bear against competitors. This involves licensing and educational restriction. The goal of this strategy is to restrict financial support to one's opponents. The second method is to challenge one's opponents on ethical grounds, thus challenging their symbolic integrity (image).

The second game, that of name calling was practised by both sides:

The AMA (circa 1924) referred to all non-conformist healers as "sectarian". Its Judicial Council has defined this term to include any practitioner who follows a dogma, tenet, or principle based on the authority of its promulgator to the exclusion of demonstration and practice,

...Abraham Flexner, the eminent authority on medical education, contended that homeopaths, eclectics, physiomedicals, and osteopaths might rightly be considered as sectarian rather than fraudulent practitioners, since they all believe

that anatomy, pathology, bacteriology, and physiology must form the foundation of medical education but regarded chiropractors and mechanotherapists as no more than unconscionable quacks.

...In charging that conventional practitioners laid undue stress on chemical compounds and surgery; these groups, with some justification, considered regular doctors as sectarian [34, pp.2-3].

Despite his moderate stand toward the variety of medical practitioners, Flexner's report on medical education (1920-21) proved to be the coup de grace to most non-regular medical practice. Stevens³¹ speaks of the reluctance of the general public (USA) to use the modern (regular) physicians because of their harsh treatments. They were popular as a status symbol among the urban rich, due to the prestige of their European education. Burrow³⁴ claims that the battles of the AMA to control licensure and restrict entry to and the proliferation of medical schools was against quackery.

Berlant views the demise of the sectarians as casualties of the internal battles of the AMA. He considers the number of irregular practitioners too small to be considered a threat, at most 10% of all practitioners. Estimates of the numbers of homoeopathic practitioners are 2400 between 1835 and 1840. At most, there were some 7000 sectarian practitioners in the 1845-1860s as compared with some 20,000 orthodox medical graduates and another 40,000 non-degreed orthodox matriculants. This was the real threat: the rapid expansion of medical schools and the large number of educated physicians. Six medical schools in the decade 1810-1820 produced 100 graduates out of 650 students; this increased so that by 1860 there were 13 schools comprising 4500 students and graduating 1300 in the 1850-1860 decade.³²

Berlant describes the tension between academics and practitioners for control of the medical profession and licensure. Medical societies were formed in the 1760s and not until 1783 was a medical school, Harvard, the first serious candidate for establishing the qualifications of a physician.³¹ The AMA, established in 1847, soon reached a compromise position with the development of a licensure plan whereby a diploma was not an alternative to licensure but a pre-requisite. It then proceeded to regulate the supply of medical schools and hence physicians.³²

The growth of medical schools had been phenomenal:

In 1869 according to the Bureau of Education there were 72 medical colleges in the US, 59 regular, 7 homoeopathic, 5 eclectic, and one botanic... (By 1911 every city had their schools) 39 in Illinois, 14 in Chicago, 42 in Missouri, 43 in New York City, 27 in Indiana, 20 in Pennsylvania, 18 in Tennessee, 20 in Cincinnati, 11 in Louisville...one physician for every 691 persons in the United States contrasted with 1:1940 in the German Empire; 1:2120 in Austria, and 1:2834 in France (circa 1913) [15, pp.761-763].

The AMA responded to this by supporting two investigations of medical education. The first, run by a physician, raised an uproar, but created little change. The second, headed by Flexner, led to reform and the securing of a medical monopoly by the AMA. Stevens³¹ sees the impact of this report as largely financial; foundation money from the Carnegie Foundation, General Education Board (a Rockefeller Foundation), and other sources enabling the better schools to improve while others declined due to lack of support.

The role of government

As discussed earlier, Weber considers the role of the state as one important condition in the survival of an organization. Leslie's cross national historical account, 'The Modernization of Asian Medical Systems',³⁹ stresses the influence of government policy. He shows the Japanese ruling elite adopting modern scientific medicine as the legally sanctioned system. The Chinese incorporation of traditional medical personnel and practices swings with the pendulum of political change (Wolstenholme and O'Connor³⁵; Harbison and Myers³⁶; New and New³⁷; and Sidel and Sidel³³). In India, the ambiguity of government policy has led to dual medical system.¹⁹ Lee⁴ details the parameters of environmental support in Hong Kong. The government employs one-quarter of the modern, but no Chinese, physicians. Anyone can practise Chinese medicine without a licence but there is a registration fee of twenty-five dollars. The practices of Chinese physicians are restricted. They are not allowed to issue death certificates, to use medical titles, or to use certain restricted medicines. Schendel² describes the incorporation of Spanish and Aztec medicine after the conquest (Cortes) under royal orders, and the diffusion of Aztec pharmacopoeia into Europe. When Germany passed a statute on June 21, 1869, abolishing some of the physician's obligations, the result was an increase in the number of nature and faith healers.¹⁶

Berlant considers that the growth of the AMA and its monopolistic advantages were linked to the rise of state power, which was then able to bolster the power of the profession. He then asks what is the advantage to society of allowing monopolization. He feels that an explanation in terms of the public interest is not convincing in light of the differential distribution of the benefits of medical care and he suggests an alternate explanation that is reminiscent of Duff and Hollingshead³³.

