PERSPECTIVE

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WHAT IS THE ROLE OF INDIGENOUS MEDICAL SCIENCES I'N OUR HEALTH CARE SYSTEM ? *

A MATTER OF DEBATE

In India as well as in most other non-western societies, there exist two distinctly different systems of medicine, the traditional system, and the modern or the western system introduced during the period of colonial rule. A uniform feature of all these societies is that the western system serves less than 15 per cent of the population, though it often takes up a lion's share of the budget. In India, even today, as it was around the turn of the century and earlier, only a small minority of the population is served by western medicine.

Today's talk of the "revival" of traditional medicine and the level and manner in which it is portrayed has tended to obscure certain key aspects of the role of traditional systems of medicine and the history of their interaction with western medicine. Ever since the beginning of the encounter between allopathy and indigenous systems, allopathic professionals have consistently tended to view any support for indigenous medicine as the encouragement given to the most regressive tendencies in Indian society. And the ambit in which the government policy has moved ever since the establishment of the British rule is typically illustrated by what occurred in Punjab in the 1860s.

In 1867 in Punjab, the government sanctioned a programme, proposed by Lt. Col. T.W. Mercer, District Commissioner of Sialkot, to establish a district-wide scheme for medical relief using the district hakims. Hakims were given a brief course of training by Mercer and sent into villages. The scheme was wound up later because of protests from practitioners of western medicine. However, what is important to note is that Mercer himself was not concerned with the restoration or revitalization of the unani system. He in fact planned "the gradual substitution of English medicines for useless native

* Response of indigenous medical practitioners to the Madras inquiry sixty years ago

drugs, the attendance of the sick of all classes to effect prompt medical relief, and ultimately the subversion of the system of medicine as practised by the natives." His aim was no different from the allopaths opposed to his scheme, namely, the spread of allopathic medical system in Punjab controlled by professionals belonging to the western system of medicine. But to insist that this must be done, without concern to local customs and beliefs, was in Mercer's opinion, "to insure resistance on the part of the population and to slow the spread of western medicine for years to come."

Today, after a hundred years, very similar arguments are taking place mainly to decide between courses of action which, if not carefully examined and debated, may do more harm than good. To facilitate this search it may be useful to take a look at the history of interaction between the two systems: indigenous and western systems of medicine.

Indigenous medicine in the 20th century

By mid-19th century, the allopathic system had become the sole recipient of state patronage. The beginning of the 20th century saw a great revival of nationalist spirit and several efforts were made to strengthen the indigenous systems of medicine. Various institutions were started for providing education and medical care along these lines.*

Several committees were appointed in the states which did gather detailed information about the indigenous systems. One of these was the Madras Committee of 1921.

The report of the committee appointed by the Madras Government in 1921 is particularly interesting since it contains the testimony of several indigenous practitioners themselves on a variety of issues such as cost, efficiency, and scientific basis of the indigenous medical systems. The Government of Madras appointed this committee "to report on the question of recognition and encouragement of indigenous systems of medicine in vogue in the Presidency." The object of the enquiry was to "afford the exponents of unani and ayurveda systems an opportunity to state their case fully in writing for scientific criticism and to justify state encouragement of these systems." The 10 member committee was constituted with Mohammed Usman as Chairman and Captain G. Srinivasamurthi as Secretary. The committee contained two ayurvedic physicians (K.G. Natesa Sastrigal and C.T. Arumugam Pillai), three allopathic doctors (who were acquainted with the indigenous medical systems) and four MLCs. The committee prepared *a* questionnaire and obtained responses from various indigenous medical practitioners.

The tenor of the questionnaire can be gauged from some of the questions listed below:

a) What are the theory or theories of causation of disease according to your system? Please favour the committee with your views on how far your theory or theories stand the test of modern scientific criticism.

* Venkataramana Ayurvedic College and Dispensary, Madras (1905), Tamilut-Tib Institution in Lucknow (1902), etc.

b) Do you agree with the view of the Calcutta University Commission that "there is a great and promising desire at the moment, among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods...." (cited earlier) ?
c) If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfillment of such an ideal ?

The committee submitted its report in 1923.

The question whether the indigenous systems are "scientific" seems to have been given the foremost consideration and the report at the very beginning says "the first question we addressed ourselves to was to decide whether the indigenous systems of medicine were scientific or not. The Secretary (G. Srinivasamurthi) furnished us with a memorandum reviewing the question in all its bearing and we agree in the main with his two general conclusions, viz., 1) from the standpoint of science, the Indian systems are strictly logical and scientific; and 2) from the standpoint of art, they are not self-sufficient at the present especially in the surgical line though in the medical line they are generally speaking quite self sufficient, efficient, and economical."

