- (ii) Income multipliers show the changes in total demand when final demand changes. The response of supply also needs to be analysed.
- (iii) Export earnings have been analysed with a view to determine the effect on total demand. The analysis could have been extended to the net foreign exchange earnings if exports of different economic activities had change by one unit.

In sum, the paper is on an interesting theme. If data problems are resolved and sector classification is made more appropriate, it would yield very useful insights, despite the limitation of Input-Output Analysis such as constant returns and zero substitution between inputs.

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Issues in Pakistan's Health Sector

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INTRODUCTION

The health sector in Pakistan is riddled with numerous problems, constraints and contradictions. There is the problem of a lack of health facilities in rural areas, of unemployed doctors despite the acute shortage of trained medical personnel in the country, of 'brain drain' of medical graduates, of the inability of medical graduates to work in simple rural settings and their dependence on "sophisticated" technology of pharmaceutical companies enriching themselves at the expense of the common man, and of a lack of potable water and adequate sewerage in slums and rural areas. The list can be expanded but the stark fact is that most of the people have little or no access to adequate health facilities and are faced with a high incidence of disease.

It is our contention that the problems of health care in the country are linked directly to the prevailing social, economic and political systems that determine the allocation of resources within or outside the health sector. We argue that it is this class system which is responsible for the lack of adequate infrastructural and health facilities in rural areas and urban slums and for the reluctance of doctors to practise in these areas.

In the sections that follow, we present a brief history of the evolution of the health sector in Pakistan and deal with some of its salient features as they exist today. Throughout our discussion, we will try to point out the structural bases in our economy and society which have determined the path taken by the health sector.

HISTORY OF HEALTH SERVICES IN PAKISTAN¹

Up to 1947, when Pakistan achieved independence, both India and Pakistan were ruled as one country by the British. The history of the two countries until

*The author is Research Economist at the Applied Economics Research Centre, Karachi. A number of the issues presented in this paper have been dealt with at great length by the author in his papers [9] to [15] but have been brought together here. The author is grateful to Mehreen for her numerous comments on an earlier version.

¹For a greater account of the history of the health sector in India and Pakistan, see [1]; [2]; [9]; and [12].

then, despite regional specifics, followed similar trends and conformed to the dictates of colonialism. This was largely true in the case of health services, except that the areas that comprise Pakistan today carried a greater influence of Muslim and Arab medical tradition.

Before the arrival of the British rulers in India, there existed indigenous forms of health care in the subcontinent. Banerji writes that in the ancient civilizations of Moenjo Daro and the Indus Valley, there existed "a great emphasis on the preventive aspects of disease indicating a fairly mature attitude of the society towards the health problems ... of that time" [1, p. 1333]. As India was invaded by nations with foreign cultures, new social and political mechanisms evolved, as did methods of health care and medicine. The Arabs and the Mughals brought with them techniques that even today influence medical practice in Pakistan. At the time the British came to India, the indigenous system of health care was highly advanced and could compare quite favourably with that imported by the Westerners.

With the arrival of the British, "every facet of Indian life, including the medical and public health services were subordinated to the commercial, political and administrative interests of the Imperial government in London" [1, p. 1334]. The Western medicine brought by the British to India was primarily meant to suit the needs of their own administrative and military personnel. Along with their own people, the British permitted the native Indian elite also to use this modern medical care, and this trend continued even after Independence, when only the affluent and ruling classes had access to adequate medical facilities. At the same time, the British allowed a select few from this elite to become administrators, bureaucrats and doctors and work alongside the colonialists. Thus, when they left India and Pakistan, the British had made sure that they "retained considerable influence on the entire health service system of the country by ensuring that the top of the medical profession in India remained heavily dependent on them" [1, p. 1334]. It was not only medicine, however, but the entire civil, military and administrative services which were handed over by the British to the "Brown Englishmen" of India and Pakistan.