Particularly in the United States, the development of the medical profession has been closely tied with the development of stratified relationships between social groups, so that quality medical care has tended to be a prized scarcity and an object of class behavior [32, pp.505].

This explanation is good but medical care as an object of class behavior does not tell enough. Elling⁴⁰ sees a close relationship between the nature of society and the nature of the health-medical systems.

It can be demonstrated that there is a correspondence between support of the indigenous medical system and the type of political system

that exists. Elling (personal communication) has suggested a typology of countries along two continua — the centralized-decentralized power dimension and the concerted-pluralistic action dimension. These concepts refer to the general nature of the formal (centralized decentralized) power structure as well as to the informal (concerted, pluralistic) dimension of power. It is possible to assign countries to one of four cells as in Table 1.

Table 2 shows the varying degrees of support that a medical system may receive along different dimensions. Scores of high, medium, or low reflect action taken relative to that of other countries. Symbolic support is defined as actions taken by the government of a country to preserve indigenous medicine as part of the heritage of a country. Japan is rated medium, not because it has considered its medicine a heritage³⁹ but as compared to the United States, there has been little persecution of indigenous healers⁴¹. China³⁹ and India¹⁹ have recognised the cultural roots of their medicines. Japan provides no funds to native medicine but does require licensing of native practitioners⁴², thus granting them recognition and legitimacy. China does support traditional medicine financially but not at the level of modern institutions.³⁹ Licensing of medical practitioners was abolished in China along with the leveling of other professionals, but traditional institutions have received government recognition. India has made some grants available for the study of Ayurvedic medicine and the provision of services.⁴³ A subjective guess would be that it is less than that provided in China. Regulations for licensing of medical practitioners and traditional schools are currently being decided in India (communication from Pandit Shiv Sharma, in visit to UCONN Health Center in 1975). These countries contrast with the United States where non-modern forms of healing receive no support.⁴³

How does medical care in a country relate to the form of government? We see from Tables 1 and 2 that only the United States, a decentralized, pluralistic country has provided no support to any but the most politically powerful medical organization. This is the result of a system where health is not a national priority, where there is no system, program, or priority of expenditures for health. It appears that only centralized and/or concerted countries refuse to allow the battles of professionals over the carving up of the medical arena to interfere with the delivery of health. Bryant¹ makes the point that health programs can also be divided among government agencies. A few examples will

Table 1. Political structures

	Centralized	Decentralized
Concerted	USSR	China
	India	USA
Pluralistic	Mexico	Canada
	Japan	England
	Hong Kong	

Table 2. State support of indigenous medicine

Type of Support	Country			
	Japan	China	India	USA
Symbolic	Medium	High	High	Low
Financial				
Educational	Low	High	Medium	Low
Research	Low	High	Medium	Low
Practice	Low	High	Medium	Low
Legal				
Licensing	High		—	Low
Education	—	Medium	—	Low

suffice. Current philosophy in China dictates that the purpose of the medical and educational system in China is to serve the people.⁴⁴ In fact, it has been noted that one problem of Chinese education is its overly utilitarian nature.⁴⁵ This signifies not the absence of professional politics but their subordination to national policy. This has occurred also in Russia where feldschers were employed despite professional opposition⁴⁶; in India where Ayurvedic physicians have not been embraced by the medical establishment⁴⁷; and in North Vietnam where Western and Oriental medicine is being combined.⁴⁸

Conclusions

This paper has discussed some of the factors influencing the status and utilization of native healing practices in the modern world. Though cultural and internal factors may affect the utility of traditional medicine by encouraging bad practices and discouraging new ones, it is equally certain that this medicine of the people contains effective practices and new ideas. Thus, the links between it as a knowledge system and its role in medical system has been tenuous. The role of professional struggles in the medical arena as the dominant factor has been tempered by the influence of government where it has been able to direct medical priorities. It has been suggested that in centralized governments or in those where action is concerted, the government is able to set priorities; in other situations, such as the United States, health priorities are the outcome of professional struggles.

From this, it is evident that the outcome of employing traditional medical structures to meet the health needs of the world will depend to a large degree on its interface with professional organizations and the type of relationship it has with the government, either controlling or controlled.

The question, however, remains unanswered. Why do different kinds of political systems allow their policy or lack of it to benefit medical power groups? Several different models of the articulation between the medical system and the political system exist. Krause discusses the imbeddedness of the health system at several levels. The first is the level of values —

First there is the issue of occupational ideology inherent in the term profession itself. What citizens believe the medical profession to be determines how they act in accordance with this belief [46, pp. 36].

Friedson⁴⁹ agrees with this view and criticizes the medical profession for usurping values when their claim to power is technical expertise. We suggested earlier that the relationship of medical systems to political systems was not due to cultural factors such as the state of knowledge of the profession or acceptance by the local residents, but rather to the nature of the relationship between the health professions as organizations and the form of government. We also noted that symbolic support is one means by which a profession may survive and obtain other types of support.

