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HEALTH AND MEDICINE UNDER IMPERIALISM

Imperialism is the highest stage of capitalism wherein monopoly capital dominates the life of society. Monopoly capital leads on the one hand, to a tremendous development of the productive capacity of human society, the spread of relations of wage-labour and capital throughout the world; but on the other hand, the private monopoly over these productive forces leads to its underutilisation, its distorted development and the domination of one country or a group of countries over others either in the form of colonialism or otherwise. What are the *specific* effects of this phase of capitalism on health (the determinants, dynamics and the status of health) and Medicine (medical knowledge and medical profession)? In general, the contradictions of capitalism between development of productive forces in society and the specific capitalist relations of production get accentuated in the period of imperialism. Thus the tremendous development of productive forces in the period of imperialism makes it more and more unnecessary for ill-health to continue to prevail. Moreover this development makes it more and more possible to improve health in a positive sense. But at the same time, capitalist relations of production in the imperialist phase do not allow full utilisation of this possibility. This can be seen from only a limited improvement in the provision of food, water, sanitation, safe working environment, medical care, to all the people in the world. Further, monopoly capitalism affects the development of productive forces in such a manner that they instead, foster ill-health by creating malnourishment all over the world (overnourishment in the imperialist countries, and undernourishment in the peripheral countries); pollution-creating and accident-prone working environment, disease creating medical interventions and so on.

This contradiction is also seen in medicine. On the one hand there has been a fantastic development in the medical knowledge leading to increased possibility of preventing and treating diseases. But on the other hand, the character of medical service as commodity (though often paid through social insurance) continues to limit its usefulness and this increasingly costly commodity is not adequately available to vast sections of the population who cannot afford to pay for it. Even the development of medical knowledge and of the profession itself

has been vitiated by the narrow interests of those in charge of this knowledge and the services. Thus for example there is comparatively less research on the health problems of the people in the peripheral countries; in spite of the rise of preventive medicine, clinical medicine continues to dominate the scene; sexism, racism, expertism continues to affect the character of medicine. Medicine has also played an increasingly important role as one of the ideological supports of the ruling class (Ehrenreich, 1978). For example, medicine gives "scientific" credibility to the ideas of the ruling class that diseases are caused by germs, ignorance, bad habits and "ofcourse" poverty for which people themselves are to be blamed, and that ill-health can be got rid of if people become wiser, learn to live clean, give up bad habits and listen to the advice of the medical experts. Medical health care programmes have been used to diffuse class tensions.

Imperialism has developed through two distinct phases, from 1880's to 1945 is the colonial phase, wherein imperialist domination required direct political rule. The post-war period has seen the development of a new phase in imperialism with a distinct change in the structure of imperialist centres (rise of multinationals, of state intervention and so on) in the international division of labour and rise of politically independent bourgeois regimes in peripheral countries. We have to analyse health and medicine in both these phases.

Health in the Imperialist Countries

After 1870, in countries like UK, the incidence of infectious diseases and of diseases of malnourishment started a secular decline, thanks to the rising living standards and some public sanitary measures. But the mortality and morbidity declined much more slowly among the working classes. A substantial section of the population was still undernourished. Thus as late as 1930, a study in UK showed that out of six categories of population according to their income, only the two most prosperous had adequate diet (Doyal and Pennel, 1979). Even in 1970s and 80s some undernourishment continued in some working class sections of the population. But gradually food consumption had increased and this along with better sanitation, housing, and

other facilities decreased the morbidity and mortality due to infectious diseases. It needs to be noted that the impact of cheap grains and other food products from colonial countries enabled monopoly capital to offer concessions to the working class through an improved food basket, without much rise in the money wages.

The secular decline in undernourishment in the imperialist countries was, however, replaced by a new form of malnourishment, overconsumption, thanks to the rise of monopoly agri-business especially after the second world war. Production of concentrated foods stuffed with calories by reducing its fibre content is the way of increase its value per unit of weight and the surplus value (profit) contained in it. This low fibre, high caloric-density food led to the problem of constipation and a host of intestinal diseases related to it on the one hand, and the diseases due to overweight, cardio-vascular diseases on the other (Doyal & Pennel 1979).