After Independence, the new ruling class in Pakistan carried on the same policies as their colonial predecessors. British Imperialism exploited the economic and cultural wealth of India and built institutions (including those that delivered health care) to further its broader interests. What is worth noting is that the rulers of "independent" Pakistan continued those policies which were designed to serve Imperialism and did not devise any measures to deal with the real problems of the people of Pakistan. At the time of independence, it was only the elite who had (and still have!) easy access to the best hospitals and doctors in the country. At the same time, the masses have had to make do with exceptionally poor government facilities, whether they are the out-patient departments in large urban hospitals, or the so-called, rural health centres and basic health units which are meant for the delivery of health care to the rural populace.

In 1986, Pakistan's health-care system can very simply be described as "a highly inequitable, western-oriented curative care model which certainly does not fulfil the requirements of a very great majority of the people of Pakistan" [11]. Let us now turn to the salient features and problems of the health-care system in Pakistan today.

THE PRESENT HEALTH-CARE SYSTEM IN PAKISTAN

Two Biases: Urban and Class²

A cursory glance at the distribution of health facilities in Pakistan reveals a startling picture. Despite the fact that 70 percent of the population lives in rural areas, most of the medical personnel and health facilities are found in cities. For example, 85 percent of all practising doctors work in cities, which comes to a (theoretically) favourable doctor-population ratio of 1:1801 for the urban areas of Pakistan. The rural doctor-population ratio, on the other hand, is 1 doctor to 25,829 inhabitants. In Sind, the second most populated province of the country, the rural doctor-population ratio is 1:57,964. If that figure is surprising, the nurse-population ratio in Sind would indeed astonish most people: there is only one nurse to a population of 568,050! Similarly, 23 percent of the hospitals in the country are located in rural areas and only 8754 beds (18 percent) are available to a population of 60 million [9].

The phenomenon described above has been called an "urban bias" by one influential writer [3]. Although we have rejected the ideological underpinnings of the Liptonian thesis (he believes that there is a conspiracy of sorts by the urban populace against the rural inhabitants, and sees the struggle for the allocation of resources as being between urban and rural areas [9]), the term can help in illustrating a phenomenon. It is quite clear that whether it is in the field of education or in the area of health care, an "urban bias" does exist in the form of a lack of facilities in rural areas and discrimination against rural inhabitants.

The reasons for such "urban bias" in Third World countries are numerous. Firstly, the ruling class resides in cities. This applies to agricultural societies, too, where, despite a feudal structure, a very large number (and proportion) of the landlords are of an "absentee" type, and they too live in cities like industrial and mercantile elite and enjoy the fruits of "development". Secondly, the cities are also the seat of government in most Third World countries. Along with the ruling class, the members of government, the bureaucracy and the military have made urban areas their homes and power bases, and thus an infrastructure has been developed to support these inhabitants. Thirdly, organized, articulate and politically active groups

² For a detailed discussion, see [9]; [10]; [11]; and [13].

such as Trade Unions, students and professionals have also made their presence felt in urban areas and have acted as pressure groups to secure their demands.

In short, since the dominant classes in the Third World live in cities, the best facilities are also located here. Similarly, there are certain sections of the society which can put pressure on government and thus the government must try to appease those groups by allowing them some access to health and other basic facilities.

These power groups have been living in the cities of Pakistan since long before the partition of the subcontinent. Thus when we look at the health programmes of the British, we find the same "urban bias" as we find in post-partition Pakistan. The government, whether of Imperial Britain or independent Pakistan, works under numerous constraints, one of which requires it to please the ruling class and other vociferous sections living in the cities. Thus all governments to date have, either overtly or covertly, shown an "urban bias" in their programmes. For example, despite repeatedly stated attempts to "redress the balance of facilities between rural and urban areas" (a common theme in most five-year plan documents), no real change has been made over the 39 years since Independence. Despite the rhetoric, in the end, over 80 percent of the already miniscule health budget (less than one percent of the GNP) gets allocated to city-based curative health facilities at the expense of rural health programmes [8]. An important reason for a lack of trained medical manpower in rural areas is the dismal lack of facilities. Even if some well-intentioned doctors wanted to serve in rural areas, the extremely deplorable conditions prevailing there would cause them to change their mind [10]. Further, the government seems rather naive when it urges doctors to go to rural areas even when it pays them less than it does their colleagues at equivalent positions in urban areas.