Krause⁴⁶ also suggests that control over the delivery of health services varies according to the ownership and control of health service production. This theme is explored in greater detail by Navarro, who makes the point that physicians no longer control the health system through the power of their knowledge. Primitive, or what Navarro calls competitive capitalism, has given way to monopoly capitalism: Health is the ...

... second largest industry in the country... the flow of health insurance money through private insurance companies in 1973 was 29 billion dollars slightly less than half of the total insurance — health and other — sold in this country in that year. About 515 billion dollars of half of that money flowed through the commercial insurance companies... [where] we find again a high concentration of commercial capital [48, pp. 150].

Navarro continues that the same corporate interests which control the American economy also dominate the health sector. Although physicians qua physicians are losing influence as the source of power shifts from entrepreneurial to corporate sources, physicians still remain part of the dominant class in terms of economic position and many are now members of the corporate class. The medical system is one way to reinforce the values of and contribute support to capitalism.

Elling (personal communication) suggests that it is this context of the health system that in the end determines if the utilization of traditional medicine is to be of real value or if it is to be a delaying action to perpetuate second-rate medical care. Professionalism, coupled with a stratified society, can serve to thwart the intention of the use of indigenous healers — the provision of better medical care. Thus we find a rural midwife program in Arkansas training women for rural service.⁴⁹ But

in fact this program is designed to preserve a two class system of medicine whereby the rural poor mostly black, are receiving minimal care, with little or no access to special services while the wealthy white are treated in medical facilities by doctors reluctant to serve the countryside. Or there is the paradox that is now occurring in India, where the use of indigenous practitioners will mean less available medical care. As a by product of their struggle to achieve recognition, Ayurvedic medicine practitioners have agreed to limit the number of practitioners they will certify and train. The price of legitimacy and other support is diminished service to the population. One must question, then, the use of indigenous healers — who is to benefit? — and who is to gain? Their utilization cannot be separated from the influence of the medical system, and its position in the socioeconomic and political systems of a country.

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'GREEN REVOLUTION' AND HEALTH

Changing Patterns of Health in Nanded

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The green revolution and the changing patterns of agriculture have resulted in a deterioration of the health status of the people. The health services are a source of exploitation in one way or another. In the meanwhile, the rich tradition of herbal medicine is disappearing through disuse, which is itself a result of changes that have occurred in the wake of the green revolution.

"The condition of the working class is the real basis and point of departure of all social movements of the present because it is the highest and most unconcealed pinnacle of the social misery existing in our day", (Preface to *The condition of the working class in England* — F. Engels).

Every major or minor change in system has raised the hopes of improvement in the lives of the poor and created illusions about the present process of development. New policies have been drafted and redrafted at the international and national level to eradicate poverty and to change the lives of the 45 crore poor people living below the poverty line. But no significant change has taken place. As admitted by then World Bank chief Mc Namara in his 1973 Nairobi speech, the problem of the world's 800 million poor people has remained unsolved.

The new approach of attacking poverty began in 1975 on a world scale and in India also. New schemes of rural development to eradicate poverty were introduced. And their health was given importance. It was a target-oriented package programme. What is happening in the country side since 1975 is worth studying.

Although the green revolution began in Maharashtra since 1965-67, its spread and growth is now restricted. Thus the problems have increased and the crisis is accentuated. The old picture of village life is not found now. Alongwith the deteriorating socio-economic system, we find the health of the people is very much affected and has deteriorated.

The area under study is Biloli taluka in Nanded district of Maharashtra. The district is divided into eight talukas and among them Biloli has the highest levels of irrigation. Most of the irrigation schemes were completed by 1975. There are three medium irrigation schemes functioning in the area. Total population in the district is 17,47,589 spread

in 1388 villages. The major crops grown are jawar, wheat, rice, cotton, chilli, and now sugarcane. Seedplots producing cotton seeds are situated in highly irrigated area. Even banana plantations are ample in number. This area is wellknown for producing long staple cotton. Now, four sugar factories are producing sugar and alcohol. Out of these, one factory is in Biloli taluka.

Changing patterns of agriculture : Effects on health

Due to changes in the cropping pattern and switching mainly to cash crops like sugar cane and cotton the production of foodgrains has declined in the area. So the old system of cropping, mixed-cropping, is disappearing. Turmeric, another cash crop was uprooted firstly in 1972 drought and by the government policy to favour supply of water to sugarcane. Similarly, groundnut is not favoured by the government. In 1983-84 canals became dry due to water-shortage. And though the government initially announced guaranteed irrigated water to groundnut crop, only once or twice did the canal receive water. So all the groundnut crops of middle and poor peasants were destroyed. The rich could irrigate with the help of powerful electric pumpsets. In non-irrigated area chilli is still grown. But in irrigated fields, chilli crop cannot be grown now as the land is saturated with water which is not suitable for growing chilli.

There is significant decline in the area under pulses. Partly because there is no increase in the relatively low per acre returns. Another difficulty with the pulses is that it cannot be grown with hybrid kharif jawar. This is a short-duration crop. This reduction in the acreage under pulses has cost a lot to the village poor because, pulses used to maintain the fertility of the soil (nitrogen fixation). And people used to have their balanced diet. As the diet mainly consists of hybrid roti, sometimes, rice and watery dal (mainly tuar or udid), their

diet has not remained a balanced one as it used to be. Other crops like sweet potatoes which used to be poor man's emergency staple food, have also disappeared.