Monopoly capital gave rise to a whole variety of new industrial products and processes. The technology to control pollution has, however, developed at a much slower rate since capitalists are primarily interested in profits and not in the health of the people. As a result, the workers and people in the neighbourhood were exposed to a new variety of pollutants, many of them being carcinogens. A new set of "industrial diseases" have sprung up.

Monopoly capitalism breeds consumerism. Even those products which are harmful to health are pushed onto the consumers through high pressure salesmanship which is characteristic of monopoly capitalism. For example, cigarettes, individual transport instead of efficient public transport, use of drugs and medical equipment when not indicated, and so on.

All the above tendencies are seen in a more sharpened form in the *post-war period*. The hazards of nuclear power reactors is an additional phenomenon. Increased alienation, psychological stress and strain has resulted in a higher incidence of psychiatric disorders as indicated by the fact that in England, 50 percent of the National Health Scheme expenditure is now used to provide psychiatric care of one kind or another (Doyal & Pennell, 1979). Massive state intervention in the economy is the specific feature of post-war capitalism. This has however not basically changed the process of social production of ill-health; state intervention has not been able to control the process of

overnourishment, pollution, accidents and psychological stresses, generated by the incessant drive of the capitalist class for capital accumulation.

Two imperialist world wars figure as two dark patches in this otherwise not so happy scenario. Millions and millions perished, crores got injured, maimed, uprooted. Undernourishment, infections raised their heads once again. These and other effects turned the clock by decades.

Health in Peripheral Countries

What has been the effect of imperialism on the health of the people in the peripheral countries? The deleterious effect has been manifold. Wars of colonial conquest and inter-imperialist rivalry left many natives dead, injured and maimed. The ravages of war, the decline in availability of food, social disruption also took their toll in health.

The impact of the policies of the colonial masters have been studied by some researchers. Study of Africa offers a typical example (Turshen 1977, Doyal with Pennel 1979). Alongwith the conquest by western imperialists came a host of infectious diseases carried by the invaders from the pool of infection in Western Europe (Doyal with Pennel, 1979). The imposition of high taxes in cash and commercialisation of agriculture led to widespread poverty and reduction of availability of food; the migrant labour system, plantations, and the filthy, newly-industrialised towns led to epidemics, premature deaths, venereal diseases and alcoholism. The extreme degree of exploitation with scant regard to the health of the workers in the cities gave rise to a high incidence of industrial diseases (Elling 1981) and high incidence of infectious diseases. In the rural areas, indiscriminate tampering with the local environment led to epidemics of sleeping sickness, malaria and other diseases.

In the *post colonial period*, inspite of the faster tempo of the development of productive forces in the newly politically independent states the living-conditions of the labouring people did not improve, except for a section of the working class in the cities. Eradication of plague, small-pox; decline in cholera, malaria (in other words, those problems which are primarily amenable to technological solutions) have increased the average longevity. But there are medico-social and new health problems begging solutions. Those polluting industries which cannot now be tolerated in the West due to increased popular resistance to pollution have been exported

to the peripheral countries. Newly created irrigation systems have led to malaria, filaria and Japanese encephalitis in certain parts of India (PPST Bulletin, 1984). Unplanned use of pesticides in the strategy of green revolution has increased the problem of mosquito resistance to D.D.T. Dams have increased the incidence of bilharziasis in places like Egypt. A series of wars amongst peripheral countries have benefited the imperialists at the expense of the health of the people.

Concentration of world food production in the imperialist countries after the second world war and the dependence of peripheral countries on food imports from abroad has converted the food situation into a political issue. The sudden withdrawal of the US food "aid" component in the seventies led to wide spread hunger, death, malnourishment in Sahel, Bangladesh and elsewhere. The health of the people in those countries which are now dependent on food imports is now at the mercy of the imperialists.

