# SOCIAL AND BEHAVIOURAL ASPECTS OF MEDICAL EDUCATION

## T.J. Danaraj

Head of Department of Medicine King Abdulaziz University, College of Medicine and Allied Health Sciences Jeddah, Saudi Arabia

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by T. J. Danaraj\*

Problems in health care vary from country to country, but they are not static and undergo changes, some of which may be quite rapid.

While acute epidemic diseases such as small pox have been brought under control, the unprecedented growth of towns and of industries have produced additional nuisances and dangers to health. With the extension of life expectancy, there is an increase in degenerative diseases of all sorts, especially cardiovascular, and geriatric problems. Trauma and accidents resulting from motor vehicles and industrial development have increased enormously. Due to rural-urban migration, social and psychological problems have arisen from failure of adaptation to changing conditions. However, there is improvement in the diagnosis not only of an individual's illness, but also that of the community, its needs and potential ill conditions.

Throughout the world, health needs are changing and rapidly so in developing countries: these must influence the evolution and pattern of the delivery of health care. The economic aspects are important as a substantial portion of a government budget is devoted to the delivery of health care. And there are many other channels besides the health budget through which contributions are made to the health needs of the community.

<sup>\*</sup> Professor of Medicine, College of Medicine and Allied Sciences, King Abdulaziz University, Jeddah, Saudi Arabia.

Emeritus Professor of Medicine, University of Malaya and Foundation Dean, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia.

Medical educationists have been aware that the education and training of physicians and allied health workers should be orientated towards the current problems of the region in which they will have to work and that they should be prepared to diagnose and deal effectively with future changes that may occur. Hence new courses, disciplines or departments have been instituted in the traditional medical schools in developed countries and two such instances are:-(a) the development of community or family medicine and (b) the teaching of social and behavioural aspects of health care. In the developing countries the need for the orientation of the total medical school towards these disciplines and the intensification of instruction in these disciplines has not advanced as much as it should have done. This is mainly because the old established medical schools in the colonial territories of Africa, India and South East Asia were bound by the traditional curriculum which had been introduced decades ago by the founders and heads of departments who were foreign to that particular region. However with the emergence of national governments in these areas, new medical schools inspired by the demands of the local communities and their needs have tended to develop their curriculum more in conformity to local / and with special reference to community health and the behavioural sciences.

This paper is concerned with one such medical school newly established in a multiracial country where modern scientific medicine is practised side by side with traditional medical systems.

I refer to Malaysia where a new medical school with its own hospital was established in 1963 and its first graduates produced in 1969 (Danaraj 1970).

Malaysia includes the Malay Peninsula and the states of Sarawak and Sabah in North Borneo. Large areas of land, some 60%, are still under dense tropical forests and sparsely inhabited. It was the presence of these forests that set the pattern of early settlements along the coast and around the mouths of rivers, extending up navigable rivers. The pattern of coastal and riverine settlements can be still seen on the east coast of the Malay Peninsula and Borneo territories. The population density varies from 17 persons per square mile in Sabah and Sarawak to 154 persons per square mile in the states of Malaya.

Malaysia is a predominantly agricultural country with forestry, farming, mining (namely tin, iron and bauxite) contributing mainly to the economy. The two main crops are rubber and rice, rice being for domestic consumption and rubber forming the chief primary export commodity. It is from the rubber that one-quarter of the income earned in Malaysia originates. Other important export items include timber and copra from Sabah, tin and iron, coconut, palm oil, pineapple and tea from Malaya and petroleum, timber, pepper, and sago and bauxite from Sarawak.

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The Malaysian economy faces several important problems. The specialised nature of production being concentrated on a particularly small number of primary export commodities makes the country highly dependent on international trade. Natural rubber faces competition from the synthetic product. Known reserves of high grade tin ore are being exhausted.