Thus, we see dependence of people on cash crops resulting in a decline in pulses production. This change in crops pattern has increased dependency on high cost chemical fertilizers and upset the traditional soil preservation mechanism and resulted in decline in the health of the people.

Anti-people forest policy

The present forest policy of the World Bank and the government has contributed to the destruction of agricultural people's living conditions. All the old variety of trees, like malwa, kath khair, sag, bamboo are not planted by the forest department on a large scale. Instead, subabul and eucalyptus are planted on a large scale with the result, more wood is supplied to the paper mills and groundwater shortage has increased. Many old varieties of the tree had medicinal value, and herbs used to grow around them. Their disappearance has created an acute shortage of such country medicines. Even in villages, old tamarind trees have disappeared. People are using less tamarind in their diet. The effect of this new forest policy on the ecosystem is tremendous.

It has also affected agriculture, since wooden implements depend upon the forest. The new varieties of trees are not suitable for house construction or cutting the implements from wood. Even firewood shortage has become most acute. People burn any type of shrubs and wood for cooking purpose even though it is unhygienic. They have to spend more time in collecting firewood. Due to shortage of wood, the size of the huts are getting smaller and narrower which is again unhygienic. The result is diseases like asthma, cough and other respiratory problems are rampant. Old chullah still exist even though tractors and high yielding varieties are introduced by new technology. The chullah creates pollution problem within the huts.

Due to increase in the cost of living, all the earnings of the family members are spent on only survival. The cash economy has changed the situation considerably in this area. As the saving of the poor is virtually nil, for sickness expenses, they have to borrow from landlords, rich peasants or money-lenders.

Plight of non-agricultural workers

Those who work on State Employment Guarantee Scheme (EGS) as labourers, are supposed to get as per law medicines if they become sick on duty. They must get drinking water at the worksite. Usually, the worksites are far away from the villages. Most of the time, EGS workers do not get ordinary medicines when they get headache or fever, or if an accident takes place even first-aid boxes are not available. At site they get contaminated water for drinking which causes waterborne diseases. This is rampant in the area resulting in loss of several mandays due to sickness. The law has made a provision for shelter and cretches at worksite. But rarely are these provided. We find infants and young babies are looked after by small children while the mother is working on the site. Last year, a labourer died on EGS site in a village in Biloli taluka due to both starvation and sickness. (This matter was discussed in the Maharashtra Assembly). The reason was that he had not got his wages for more than fifteen days.

The sugarcane factories also pose new problems. The molasses accumulated near factory creates pollution problem for the peasants living near the factory. Water-pollution by the sugar factories is so much that many deaths have taken place in the villages near the sugar factory. Sudden death of animals after drinking water is quite common in the area. Even the hue and cry made by the press and organisation does not affect the sugarbarons and they continue to violate all anti-pollution norms. The health condition of sugarcane factory workers is equally bad. They are exposed to pollution, chemicals and accidents due to outdated machinery.

Certain other factors also affect the health of the people. Adulterated edible oil has brought new types of diseases. Sometime ago strange kinds of jowar and wheat (imported) were distributed through the rationing shops. And after consuming them there was a virtual epidemic of skin disease. Similarly, the imported wheat from US under PL 480 brought another variety of Mexican seed grass, which has since spread all over. This has made the land infertile and constant contact with the grass, spreads skin allergies and allergies affecting the respiratory system. (This is popularly known as 'Congress grass' and during 1975, Cong I Govt. banned the word 'Congress' grass).

Due to inflation, people tend to cut down

expenses on food items. For example, as the price of edible oil has gone up, women are using less quantities of cooking oil, not even using coconut oil for their hair. As the prices of medicines have gone up, ordinary tablets for usual ailments cannot be purchased by the people. This taluka has a very high incidence of leprosy, but only one leprosy centre is functioning.

Imperialist technology has improved HYV jowar, bajara, wheat and rice production in irrigated area but no breakthrough has been so far made on oilseeds and on HYV seeds for dryland farming. Thus, it has limited results for total agricultural growth in India.

Exploitative health care services

Medical facilities are available, for example in four big villages in the taluka. In this article we will look at two places : PHCs at Naigaon and Ketur. About hundred villages are connected with these centres. They are situated either at taluka headquarters or at the villages where the most influential local MLA, ZP president or MP is based. The corruption at government dispensaries is so rampant that people tend to go to private doctors or the government doctors treat patients privately.

During the drought of 1980 and floods of 1983, various types of epidemics spread in the area. The government dispensaries and hospitals created such a situation that patients were sent back on the pretext of a scarcity of medicines. Kashtakari Sanghatana had to take up the issue, the doctors and dispensary staff were gheraoed for several hours. Only then was proper treatment given to the patients.