Medicine Under Imperialism

What have been the characteristics of Medicine in the period of imperialism? It is only after the 1870s that clinical medicine acquired some solid scientific formulation. All the branches of scientific clinical medicine have grown very rapidly during the last 100 years. But at the same time, medicine became more and more synonymous with clinical medicine since the character of medical services remained primarily in the form of sale and purchase between individual doctor and the patient. Though the sanitary and social reforms were almost solely responsible for the improvement in the health status of the population, clinical medicine and the "germ theory of disease" usurped the pride of place in the ideology of medicine since the vested interests of the clinicians demanded this. With the establishment of scientific clinical medicine a final, decisive onslaught on the traditional medical system as well as homoeopathic system was made through the famous Flexner report in the US which argued for allowing only "scientific medicine" (meaning clinical medicine with all the limitations imposed by the commercial professionalism of male doctors) to continue. Scientific clinical medicine, however, arrived too late on the European scene since most of the infectious diseases had already declined substantially and medicine had hardly anything to offer on the new health problems. The post-war period saw a new explosion of scientific knowledge. In the absence of a proper social perspective, and a conducive structure of medical profession, this

new knowledge led the ideology of superspecialisation and expertism.

The discipline of "public health" in the mid-nineteenth century grew into a modern science of Preventive and Social Medicine (PSM) and still further into Community Medicine in the twentieth century. But firstly this all important approach has been relegated to secondary importance by the medical industrial complex. Secondly, the established discipline of PSM has neglected or rejected the Marxian approach, is informed by bourgeois sociology and hence it has hardly any correct understanding of the relation between health and the process of capitalist development, of the changing balance of class forces. Its scientific insights are marred by its bourgeois paradigm/framework and hence cannot challenge bourgeois social order. Nay more — it tends to create illusions that ill-health can be eliminated through technical interventions applied on a social scale. Through concepts like "tropical diseases", "diseases of industrialisation", PSM *naturalises* the cause of diseases which are primarily of *social* origin. It has thus a kind of fetishistic understanding of the diseases and hence has become a part of bourgeois ideology.

The specific effect of monopoly capitalism has been the rise of monopoly medical industrial complex. The monopoly drug corporations, medical equipment corporations and health insurance corporations have joined hands together (with the doctors acting as accomplices) to exploit the people, to breed consumerism and help keep the labour-force docile and productive. Some medical insurance companies like Metropolitan Life, Providential have grown larger than General Motors and Standard Oil. Unnecessary medical interventions at each stage of life; ("from womb to tomb") this medicalisation of life (Illich 1976) is a specific feature of this stage of capitalism.

Special mention needs to be made of the drug companies. The explosion of antibiotics and other "wonder" drugs after the second imperialist world war is hailed as one of the greatest achievements of modern medicine. But these drugs which can contribute a great deal to relieve pain and sufferings, are not available to the poor. Secondly, an illusion is being created that medicine can solve the healthy problems of society with the help of these "wonder" drugs. The potential created by modern sciences like chemistry and pharmacology is being used to exploit people and create illusions. There is plenty of literature available on this issue.

Thus the heightened capacity of medicine in the period of monopoly capitalism has not only been limitedly used, but the capacity itself has been affected by monopoly capital.

Medicine and Imperialist Domination

What has been the role of Medicine in the imperialist domination over the peripheral countries? In the colonial period, medicine helped the conquest of colonies. Some of the infectious diseases like yellow fever and malaria, took a heavy toll of the imperialist army and hence made it impossible for the army to win territories. Medicine solved this problem by controlling these diseases (Brown 1978, Doyal and Pennell 1979). But, those diseases which exclusively affected the natives were not controlled in this period. Secondly, effective curative services offered by missionary dispensaries created a good impression on the natives; and distracted their attention from the ill effects of colonialism. In the words of the then president of the Rockefeller Foundation, "Dispensaries and Physicians have of late been peacefully penetrating areas of Phillipines Islands and demonstrating the fact that for the purpose of placating primitive and suspicious peoples, medicine has advantages over machine guns." (Brown 1978).