The report establishes with facts and figures that in the Madras Presidency, "less than 10 per cent of the population is served by allopathic practitioners and institutions."

The response of the indigenous medical practitioners to the appointment of such committees was varied. The All-India Ayurvedic Conference passed a resolution urging its members to "give replies to questionnaires issued by the committees appointed by different provincial governments, give evidence, and also work on the committees if called upon." In contrast, the Andhra Ayurvedic Conference held at Tenali passed a resolution that "the Ayurvedic physicians of Andhra Desa should not cooperate with the committee (the Madras Presidency Committee of 1921) as they believed that the committee will not be conducive to the interests of the ayurvedic system; they also thought that it was a bait to pass off some more time; also they had no confidence in the government."

Of greater interest, however, is the testimony of the practitioners themselves indicating how they viewed their own medical system and its relation to allopathy. This is best illustrated by the following • excerpts taken from the testimonies of these practitioners, focusing on issues like efficacy and cost of the indigenous systems, their scientific basis, and their views on the relationship between allopathy and Indian systems of medicine including the proposals often made for "closer contact and interaction" between them.

The statistics given in the report do certainly afford clear evidence that the Indian systems are not only efficient as far as they go, but undoubtedly more economical than the western system.

Popularity *of* ayurveda: Ayurveda was not only decidedly cheaper than allopathy but was also tremendously popular and effective.

To quote Mahamahopadhyaya Kaviraj Gananath Sen of Calcutta, "As to the general efficacy of ayurvedic treatment, I think there can be little doubt... Where there are well equipped ayurvedic charitable dispensaries side by side with similar allopathic dispensaries in a town, the attendance in the former goes on increasing steadily to an extent which would seem to be incredible."

This is substantiated by several statements of physicians. To quote one example, Vaidya Appa Sastri Sathe of Bombay states:

"When there was a cholera epidemic at Parel (Bombay) in 1918, the Deccan Volunteer Corps, of which I was then the President, had opened two charitable dispensaries, one ayurvedic and the other allopathic. The allopathic dispensary was in charge of Dr. Madan. L. M. and the ayurvedic one was managed by Vaidya Patwardhan. There it was found that the proportion of patients at the ayurvedic dispensary was six times as that at the allopathic dispensary. Not only was the number of patients who visited the ayurvedic dispensaries great, but the percentage of recoveries in the ayurvedic dispensaries was much in excess of that in the allopathic dispensaries."

Why allopathy is costlier: Several of the pundits go on to analyse reasons as to why allopathy is bound to be costlier, such as its high dependence on foreign inputs, the costly nature of its diagnostic tools and aids, and so on. To quote Appa Sastri Sathe:

"The cost of ayurvedic treatment is trifling when compared to that of allopathic treatment. The reasons as to why allopathic treatment is so costly are that 1) The doctors go through costly training and therefore charge high fees. 2) All their medicines are imported from abroad and are monopolized; so they have to buy them at high prices. The experience during the last war is common to everyone. The doctors had to pay, and even now do pay, high prices for medicines of daily use such as quinine, sartonine, etc. They are not taught to prepare these medicines themselves and have therefore to buy them at exorbitant rates. The case of ayurvedic physicians is quite different. Their education not being so costly, they can charge less. They prepare their own medicines from indigenous plants and herbs and other ordinary articles got from bazaars and therefore they can dispense them at a very low charge."

One of the main reasons cited for the greater cost of allopathic treatment is the cost of its drugs. There is clear recognition that many of these are only "processed" (and hence inferior) forms of Indian drugs, and the increased costs only benefit middlemen or go towards making cosmetic changes in presentation and packaging that adds nothing to the medicinal value of the drug. To quote S.R.V. Das from Vellore:

"There is no doubt that medicines prepared according to ayurvedic principles are very much cheaper than medicines made by the English method. We see that chukku (dried ginger) that is grown in our country and bought for two annas goes across the ocean, changes its

natural form, gets packed in a fancy container and covered by coloured labels, and comes across the ocean again with a new name unknown to us and gets sold at a price of Rs. 4 to Rs. 5 per bottle. No matter how often it crosses the seas, our chukku remains the same old chukku. By such numerous trips across the ocean, will its qualities grow ... ?"

To quote Shri Vaidya: "Most of the allopathic medicines are produced in foreign especially European countries where the cost of labour is higher than in India. ... According to the taste of richer people in Europe, the medicine makers try to acquire a high standard of excellence in outward form, in packing and other contingencies, which do not affect the real value of the medicine, but evidently raises its cost. ... Medicines prepared in India are sold in any quantity required by the patient, while most of the foreign medicines cannot be had for less than a certain definite quantity in which it is packed by the maker and whether it does or does not suit the patient afterwards, he has paid for a full phial, bottle, or box as the case may be, and if another medicine is then prescribed, the same procedure repeats itself."