At the grassroot level, village health workers are operating. They are supposed to distribute medicine for ordinary ailments, malaria and so on. They are supposed to help mothers at the time of delivery. And to report to the PHCs when cases of epidemic or serious diseases are noticed. In the recent drive for birth control, they have to bring cases for family planning operations. Now it is lucrative business for them since the government gives monetary incentives to both patients and health workers. But generally stocks of tablets are not available with them or instruments are not available with them. So people have to go to private doctors paying more fees or to the quack doctors.

The local organisation had to take up another issue since it affects the health of the people — 'Bhanamati' (ghost or spirit) is a usual phenomenon

and mostly women are 'haunted' by this in the villages. In reality, they are either psychic patients or ailments developed due to insoluble personal or domestic problems of feudal character. Many a time, patients became victims of superstition. So the local organisation had to take up several cases and treat them in the Hospital after prolonged persuasion. In the past five years, more cases of bacillary dysentery, flu, malaria are reported in the hospitals. Thus, even the health services have become a source of exploitation and people are not benefited though all the institutions are aided by government and international agencies.

Health under Green Revolutions

Changes have occurred in the attitude of the people towards health and medicine are quite obvious.

(a) All the old herbal, country medicines have disappeared and the trend of widespread use of allopathic medicines has been stabilised. It is known that the sargandha herb is used for serpina tablet for blood pressure or heart problems. Similarly, some old medicines based on herbs and minerals are quite effective. But little further research has taken place.

(b) Due to hard work, hectic life and mounting problems, people tend to ignore their health unless health problems become serious when they go to the doctor or the dispensary. Again, less attention is paid towards the health of women and girls in the villages.

(c) Use of outdated medicines in the dispensaries is quite normal. As the efficacy of the medicine is automatically reduced, people have again turned towards either quack doctors or towards superstitious practices.

There are certain voluntary agencies like Oxfam which are working in the same villages where we are working. But they have not yet taken up any programme for health services. Except making propaganda for family planning operations (on the same line as the Government propaganda) they have done nothing in the health sector. The only service they offered to the people during floods was to give loan on low interest rates to the affected people and the loan was repaid by the debtors after the harvest. The huge irrigation schemes began only after World Bank aid arrived since the Government had no funds to provide them under the five year plans. So boosting irrigation, new

technology of HYV seeds in irrigated area, boosting production for cash crops mainly for export, development of infrastructure and absorbing non-farm population in service industry, creation of well-knit finance organisations and so on makes the entry of forces of imperialism in agriculture on a sound basis and allows the local exploiters, landlords and rich peasants, a share of the surplus. But has it really solved the problems of the people?

Nanded is a drought prone area. In the past five years it was twice declared drought area and twice the area was declared as being flood affected. Instead of giving water for subsistence crops, water is given mainly to cash crops. Due to faulty man-made forest policy, the pattern of rainfall is changing and affecting the crop production and ultimately the ecology. All drought-prone areas eradication schemes are slowly turned into implementing a policy for export led growth, cash crop growth. This is happening nationally, locally under the guidance of imperialism. "A major plank for ambitious political leaders is the promise of providing irrigation to newer areas. Here the chief consideration is bringing prosperity to those peasants who are in a position to grow cash crops and not tackling the droughts."

Though agricultural production of HYV has increased, we do not find any improvement in

the conditions of poor people. All the benefits have gone to the upper classes. Consequently, economic conditions of the poor have further worsened. This has made health of the poor people a severe problem. The vicious circle of poverty and health can be seen clearly in the rural area.

What imperialism does to the system is that it has made the system totally dependant. Future growth and internal growth of productive forces is stopped or growth is stagnated. In the case of health, it is clear that no funds are made available for further resources and production of medicines on specific disease or health problems. The less costly methods of production of medicines for such diseases are not found out. Ultimately, as agriculture is very important to extract surplus, imperialist and multinationals do make high profits on the deteriorating conditions of health. And thus country's real wealth, the precious people, mainly working force, has again been ignored and is subjected to the process of pauperisation. From slums to farms, the fate is the same in this system.

Reference : The silent drought : Maharashtra, EPW, Jan 19, 1985.

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ORGANISING DOCTORS: TOWARDS WHAT END ?

anant phadke

Until the 'sixties almost all doctors in India belonged to the classical middle class, owning and controlling their instruments and conditions of production. But since the 'fifties more and more doctors are entering government service. The article begins with a discussion of the role of the wage earning doctor and suggests that the strategies for organising doctors should be based on a clear understanding of these contradictions.

This article was held over from the issue focussing on 'People in Health Care' (SHR 11:2), due to lack of space. The author has since added a comment on Sujit Das's article in that issue which is published in the Dialogue section.

Analysis of role of doctors' organisations in social revolution in India, would require, to begin with, some analysis of doctors as a social layer (including an analysis of different subgroups of doctors) in India. This, in turn, would require an analysis of the role of doctors in the social process of production.