Later, the imperialists initiated health programmes for the natives to improve their health and thereby their productivity. Increased productivity meant increased profits for imperialists. For example, the Rockefeller Foundation programme to control hookworm infestation in Latin America (Brown 1978). Such health-programmes also offered them opportunities to export drugs and equipment. Problems like tuberculosis, leprosy, venereal diseases cannot however, be eradicated by such techniques of social engineering because they are much more deeply rooted in the social structure of peripheral capitalist countries. Colonialism has also led to the suppression of indigenous systems of medicine.

In the post-colonial period, it is well known as to how the imperialist domination in the field of medicine over politically independent countries continues in an indirect form through the multinational drug companies, through population control programmes and other "health programmes". The role of western dominated medical education is also important. Western dominated medical education in peripheral countries produces doctors suited to work in imperialist countries. This enables imperialist countries to import medical graduates from peripheral countries and save money which would have

otherwise been spent on training doctors in their own country. This "brain drain" is also a financial drain since peripheral countries spend so much on training these doctors here. Moreover, the illusion that health problems of your society can be solved through medical interventions carried with the help of 'superior and benevolent' west, the ideology of medical expertism percolates through this type of medical education.

The period of rapid growth of peripheral capitalist societies after political independence came to an end in the late sixties. As a part of its response to this crisis, the ruling class is changing its strategy of medical care. The cost of medical care is sought to be reduced through the scheme of village health workers. New innovations in the management of health problems are being used to create illusions under the slogan of "Health for all by 2000 AD". The talk about "indigenous" system being made more suitable than "Western medicine" needs to be understood in this context. There's hardly an adequate attempt to really find out and develop the useful, rational aspect of indigenous systems of medicine. The continued neglect of these systems shows that the hollow praise bestowed on it is only a part of the new strategy of dumping responsibility onto the people for their health.

A struggle to create a healthier society and an appropriate system of medical care cannot be separated from the struggle against imperialism. In this struggle, the aim cannot only be taking over the existing productive forces, the existing medical system and using it in the people's interests. How can people in a socialist society be healthy if they consume the same amount and type of food as is being done in the US today or get their electricity from nuclear reactors? Likewise imperialism has also vitiated the science of Medicine. How exactly and to what extent this has happened is a matter of further study. A word of caution is in order here. Let us not fall into the opposite pitfall of rejecting the relevant scientific advances made by medicine in capitalism. One cannot talk in terms of modern medicine as such and reject it. Rather its a question of grasping the rational kernel of existing medicine and developing it further. Otherwise, we would throw away the baby with the bath water.

anant phadke

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In This Issue

Radhika Ramasubban examines the colonial health policy in India and traces its legacy to the present public health system. Meera Chatterjee highlights the wide ranging implications of a new scheme formulated by the American Association of Physicians of Indian Origin in collaboration with the IMA to transfer high technology in medicine to India. Warren Salmon's reprinted article deals with the increasing interest and involvement of large US corporations in health issues in America and the emerging class stand which will eventually restructure the health sector under monopoly control. The article on racism and health in the US, a revealing glimpse at health care in a country which spends one billion a day on such care is by Bindu Desai a neurologist working in the Cooke Country Hospital in Chicago. The *Bhopal Update* which is likely to be a regular feature in future issues is a resume of health issues, health efforts and on-going medical debates concerning the Bhopal disaster by Padma Prakash. We feature a review article on John Braithwaite's explosive new book on the drug industry, *Corporate Crimes in the Pharmaceutical Industry* by Ravi Duggal. This book is a must for all concerned people — if one can afford the price!

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THE COLONIAL LEGACY AND THE PUBLIC HEALTH SYSTEM IN INDIA

radhika ramasubban

Colonial health policy in India never really came to grips with the problem of public health. Through the evolution of a 'colonial mode of health care', the enclave sector — the army and the European civilian population — kept pace with the metropolitan developments in sanitary and medical sciences while attempts to introduce epidemic control and public health measures remained abortive. In the last years of the nineteenth century when the situation afforded a compelling basis for a far-reaching public health policy, the colonial government found an escape route in the new research possibilities. The contradictions of the health system in India arise from its historical legacies. This article traces the various strands which evolved during the period of colonial rule and the manner in which they continue to shape the present public health system.