While it is said of our economy that it must be diversified the opposite may be said of our people. What we need is more homogenization of our various races, creeds and cultures into one Malaysian. The population of approximately 11 million is composed of Malays (46.8%), Chinese (34.1%), Indians (9%), Dayaks (3.7%), Kadazans (1.8%) and several indigeneous tribes such as the Melanaus, Muruts, Bajaus, Senoi, Obians, Bindans and Sulus. Approximately, only 30% of the population live in towns of size greater than 10,000 persons with organized health services such as water supply and excreta disposal.

Population growth has been extremely rapid and is about 3.3%.

This rapid growth has resulted from a declining death rate with birth rates remaining high. The population is a young one, more than 50% being under the age of 20. The rapid growth and the age distribution has an important effect on our economy, all our services, schools, medical care and health services being affected.

Much of our knowledge of the pattern of diseases in the country has been built up from clinical experience over many years of work in hospitals. But the situation is analagous to an iceberg, in that there is much below the surface of which we have no knowledge.

The major diseases are malaria, tuberculousis, diseases due to poor sanitation (namely helminthiasis, amoebiasis, gastroenteritis, \$typhoid, etc.), malnutrition and leprosy. In the urban areas, trauma resulting from accidents and tuberculosis lead as specific causes of death, with degenerative heart disease coming third. Communicable diseases, including preventable diseases such as diphtheria, still cause a large proportion of deaths and diabilities.

What of our health services? These have expanded greatly during the past decade, but we are still having difficulty in meeting our needs, particularly in the rural areas. The overall doctor-population ratio stands ar 1:6,000, but the distribution is uneven, the doctors being concentrated in the urban area and not available to a large proportion of the population, and auxilliary health workers are still—scarce.

Should we have more medical schools? Another one in Malaysia is already been established, but should we not rather consider the type or types of physicians that we need and want instead of following traditional patterns of the curriculum in well established schools?

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The doctor-population ratio mentioned above refers only to doctors regarded as western-trained physicians. However, it must be emphasized that there are also other physicians but of the traditional medical systems (Chen, 1975) which are a direct reflection of the ethnic diversity of the population of Malaysia. Although traditional medicine is giving way to modern scientific medicine the latter is not replacing traditional medicine, which is being practiced with some vigor both in towns as well as in rural areas and plays an important part in satisfying the health care needs of the country. Undoubtedly the contribution made by the various traditional medical systems will continue to remain substantial for several decades.

To the traditional Malay, disease is thought to be the result of one or more of three classes of factors, namely, pre-disposing factors, supernatural causes and physical causes. The pre-disposing causes include: the loss of the vital soul substance "semangat". A person without his "semangat" is defenceless against any spirit and is also susceptible to the effects of physical agents to which he might otherwise have no ill effects. Incorrect behaviour as well as mental stress are also reputed to produce ill health. Supernatural causes include a host of malevolent spirits, witchcraft and the will of God. Physical causes include certain foods such as fish which is reputed to cause worms, heat and cold (properties said to be present in some foods) which may cause swellings, poisons, physical trauma and organic impairment as in the case of epileptics and senile individuals. When

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it comes to therapy, the traditional Malay believes that the "bomoh" (Medicine man) is immensely suited to the task of healing since he knows the folk-lore of disease causation and has at his command the mystical powers of ascertaining the cause of ill-health as well as of therapy which usually involves mystical incantations. There are an estimated 20,000 "bomoh" in Peninsular Malaysia compared with about 3,000 registered practitioners of modern medicine in Malaysia. The majority of bomohs are farmers who practice only when the occasion necessitates. Approximately 2,000 of the bomohs are full-time practitioners whose speciality ranges from psychotherapy, bone setting, cupping to treatment for loss of "semangat", abdominal colic and mass hysteria. Training is by means of apprenticeship.

The Ibans and Kadazans who form the main ethnic groups in the two Malaysian states in Borneo have concepts of disease causation with some similarities to that of the traditional Malay.