Materialist analysis of position of doctors

It is generally not recognised that although a doctor's work has its own peculiarities, it nevertheless involves a material process of production. Like the work of a barber or a massager, it brings about a material change in the human body and restores it to a 'normal' level. The 'raw material' on which doctors work is very peculiar — it is a material which thinks, has emotions and the emotional aspect is very much in action, when the body is impaired. This is especially true when the illness is serious. Hence the ideological-cultural relations that inevitably accompany any material process of production are much more pronounced in case of this material process of restoring an impaired body to a 'normal' level. The ideological role of doctors is, therefore, much more important than that of other professionals.

Until the sixties, almost all doctors in India belonged to the classical middle-class — owning and controlling their instruments (stethoscope, syringes... etc.) and conditions of production and not employing wage labour but basically living off one's own labour. The wealth amassed by this section of the middle-class has been through a commercial exploitation of consumers (patients) through professional monopoly over and mystification of medical science and technology; and not through the exploitation of wage-labour. Even now majority of doctors in India belong to this category of classical middle-class. But since late fifties, more and more doctors are entering into employment with the Government.

This social layer is a wage-earner; does not own the instrument and conditions of its labour and apparently is part of the white-collar working class. But on closer examination, it would be clear that this layer's role in the process of social production of medical services is different from that of the working-class and that it belongs to the new middle-class — a peculiar product of developed capitalist society.

New middle class

The category — "new middle class" has been clearly formulated, developed in recent marxist literature. (For example, Carchedior, better, E. Wright) Briefly, the new middle class is a product of developed capitalism wherein a social layer occupies a position midway between the capitalist class and the working class by partly doing functions both of the capitalist class and of the working class. The "function of the collective worker" is geared to the production of use-values whereas that of capital is geared to the production of surplus value; (profit, rent, interest) and involves the work of supervision, surveillance. Wage earning doctors (medical officers) are on the one hand, part of the team of labourers consisting of nurses, midwives, technicians...etc. doing materially useful work and like them not owning the instruments (medical equipment) and conditions (building and other infrastructure) of labour. On the other hand, they also perform the function of Capital, of supervising, extracting work from the paramedics. Their comparatively high salary, therefore, includes both a wage for the trained labour-power they sell and also part of the surplus value for performing the function of Capital. Along with foremen, executive engineers, head-clerks, junior officers and the ilk, departmental heads in educational institutions..... this layer of doctors is part of the new middle

class. The junior doctors, a transitional phase in a doctor's life, is entrusted less with the function of Capital and hence is closer to the trained, skilled white collar working class. The following analysis is applicable primarily to medical officers and only to a certain extent to the junior doctors.

This 'contradictory class location' of the Medical Officers would determine a great deal their contradictory role in the movement towards social revolution. As wage-earners, they are ready to unionise and fight for their demands, and this struggle demands an alliance with the rest of the working class against the state. But as officers, their interests demand a break from the subordinate working-class; a continuance of the hierarchy within the medical system.

There is a second couple of contradictory facets of medical officer's life — on the one hand, there is a need in this inhuman world of competition for amassing money, to earn more and more money through illegal, irrational private practice or through corruption to compete with and to be a part of the flock of the money-spinning community of fellow private practitioners. (This does not apply to the junior doctors. They do not do private practice.) On the other hand, as wage-earners, they need to accept limitations of a wage-earner, and are also expected to follow the ethics of a noble profession.

The third couple of contradictory aspects of this layer of wage-earning doctors is related to their ideological role. (In this respect, private practitioners also share this contradiction to a certain extent). On the one hand, the dominant ideology in the field of science and hence also in the field of medicine in capitalist society is that of technocratic scienticism i.e. of looking at health and disease as primarily a question of interplay of germs and chemicals amenable to drug-therapy. Added to this is a predominantly curative and individual-oriented as opposed to community oriented approach to medical care. On the other hand, the very nature of the 'raw-material' on which the 'doctor-scientist' works demands a holistic, humane approach and an exposure (though in a limited and somewhat distorted fashion) to the science of community medicine; to the national health programmes, throws light on the limitations of a predominantly clinical orientation.

One more set of contradictory relations constitute the doctor's work — on the one hand, majority of doctors are drawn from upper-caste, urban

background and are by and large male and hence are biased in favour of their own social background. On the other hand the science of medicine (though vitiated to a certain extent, by elitist, sexist bias) basically transcends these narrow barriers and exposes medicos to universal concepts devoid of narrow considerations.

What should be basis of doctor's organisation ?

The left has to grasp these contradictions in order to determine its strategy of organising this layer of doctors. Secondly we should also be clear as to what kind of medical system we want to and can build in socialist India. Should we aim at a medical system which is in the process of freeing itself not only from commercialism of capitalism but also from other ills like hierarchy within medical system, mystification of medical knowledge and unnecessary glorification of medical profession, urbanism, elitism, sexism, allopathic chauvinism, scienticism... and so on? If yes, then in that case it is wrong to appeal medical officers mainly on the basis of their trade-union demands. We should plainly point out their contradictory interests, and appeal them to choose, and stick to the 'positive, healthy, progressive aspects of their life-situation and organise a revolutionary union of doctors on the basis of this comprehensive plan. It is likely that only a small section of this new middle-class would come with us for this comprehensive revolutionary change in the medical system. That can not be helped. But to be sure, there is a definite objective basis for at least a small section to come over to the side of revolutionary programme.