This article is an abridged version of an earlier research report by the author, "Public Health and Medical Research in India. Their Origins under the Impact of Colonial Policy" (SAREC, 1982).

The task of tackling widespread disease and of raising the health status of the population requires coming to grips with the conditions which cause debility and disease. The three main instruments for such a strategy in the Indian context are thorough-going public health measures, improvements in the standard of living of the population through raising incomes and providing employment and making the health services available to those in need. Obviously, the health system alone cannot cope with all these challenges and in a general sense the contradictions of the Indian health system are a reflection of the contradictions of the development process itself. More specifically, the contradictions of the health system in India arise from its historical legacies and the overall framework which guides its nature and functioning.

India missed going through the period of sanitary reform which swept through most of Europe in the 19th and early 20th centuries. Colonial health policy never really came to grips with the problem of public health in India, whereas through a policy of segregation and what evolved into a 'colonial mode of health care', the enclave sector — the army and the European civilian population — kept pace with metropolitan developments in sanitary and medical science. In the absence of general public health measures, epidemics of small pox, cholera, plague and influenza continued to recur among the general population. Some attempts made in the first quarter of the 20th century to evolve epidemic control measures remained abortive due to the administrative disruptions caused by the two world wars and the preoccupation with the health of the army, particularly the control of malaria in the eastern theatre of the second world war.

The independent Indian State, although it recognised public health as one of its main concerns, lacked the commitment to carry through a public health revolution. Seen in the wider historical perspective, the huge expenditure that public health measures require have been incurred by the State in the western countries for ensuring a steady supply of the labour force and for raising its productivity. The capitalist path of development launched in India has remained distorted and slow. It could neither impart dynamism to the public health system as it had very little demands to make, nor could the productive forces develop to the extent which would improve the health status of the population by meeting their nutritional and other basic needs. About half the Indian population is still living below the minimum nutritional standard for meeting the energy requirements of the body and the incidence of diseases preventable through public health measures dominates the disease profile.

The problem with undertaking far reaching public health measures such as protected and adequate water supply, sewerage systems and better housing and nutrition is that it requires massive public expenditure. The independent Indian State, however, has not been able to meet these requirements (Ramasubban, 1984). It has, instead, settled for softer options which are essentially a continuation of the colonial tradition. The attempt here will be to trace the various strands that evolved during the period of colonial rule and the manner in which they continue to shape the present public health system.

The Evolution of Colonial Health Policy

The main factors which shaped colonial health policy in India were its concern for the troops and the European civil official population. The response

to this concern underwent a series of stages corresponding to the growth of knowledge in England about the principles of disease causation. The old climatic theory was that the Indian climate caused diseases in the 'abdominal cavity', while that of Europe caused disease in the 'thoracic cavity' (Scott, 1939). This gave way to the theory of miasma, resulting in a policy of segregation and sanitation which began in the mid-nineteenth century and continued through until the end of the century. The result was the evolution of a distinctly colonial mode of health care. This policy also took into account statistical patterns of mortality and simple prediction of epidemics. The general spread of epidemics resulted, however, in the mobilisation of international opinion, and the perception of the Indian population as a secondary source of infection brought the general population into the ambit of health policy. But the main concern remained the army, and therefore, the evolution of colonial health policy has to be necessarily placed within the framework of the army. The shift in focus in England and Western Europe from sanitation to epidemiology and bacteriology, which began in the 1880's and gained revolutionary momentum in the following decades, had significant implications for India. By the turn of the century, laboratory investigations were instituted in the four army commands, to put army health on modern, scientific principles. Although the direct link between health and medical research remained confined within the framework of the army, the growing interest in and official patronage for the discipline of tropical medicine in England integrated India, the largest natural disease laboratory in the British empire, into metropolitan scientific activities, and a few laboratories for research were set up within the country.

The army, the main instrument of the East India Company's political consolidation, was primarily composed of Indian soldiers, the European component being outnumbered by roughly eight to one (Imperial Gazetteer of India, 1909). The high cost of transporting European soldiers to India and of invaliding due to sickness, and the time taken in further recruitment and replacement, were the major factors responsible for the excessive reliance on the Indian component.