Our criticism of the Liptonian "urban bias" thesis is that, although this bias is "apparent", there exists a deeper and more fundamental bias which is the main determinant of access to health facilities. This is the *class bias*. The facts reveal that not all urban inhabitants have equal access to health facilities, nor are all rural-ites equally discriminated against. It may be easier for a feudal landlord to have access to good health care than for a slum dweller in a large city. A bustee-dweller may have "apparent" access in the sense that he may know of the existing facilities but it is not likely that he will be able to afford the high cost of private care. At the same time, the quality of care at a government hospital OPD, where a doctor has less than 60 seconds for a patient, is indeed questionable. Similarly, for residents within cities, great differences in access exist. Those with money can afford the 'best and latest' technology and have immediate access to facilities, while the majority, like the slum-dwellers mentioned above, face innumerable hurdles.

Thus, despite the apparent urban bias, we can conclude that "irrespective of geographical location, it is class location which determines access to health facilities" [9, p. 474].

Medical Education and Training³

The purpose of medical education is to produce medical personnel who can work effectively in the existing model of health care in a country. Thus, the doctors produced after six or seven years of training in Pakistan are those who work best in the setting described above: one that is urban care-oriented, and essentially serves the interests of the richer inhabitants of the country.

Medical students in Pakistan are taught from books written in and for the developed countries. Thus the diseases our students learn about are more specific to the developed capitalist nations than to the underdeveloped ones. For example, they learn from their books that cardio-vascular disease and cancer are the main killers, while the real situation in Pakistan is that parasitic and infectious diseases are responsible for 54 percent of all deaths, while diseases of the rich and of Western countries (heart disease and cancer) account for less than 2 percent of all deaths [5, p. 614]. The teaching methods and books leave such a profound influence on the students that they begin to believe that one of the main causes of death in Pakistan is indeed the cardio-vascular problem [10]!

Not only the diagnosis of the disease comes from Western sources, but also the approach to care and cure. The curative care approach followed in the developed countries is copied in underdeveloped countries where the emphasis turns to city-based hospitals. The teaching faculty plays a contributory role in accentuating this "cultural imperialism". Professors go to the West for training and urge their students to do the same to acquire skills in disciplines such as neuro-surgery and plastic surgery. When (if) these doctors return, they become even more alienated from the masses of their country who live in urban slums and rural areas. Firstly, they lose touch with common ailments which afflict the poor, such as gastro-enteritis and tuberculosis, and can deal best with the diseases of the rich. Secondly, and more importantly, the West-trained doctors are available to only a select few who can afford their high fees.

In underdeveloped countries like Pakistan, where most diseases are of a communicable and preventable nature, the emphasis should be on training doctors who are well-versed in primary health-care techniques. Yet, the course in Community Medicine in medical school is taken very lightly by the students and teachers who have no real community experience [10; 12]. Often one finds examples of qualified doctors being unable to cope with simple and common problems like snake-bite. The training and practical experiences of medical students are solely dependent on their interaction with patients who come to their urban hospital — again, a curative approach when a preventive approach may be preferable.

³ Also, see [10]; [11]; [12]; and [13].

The explanation for this inappropriate medical education is quite straightforward. Since it is the ruling class which essentially determines the dynamics of the health sector, it is also responsible for the production of a specific kind of doctors. This ruling class requires a doctor who works best in a hospital-based curative-care setting and can deal effectively with the diseases of the rich of Pakistan, which are similar to those common in the developed countries. Consequently, the curriculum in medical colleges is designed to produce the desired product.

An important outcome of this type of education and training is the "Westernization" of doctors. Since doctors in Pakistan are taught about "Western diseases", most doctors can, after some acclimatization, work easily in hospitals in the developed countries. Our system of medical education has been a major reason for the medical "brain drain" from Pakistan, with nearly 50 percent of her doctors practising outside the country [5, p, 593]. Had the curriculum been designed to suit the needs of the poor masses of Pakistan, with more emphasis on conditions in rural areas and urban slums, this problem would not arise. At present, given their medical education and a considerable migration of their doctors, the UDCs are actually subsidizing the West!