Similarly, we need to concretely analyse the contradictory situation of other categories of doctors like private practitioners (classical upper middle class) junior doctors, consultants .. etc; and base our organizational strategy on that basis.

Unfortunately, today, there does not seem to be a well thought out strategy in organising doctors. On one hand, medical Officers in Government service and resident doctors are being organized primarily on their trade-union demands. But things are not moving much beyond this narrow focus. At certain places, Left activists are the leading organizers of such organizations. They do get a few cadres for their party or group on the basis of Party's broader (non-medical) programme. Their medical programme however does not go much beyond asking for extension of medical services to all people. These Leftist organisers have not been able to foster a process of gathering medicos on the basis of a

comprehensive revolutionary medical programme which asks doctors to throw away their privileges as elite doctors in return for promise of decent, scientific, meaningful working life.

If there is a hope that doctors — a middle class — can be "neutralised" by catering to their trade union demands, then it is a misplaced hope; we must also understand that such a "neutralised" social layer would immediately spring into opposition if a thorough going change in medical system is proposed or is actually attempted. Radicalism of many leftist doctors is directed against injustice, irrationalities in the broader society; but has Penetrated only to a small extent in their own field. How can such a leadership foster a thorough-going change in the medical system? A combination trade unionism in the medical field with broader left politics (but not inclusive of ills of the medical system enumerated above) will fall much short of revolutionary changes that can be made in the existing medical system. Some attempt in the right direction is being made in West Bengal during and after the state-wide strike in 1983. Apart from trade union demands they have asked for certain changes in the medical system, drug industry. It is difficult to judge from here, as to how much of their support for radical measures is a reflection of genuine change in the attitude of at least a sizeable number of doctors or only expresses the wish of a few leaders or worse, only a lip-service to radicalism in the medical field.

At the other end, many social activists criticise the doctors as if doctors ("barring a few exceptions") are basically anti-people. It is true that flourishing private practitioners, consultants, surgeons, hospital owners would, as a social layer, be opposed to a revolutionary change. But it is not realized by these critics that many wage-earning doctors have a lot of problems related to working conditions — they hardly have any say in the policy-decisions that affect their work, are constantly plagued by shortage of drug-supply and other facilities, have to bow down to the local bourgeois politicians, and at the same time are disliked, criticized by the people for 'poor service' for which many times they are not responsible. These woes, like those of workers in other public utility service, are genuine. Rather than ignoring their problems and be content only with criticizing their irrational, anti-people approach; why not analyse these problems and show them how they are problems of a system, how they can be eliminated only through a thoroughgoing revolutionary change in

the medical system; (as part of a broad social revolution) and offer a programme, an organization which would help to do this? Many medical officers would not be interested in joining this organisation since they would not be prepared to leave many privileges that they currently enjoy. But why not build bridges across the valley that separates them from a people's front when there is some objective basis in their life situation? An approach which appeals doctors only on moralistic grounds is a mistaken one on many grounds and hence will not succeed in even rallying round even that small critical mass of doctors we need to forge in order to make any viable, sufficiently strong clamour for a revolutionary change in the medical system.

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 [Please see Dialogue Section]

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In Defence of My Confusion

Imrana Quadeer

I read with interest Anant Phadke and Dhruv Mankad's defence of their editorial policy. My confusion only doubled when I realised that for them a policy is meant only to be stated and not implemented. Within a given policy framework, should not an article be edited or published with comments requesting the author to rewrite it? Instead of declaring it "disjointed" etc., etc. six months after it was published and that too because some one else pointed out a few contradictions!

The basis of my "confusion" as Anant and Dhruv understand it, stands out clearly from their letter itself. *While I think that not all health analysts have the required understanding of society at large (including myself) and they should therefore very consciously try to do so through the 'window of health'* (a point in my letter with which my critics agree but have preferred to ignore), *they choose to believe that "a rigorous, correct understanding of Health and Medicine would not be possible with a superficial understanding of society"*. This may be the ultimate truth but given the status of "rigorous and correct understanding" of the health analysts I am not ready to take such an assumption for granted. While they presume that within their perspective any discussion on health and medicine "would necessarily be based on an understanding of society in general", I will plead that such over-confidence only leads one into complacency. In fact I would like to point out that unless and until all authors of SHR are aware of the fact that all their general theories will be tested in the field of health (and vice versa) by

the circle of SHR readers and not in the circles of Social Scientist or EPW readers, the tendency to take general concepts as well as the readers for granted cannot be checked. It is true that SHR has not got involved into a discussion on the mode of production or the nature of the state but it is also true that it has neither helped us understand these concepts through health nor clearly demonstrated the need to grasp them for a better understanding of the health situation. Do we, then, mention these concepts only to establish our Marxist credentials?

Essentially the difference of opinions between us boils down to perspectives. For Anant and Dhruv there are those clear headed few who know what is "correct" and therefore have a monopoly over marxist analysis of health. They will write about imperialism in health in SHR and if at all necessary, improve their understanding of imperialism in other intellectual circles.

For me SHR is the place where through health I must understand imperialism. I will therefore not let superficial handling of the concept pass unnoticed in SHR.