Mortality, sickness and invaliding in the European army was due mainly to four major diseases: fevers, dysentery and diarrhoea, liver diseases and epidemic cholera, in that order, all of which, particularly the last-mentioned, assumed virulent form

when the troops were on the march. And the troops were almost constantly on the march in the prevailing unsettled state of the country.

As regards the European civil population, a large section was concentrated in the three Presidency towns of Calcutta, Bombay and Madras, which were centres of government as well as the major ports. Here European areas of residence were secluded from the Indian areas and along with the cantonments in these towns, were fully self-contained. By the mid-nineteenth century, these areas were relatively well planned and drained and vaccination against small pox (the only effective prophylactic known), among the European civilian residents and among the residents of the cantonments, was almost universal.

The events of 1857 — the 'Indian Mutiny' — highlighted as never before, the importance of the British soldier's health and efficiency. Army health which became the primary concern of colonial health policy remained an abiding concern as, with the expansion of the British empire, the army in India increased in importance as the largest single force in the empire, and as a key instrument in the security of Britain's eastern possession. The 'Mutiny' of 1857 had highlighted the insecurity of British military power in India. Reliance had hitherto been placed on Indian soldiers and they had vastly outnumbered the European component. Although the majority of the Indian troops had remained loyal to the Company and the 'Mutiny' had been successfully quelled, it was decided that the defence of India would henceforth have to be in British hands, and it was resolved that the 'British army serving in India' should form part of the Imperial British army. This necessitated the transfer in 1858 of the European troops of the East India Company to the Crown and a Royal Commission was appointed to work out the army's reorganisation. It recommended raising the number of British troops, and that the ratio of Indian and British soldiers should be of the order of 2 to 1. The result was a 60 per cent increase in the number of British troops. (Imperial Gazetteer of India, 1909)

The result of the increase in the strength of British troops was that one-third of all British forces came to be stationed in India. The problems in acclimatising such large numbers to Indian conditions and ensuring their health, therefore, assumed importance.

Along with the Indian Mutiny, the Crimean war, too, played an active role in focusing discussion in England on the health of the British army. The

Crimean experience had shown that mortality among troops had been due primarily to epidemic ravages and the insanitary state of barracks and hospitals rather than to wounds of war. It highlighted the need to apply the principles of modern sanitary science currently championed in England by sanitarians like Chadwick and John Simon, to the army. In 1857, a Royal Commission was appointed to enquire into the regulations affecting the sanitary conditions of the army, the reorganisation of military hospitals and the treatment of the sick and wounded. The enhanced strength of the British army in India required a similar enquiry into Indian conditions, and in 1859, another Royal Commission was appointed to enquire into the Sanitary State of the Army in India.

Of the total number of deaths in the period examined by the Commission, i. e., 1817 to 1857, only 6 per cent had been due to war. The rest were caused by four major diseases: fevers, causing about 40 per cent of all deaths and three-fourths of all hospital admissions; and dysentery and diarrhoea, liver diseases and cholera being the other killers. Fevers, besides the suffering and immediate risk to life, also had a tendency to relapse dangerously and affect vital organs, resulting in considerable subsequent illness, mortality and invaliding among British troops. At this time 'fevers' was still a general term for most forms of sickness. Clearly, therefore, "the main enemy of the British soldier in India was not the Indian enemy but disease". (Royal Sanitary Commission Report, 1863).

a) Sanitary principles and the policy of segregation.

The situation, however, was neither unfamiliar nor irremediable. The old climatic theory had held that the Indian climate produced diseases distinctly different from those resulting from the English climate. Now, the diseases which were fatal to the British soldier in India were recognised as familiar, as those which had until recently caused the highest mortalities in England, and which had been brought under control in that country through sanitary programmes.

The keynote of metropolitan sanitary science, which grew out of the compulsions of urbanisation in England in the eighteenth and nineteenth centuries, was environmental control. The means through which this was accomplished were mainly town planning, housing and sanitary engineering. These measures required administrative and government institutions embodied in 'local governments', which were responsible for investigation of local insanitary

conditions and their control, and given the force of legal sanction through public health legislations.