Yet another reason noted for the high cost of allopathy is the expensive clinical and diagnostic aids it demands. As Kaviraj Haran Chandra Chakravarthy (from Gharmara, Bengal) observes :

"Allopathic treatment which has been adopted as is followed by physicians nowadays is almost an impossibility for a poor country like ours to undergo. Firstly, for the proper diagnosis of disease, it is necessary to examine blood, urine, and sputum at least, with the help of western chemical science and microscope. This scientific diagnosis is impossible in villages. And, as it seems, it cannot perfectly be demonstrated in almost all the towns and cities."

Is ayurveda more *effective ?* Numerous instances are cited where ayurveda has provided effective remedies for conditions pronounced incurable by allopathy. To quote Kaviraj Gananath Sen once again:

"In private practice the average ayurvedic physician often does better than his western trained brother/Besides, western trained medical men very often request the services of their ayurvedic colleagues, in chronic intractable cases, not only among their patients, but also among their own family members."

Is ayurveda suitable to local conditions? Ayurveda, as developed in India, is adapted to suit the needs of the masses and blends with the cultural, religious, and social practices of the nation. A glaring problem with allopathy that finds repeated mention is in the matter of diet. It is pointed out that at one level, even as a science, allopathy does not have well developed notions on dietetics and the adaptation of a diet to suit individuals and their specific needs; while in practice doctors do not invoke even the most obvious changes dictated by a change of place, context, etc.

Similarly, Haran Chakravarthi states: "As regards diet, juice of masuri dal, milk, meat juice, and other cheap, easily available foods are prescribed by ayurveda. The western system of medicine has hardly discussed the dietetics and customs of our country while ayurveda has laid down what is particularly beneficial or detrimental to our health, after due consideration of merits and defects of every one of our food stuffs in all their different conditions and forms, and of every one of our actions. It has further enjoined that in selecting any diet, the physician should closely observe the conditions of the place, time, vitality, natural constitution, habits, and age of the patient. In the West, consideration of diets is based on the chemical analysis of those ingredients, but in a majority of cases such a process hardly yields any useful result."

Surgery in indigenous systems: The report also includes some details about 14 institutions of Indian medicine—13 ayurvedic dispensaries (7 in Madras city and 6 outside) as well as the Takmul-ut-Tib Institution in Lucknow. The information is quite revealing showing as it does the extent to which surgical relief was provided by some of these dispensaries, even when surgery was supposed to be in a state of "decay."

The contents of the report refute some popular current myths about indigenous sciences and their relation to western science. Today many of the practices of traditional science and technology have undergone considerable distortion and decay and in most areas the traditional practices are being rapidly replaced by western science and technology. It has become common among a section of historians and scientists to offer a post factum explanation for this situation to the effect that this decay is a "natural" process by which a science that was not serving the needs of the people and not suited to the changing times, was replaced by modern, science, which represented an intrinsically "superior rationality." However, what this report clearly establishes is that, even after a long period of neglect due to absence of state patronage and well over a century after the introduction to western medicine which became the sole recipient of state help, the indigenous systems of medicine were not only serving over 90 per cent population, but doing so much more effectively and economically than the western medicine. The "decline" that set in was not because they had ceased to be useful or effective, but the result of constraints being imposed on them by a political process that favoured western medicine.

In the testimony of the practitioners there is a clear statement that ayurveda is a science with its own distinct world view, which was in consonance with the Indian culture and civilization and ideally suited to meet the specific needs and conditions of the people.

In the past 50 years, ayurvedic education has been taking new forms, with varying degrees of "integration" with allopathy. A lot of research and investigation, performed in the name of indigenous

medicine, employs the framework of western medicine; thus, increasingly, drugs are "standardized" by chemical composition, and efficiency of drugs or treatments are "tested" by employing criteria prescribed by western medicine as a yardstick. Today's talk about "development" of indigenous systems by the World Health Organization (WHO) has also a similar perspective. The Chief of the Unit of Traditional Medicine at WHO headquarters at Geneva, Olagiwola Akerole has in a recent essay spelt out some aspects of the role of WHO: "The large number of health practices in specific countries need to be identified, gathered, sifted and evaluated ....modern technology can be used to provide evidence of efficacy and safety or to prove the placebo effect of some practices and remedies."

Do all these constitute the development of indigenous medicine ? Do we have a clear understanding of what should be the system of health care ? Could it be the indigenous System of medicine ? If not, why ? If yes, what need to be done to facilitate the development and use of the system ? Contextually, the search for alternative will not be relevant if it ignores the importance of finding answers to these and similar questions.

(Condensed from "What is the role of indigenous medical sciences in our health care system ?" Gram Vichar, 3(10), December 1984.)