Unemployment of Doctors⁴

One would think that, given the poor health-status of the population and the poor distribution of facilities, a feature like unemployment of doctors would be quite unheard of in Pakistan. But this is not the case. At present, government sources themselves admit that more than 11,000 doctors are unemployed in the country. On the one hand, the country is faced with this unemployment, while, on the other, the infant-mortality rate is 125 per thousand and the doctor-population ratio in rural Sind is 1:57,964.

The crisis of the unemployed doctors has been brewing for a number of years and has only just exploded. Given the policy of successive governments towards health care, this crisis should have been anticipated. Governments have been obsessed with the city-based curative-care approach and have accordingly built medical schools to provide for the main pillar of the system, the doctor. This one-sided approach to health care has backfired: in the absence of a medical infrastructure to absorb the entire output of medical schools, the doctors have ended up without jobs. Had a more balanced approach been followed, and had facilities been provided in accordance with the distribution of population, the doctors could have been able to find jobs, and some could have even considered moving out of the larger cities. Today, the situation is indeed ironic and deplorable in that, despite the shortage of doctors in the country, the government has advised the unemployed doctors to seek employment in the Middle East.

⁴ Also, see [11].

Pharmaceuticals

Most of the underdeveloped countries criticise and restrict the role of multinational corporations (MNCs) in their country. The reasons are usually the same: the MNCs take out more money in the form of profit than they invest; they often monopolize certain sectors of industry, including certain strategic and essential services; and they exercise political control over local governments in order to guard their investment.

In Pakistan, more than 7500 medicines are produced despite the World Health Organization recommendations that only 250 would be enough for underdeveloped countries. Significantly, 85 percent of the total pharmaceutical production in Pakistan is controlled by 15 MNCs!

There are two main reasons for this state of affairs, which is quite common in most underdeveloped countries. Firstly, in a country which supports a doctor-oriented curative-care model, the doling out of medicines becomes an essential requirement of the system. Doctors must have plenty of medicines to give to their patients. If, on the other hand, the approach to health care in Pakistan was prevention-oriented, with intervention taking place much earlier, the need for medicines would have decreased and the cure would have been cheaper, too. The second reason for the continued prominence of pharmaceutical MNCs in the UDCs is the link these MNCs maintain with the doctor community and with the state bureaucracy. Many MNCs sponsor international seminars with the ostensible aim of promoting medical science, but with the real objective of promoting their own product. In many countries, doctors are given numerous perks to promote certain medicines. Links with the bureaucracy are strengthened and influence is exerted to ensure favourable treatment in matters of pricing and production [6].

In the case of Pakistan, little research has been carried out on the pharmaceutical industry and it is time that some scholars took upon themselves the task of doing it. It is important not only to know the profit which the MNCs make each year, but also to expose any unethical practices that they indulge in.

"Health for all by the Year 2000"?⁵

In 1978, a revolution took place in the field of health care. More than 130 countries signed a declaration at Alma-Ata in which they promised to give to their people adequate health-care by the turn of the century. Pakistan was one of the signatories to the Alma-Ata declaration.

Eight years have gone by since the signing, and only 14 years are left before this century comes to an end. Yet any impartial observer would be distressed by the status of health of the people of Pakistan. Not only have no significant changes

⁵ Also, see [14].

been made in the last 8 years, but, given the present trend, none can be expected in the next 14 years! At best, one can expect some small cosmetic changes within the warped health-care structure in Pakistan, but there are no real indications that the structure itself will be overhauled.