All this of course is not to deny my confusion but to say that till the clear headed ones pay some attention to its roots it is bound to grow and grow more.

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One Sided Defence of Professional Interests

Anant Phadke

Sujit Das (SHR II: 2) starts from a correct observation that "...little study has been made to investigate analyse and understand the medical profession in the perspective of concrete reality." But his article does not help much in a critical analysis of doctors as a social layer but is an uncritical shame-faced defence of the interests of the doctors. Secondly, because of lack of clarity about the 'contradictory class location' of wage-earning doctors, he is unable to characterise them in spite

of a long discussion (with many excursions into sub issues).

To begin with, a word about the title of the article. It reinforces the popular but mistaken notion of medical profession being only doctors, forgetting other medical professionals like nurses, social health workers and so on. The title reflects the perspective of the article of focussing on the interests of the doctors.

Das's defence of the interests of the doctors starts with his analysis of the general practitioners. It is true that this category of doctors is not involved in capitalist relations of 'production; but in petty commodity relations (not 'precapitalist mode of production') as part of a capitalist social formation. But it does not mean that he can not be an exploiter. Unlike retail store-keepers general practitioners have earned wealth quite out of proportion to their skill, knowledge and labour. Such doctors through their monopoly over medical knowledge and skills have earned money through commercial exploitation (price more than value). It is however, true that, as pointed out by Das, increased competition amongst doctors and the rise of state medical service is changing this picture especially in bigger towns and cities. Das is however, content with pointing out only the problems faced by GPS. This in itself does not tell us their possible role in social revolution and the attitude of marxists towards this layer. He does not mention their poor understanding of clinical or preventive medicine; their unnecessary use of injections to earn money, unnecessary use of drugs (rational or irrational combinations) many a times cursory, indifferent, attitude to patients, and so on. Likewise other contradictory aspects of their existence have to be brought out since it is these contradictions which tell us about the potentialities of change.

Confusion between two categories: Das clarifies that "the present discussion dwells largely on the doctor in-service among the practitioners of modern medicine". But doctors-in-service is not a homogenous category. Junior doctors are closer to the white collar working class, whereas the medical officers are part of the New Middle Class. Das is unable to see this distinction and therefore discusses the 41 day strike by medical officers and engineers in West Bengal in 1974 and the movement of junior doctors in 1983 in the same breath, in the same section. Here again, he gives a one-sided picture which only defends the sectional interests of the doctors concerned. It does not give us an idea as to what would be the role of this layer of doctors in social revolution. The demands in the 1974-strike mentioned by Das were "exclusive executive power for the scientists, technologists and professionals in the scientific and technical departments of the state administration which were the preserve of the generalists and parity in pay-scale with the IAS". These are demands of a technocracy competing

with administrative beauracracy! The most important issues in medical care like more resources for water and sanitation, proper training and importance to paramedics, rational drug policy, reorientation of medical education....these are not even mentioned by the 1974 strike. Then why does Das talk about the woes of these medical officers and give importance to this strike? This inability and unwillingness to focus on the contradictions of this section of doctors results in only defending the sectional interests of the New Middle Class. From the point of view of a social revolution, this is a fruitless exercise unless the most important issue of fundamental restructuring of health services are also taken up seriously (and not only for cosmetic purpose or for winning sympathy for a struggle basically aimed at sectional interests only).

In the junior doctors strike in 1983 however, the doctors' demand for proper facilities in the hospitals was also the people's need. Interests of doctors and the people coincided on one point. It is hoped that the movement of this section of the white collar working class would transcend more and more purely sectional interests. Only history can tell us whether the 'basic people's demand' of the 1983 strike were genuinely raised or primarily to win public support for a movement for purely sectional interests. We would like to know from Das what efforts this organisation of junior doctors has made to pursue these people's demands during the last two years.

In this brief response, I would not go into Das's discussion on professionalism, role expectation, performance. One would only say that it suffers from the same one-sided, shamefaced defence of professional interests of doctors and their existing role.

Let us be clear about the role of the New Middle Class i.e medical officers (like most of the executive engineers, bank officers and others) in today's society, their contradictions and hence their role in social revolution. Even after a lengthy discussion, Das's article precisely fails in achieving this.

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A dawn rises in your dream,
but you go back to the longings of the coal.
Shovelling centuries back, you return
to the fiery springs
and the merry beasts of yore,
through the prehistoric dreams
of a sunlit village,
through the screaming skulls
of its grudging grandfathers

This earth lies unaware
of the acid and the dust
gathering the form of death
in your toil-torn lungs.
You shovel the coal, but
your naked children howl surprised
as the train passes by the hamlet

My brother, nameless, unknown,
Even you do not know
but for you the heart of Bihar,
its head raised like a seahorse's
stop to beat

Your mind is dry,
sterile like the River Damodar
in summer noons
The Buddha of Gaya ignores your prayers.

But tomorrow a sun will rise
from the flickering flame
of your charred heart,
you will find your forefather's dreams
in the single staring eye of the train, burning.

1974 INDIAN SKETCHES