Chinese form the second largest ethnic group in Peninsular Malaysia and are influenced to a great extent by traditional beliefs and practices that have remain unchanged for decades. In the traditional Chinese concept of the universe the elemental forces "yin" and "yang" are conceived as being in harmonious balance; all branches of traditional Chinese philosophy including medicine are dominated by theories of the harmonious balances of the elements, ill-health resulting as a disturbance in this balance. Thus numerous Chinese herbs and medicines are imbued with special properties which help to restore

this balance. It is estimated that there are about 1000 traditional Chinese "sinseh" (medicine man) in Peninsular Malaysia of whom 500 are members of various Chinese Physicians' Associations and have received formal training in traditional Chinese medical schools either in China, Malaysia or Singapore; the formal training takes approximately 4 years.

Although a strong tradition of ayurvedic medicine exists in rural Indian communities in Malaysia, it is relatively poorly established when compared with the above preceeding types of traditional medicine and is being replaced largely by modern scientific medicine.

The differential use of the various medical systems available in the country depends on the cultural background of the different ethnic groups, the availability of each medical system, the degree to which modern science has eroded the traditional culture, the extent of cultural integration present in the traditional culture in question, and its geographical isolation in terms of other communities. The effect of these social factors apply with varying degrees to each ethnic group in Malaysia.

In such a culturally diverse society, both in terms of ethnic variety with its different languages and of the urban rural differences, a knowledge and understanding of the differences bytween patterns of behaviour is essential in the delivery of health care.

Hence the opportunity was taken in the development of a curriculum in a new medical school in Malaysia to establish strongly a programme in social and preventive medicine and medical sociology. The latter subject has formed part of the curriculum with each class of students since the first was admitted in 1964 (Chen, 1972). The course attempts to show the medical student that the social environment of his own upbringing is only one facet of the complex society in which he lives and will have to work, and an understanding of man in health and in sickness. Deliberate efforts are made to show students the relevance of sociological concepts and theories to the roles and functions in society of doctors and of organizations for medical care.

The first part of the course gives the student an understanding of the more important and relevant sociological concepts, including those on culture patterning, social norms, deviance and conformity in society, values, attitudes and value-orientations, and the major social institutions such as the family. In addition sociological theories in regard to the role of socialization and culture in personality development, the rules governing group behaviour, and the nature of sociocultural change are briefly covered. Empirical research designed to test such theories are used as illustrative material of the methods of sociological observation and analysis.

In the second part, these sociological concepts and theories are applied to medical practice both in terms of the doctor-patient relationship as a social system and in terms of the organization of

medical care on a community level. The pattern of health behaviour of the patient and his family and of the role of the doctor and the medical profession are discussed in detail. In addition the relative role and importance of the various forms of traditional medicine is examined.

The sociological concepts in relation to man in health and sickness are reinforced in the clinical years when the student takes part in health surveys in rural areas. Each student spends from two to three weeks in a rural community where he studies the physical environment of a selected group of inhabitants and notes their way of life, and where he inquires into their health attitudes and behaviour, dietary pattern, literacy, economic and occupational patterns, and into any custums that might be of importance in relation to the prevention and treatment of illness.

Further reinforcement occurs when the homes of selected patients are visited, under the guidance of his teachers and of the hospital medical social workers. These selected patients and their families are followed-up for about a year, and this affords the opportunity for the student to study the reason why patients and their families behave as they do in situations of illness in relation to the social and cultural factors that operate in their sub-culture. In addition, the student is able to study how sociocultural factors contribute to the causation of disease, hinder prevention and treatment, and contribute to difficulties in communication in relation to the patient and family studied.

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Finally, it should be mentioned that, with sufficiently sensitive teachers, reinforcement is continually occurring as an integrative contribution both in the hospital wards and in outpatient clinics as well as in elective postings to general practice clinics.

### Conclusion

Health problems which vary from country to country are undergoing changes which require different patterns in the delivery of health care. The education and training of physicians and of auxilliary health workers must place sufficient emphasis on community medicine and the social and behavioural sciences with particular reference to the region in which the health workers are going to practice. How this has been done in one new medical school (viz. Malaysia) in a developing country with a multiracial population is briefly described.

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