We have argued repeatedly [9; 10; 11; 12; 13; 14; 15] that health care is a reflection of the social, economic and political structure prevalent in a country. If a small ruling clique controls the resources of a country and little or no participation by the people is tolerated, then the health sector will reflect this pattern, and there will be health for a few and not for all. To bring about a revolution in health, it becomes necessary to bring about a revolution in society. The experience of socialist-oriented societies shows that once they have changed the pattern of the distribution of resources within society, they have been able to change the pattern of health care, making access to health measures more equitable [4]. Apart from socialist countries, some Social Democratic nations, with a long history of participation by the masses, have also provided adequate health facilities to their people, and the resulting improvement in their health status is quite enviable [7]. Thus, one cannot expect any significant improvement in the health sector in Pakistan without substantial participation of the masses in the working of society, and without substantial changes in the existing power structure.

CONCLUSIONS

Now, given the above conclusions regarding social change, where does that leave us as social scientists? I believe that history has placed on our shoulders a great responsibility towards society which we must fulfil if we are to be true to our conscience. As social scientists, we must expose the inequalities in our unjust social system. We must keep searching for truth and pass it on to more and more people, who must be informed of what is corrupt in our society. We must work in every possible way to change the society, and bring in a system that will truly ensure equality and participation to all. Only then will we have a system that guarantees Health For All.

REFERENCES

- ✓ 1. Banerji, D. "Social and Cultural Foundations of Health Services System". *Economic and Political Weekly*. Vol. IX, 1974. p. 1333.
2. Banerji, D. *Health and Family Services in India: An Epidemiological Socio-cultural and Political Analysis and a Perspective*. Lok Paksh, New Delhi.
3. Lipton, M. *Why Poor People Stay Poor. A Study of Urban Bias in World Development*. London: Temple Smith. 1977.
4. Navarro, Vecente. "A Critique of the Ideological and Political Position of the Brandt Report and the Alma-Ata Declaration". *International Journal of Health Services*. Vol. 14, No. 159. 1984.

5. Pakistan. Planning Commission. *The Fifth Five Year Plan*. Islamabad. 1978.
6. Patel, S. J. (ed.). "Pharmaceuticals and Health in the Third World". *World Development*. Special Issue, No. 11. 1983. For the case of Pakistan see: daily *Dawn*, Economic & Business Review Section, January 7-14, 1986.
7. Sen, A. K. *Level of Poverty: Policy and Change*. Washington, D. C. World Bank, Washington. 1980. (Staff Working Paper No. 401)
- ✓ 8. World Bank. *Pakistan; Health Sector Report*. Washington, D.C. 1983.
- ✓ 9. Zaidi, S. Akbar. "The Urban Bias in Health Facilities in Pakistan". *Social Science and Medicine*. Vol. 20, No. 5. 1985. pp. 473-482.
10. Zaidi, S. Akbar. "Why Medical Students will not Practice in Rural Areas: Evidence from a Survey". *Social Science and Medicine*. Vol. 22, No. 5. 1986. pp. 527-533.
11. Zaidi, S. Akbar. "Eleven Thousand Unemployment Doctors". (Forthcoming)
12. Zaidi, S. Akbar. "Undergraduate Medical Education in Underdeveloped Countries: The Case of Pakistan". (Forthcoming)
13. Zaidi, S. Akbar. "The Class Composition of Medical Students in Pakistan: Some Indications from Sind". (Forthcoming)
- ✓ 14. Zaidi, S. Akbar. "'Primary Health Care' and 'Health For All by the Year 2000': Can They Be Achieved Without Structural Change?". (Forthcoming)
- ✓ 15. Zaidi, S. Akbar. "Poverty and Disease: Need for Structural Change (Forthcoming)

Comments on "Issues in Pakistan's Health Sector"

The health sector has throughout been given a low priority by governments in Pakistan. The allocation of funds for the health sector, amounting to 0.9 percent of GNP in 1980 and 0.7 percent of GNP in 1984 [1] proves this fact. But what is most annoying is that even scholars and researchers have neglected this sector as an area of research. It is in view of this that the author should be complimented on having chosen this important area for research purposes.

My first observation about the paper is that all the issues that have been discussed in it are well known. The focus on urban and class biases in the health-care system deserves credit but crucial issues like under-utilization of health facilities, declining quality of medical services, and serious imbalances between manpower needs and supply in the health sector have not even been identified.

My second remark relates to the indifference shown towards the positive achievements of public-health measures since independence. The system did develop, no doubt, along the lines set by the British and, thus, it did result in an urban bias and lacked preventive measures and community-based approach, but it nevertheless was effective in reducing mortality. Major declines in mortality until the Sixties were brought about by the introduction of vaccines against small pox, growing use of antibiotics for curing infectious diseases, and adoption of other effective public health-measures by the government. Since 1982, preventive programmes against malaria, tuberculosis and, more recently, expanded immunization schemes, production and distribution of Oral Rehydration Salt (ORS) packages, and training of traditional birth-attendants (TBAs) have been adopted with considerable success.

My third comment relates to the non-identification of some critical issues in the Health Sector. The most critical one, today, is the under-utilization of health facilities which can not be tolerated even under socialistic systems. Even in those areas where health facilities exist, utilization rates are quite low. Basic Health Units (BHUs) and Rural Health Centres (RHCs) are designed to treat up to 50 and 150 patients daily, but the actual number of outpatients who attend these facilities are 25 and 85 respectively (yielding 50 percent and 57 percent utilization rates). One unpublished study for the Punjab discloses this rate to be 10 percent. The average bed-occupancy rate is only 32 percent; operational facilities are rarely used, and there is a complete absence of referral system which could link BHUs and RHCs to

more specialized urban treatment-centres [1]. This under-utilization of the health-care system leads to big increases in unit costs in Health Projects, making them less attractive for investment. To counteract this trend, health projects and programmes need to be appraised more scientifically.

My fourth comment relates to the private sector which is emerging as a major supplier in the health-care system in our country. Though an easily accessible alternative in urban areas for those who can pay, it has produced a quality problem. The negligence, and sometimes incompetence, on the part of not only junior doctors but also of renowned specialists, are increasingly proving fatal and permanently disabling. This has not been mentioned in the paper. Unfortunately, there is no legal protection against the malpractices of doctors, which further aggravates the situation for patients. Medical negligence is a current health-issue, which, if not totally eradicable, must be curbed as far as possible.

My last comment relates to the radical solution, which, the author has suggested, will resolve health-sector problems. One feels very uncomfortable when such Utopian solutions in the present set-up are suggested. In fact, most of us strongly support the overhauling of the present structure. But is it a feasible solution in the immediate future? Pragmatically speaking, it may not be possible to change the centuries-old societal pattern in a short period. Unfortunately, the author has no mid-term solution to offer. Relying on one 'extreme' solution to the problems and ignoring less extreme alternatives, such as a better utilization of the existing system through necessary reforms, would cause the people to continue to suffer indefinitely. Does that mean also that the current system has deteriorated so badly that it can not be reformed?

I think what really has to be done immediately is that primary emphasis should now be placed on the development of a comprehensive and effective basic-health-service system. The nationwide health-care schemes in the Sixth Plan can be considered a first step towards the achievement of a universal health-cover by the year 2000. To reach rural areas which have remained largely unserved by the existing health infrastructure, the government should devise a method of associating the representatives of the people with the administrative set-up, for the purpose of both expansion and improvement. The public sector should be made to play a leading role in providing health care to the people and the private sector should at best play a supportive role in the health system. The under-utilization of health and medical facilities can be rectified by reserving adequate allocations for recurrent expenditure, improving the implementation and supervision capacity of the health structure, better maintenance of equipment, adequate female staffing, and regular training of staff posted in rural health-facilities.

I conclude by saying that the author has used a very simplistic approach in addressing a very complex problem — much of the paper is based on rhetoric and the many points raised are unsubstantiated. More research in the area of health is needed, particularly through surveys, and only then can one really get an idea of the problems of the health sector in Pakistan. The author, apart from the majority of his own references, neglects to mention what research, whether major or minor, has already been undertaken in this area. A section on a review of literature would have been most useful.

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REFERENCE

- 1 World Bank. *Pakistan: Economic and Social Development Prospects. Volume II: The Social Sectors*. Washington D.C. February 18, 1986. pp. 48–73.

INCOME DISTRIBUTION AND EMPLOYMENT