The physical placement of the European population in India was, as far as possible, based on the principles of this sanitary science. Using criteria of soil, water, air and elevation, the Royal Sanitary Commission on the army in India laid down elaborate norms for the creation and development of distinct areas of European residence, and the 'cantonment', 'civil lines', 'civil station' and 'hill station', regulated by legislations, developed into a colonial mode of health care and sanitation based on the principle of social and physical segregation. From the time of the Royal Commission's Report of 1863, the location and layout of European civil and military areas were determined by criteria of health laid down by the prevailing medical scientific theories of miasma and environmental control rather than by political and strategic criteria. Most of the troops were located at 'hill stations' or on elevated ground. In cases where strategic stations were unhealthy, only small forces were posted there to be reinforced at short notice. Earlier, the 'native lines', i. e., residential areas of Indian soldiers, had been left outside the pale of colonial planning and construction activity for troops. European fears of miasma emanating from them had even led to construction of walls between Indian and European troop locations to keep the miasma out. The Royal Sanitary Commission voiced concern for the health of the Indian troops and recommended that cantonment planning should also be extended to the 'native lines'.

b) Public health machinery: vital statistics and disease control

Following the Royal Commission's Report, Cantonments Acts, Regulations and Codes were issued, modelled on public health acts in Britain.

While segregation was an effective tool, at least in the three Presidency towns contact with the native population was unavoidable. Native servants often lived in the native areas, and native dealers and tradesmen serviced the cantonments and civil lines. Grossly insanitary conditions prevailed in these large and unplanned urban centres and the native population could well serve as secondary sources of infection. An understanding of disease among them was, therefore, considered essential. In his despatch to the Government of India the Secretary of State for India pointed out, "The determination of the effects of local causes on the mortality of the

native population, besides its intrinsic value in connection with the welfare of the people of India, cannot fail to have an important bearing on the health of the Europeans resident among them." Gazette of India, 1864).

Three Presidency Sanitary Commissions were set up in 1864. The basis for the functioning of these Commissions was to be the systematic generation of facts about mortality, epidemics and sanitation, which would be embodied in an annual sanitary report to be submitted to the Government of India by the Sanitary Commissioner to the Government of India. This would in turn be summarised in annual reports presented to parliament on the progress of sanitary measures in India. This laid the foundation for a public health machinery, particularly in the field of vital statistics and disease control.

The investigative tradition was an integral part of the sanitary movement concurrently taking place in England; in fact, the first stage of the public health movement was that of governmental investigations on grand scale. Regular statistical reports were also seen as essential to any systematic public health control and since the establishment of the office of the Registrar-General of Births, deaths and Marriages in 1836, the steady accumulation of statistical evidence had generated a demand for further research into the causes of epidemic diseases. (Shryock, 1948)

In keeping with this tradition, the Government of India appointed in 1861, the first systematic enquiry into a major epidemic — the cholera epidemic of 1861. The facts that it highlighted were followed up in the annual sanitary reports, which resulted in a steadily growing volume of statistics and facts about the disease.

The significance of the 1861 epidemic was that its impact was not confined to India alone; it was followed by another epidemic in 1865 which spread from Egypt across Europe to England. Cholera had been the most important factor responsible for initiating the public health era in Britain in the early nineteenth century. The 1861 epidemic provided the final and most powerful spur to sanitary legislation in England. This was the Sanitary Act of 1866 embodying the important principle of compulsion by the central authority if the local sanitary authority failed in its duty.

This epidemic also gave rise to four international sanitary conferences participated in by European

countries in 1866, 1874, 1875 and 1885. They devoted their deliberations specifically to this disease and attempted to work out quarantine measures acceptable to all participating countries; systematise existing knowledge about the disease and identify major questions for further investigation; and, recommend measures for prevention. As the 1861 epidemic had originated in India, the first Conference at Constantinople discussed India as a major topic.

The Constantinople Conference put the Imperial government into a quandary by pronouncing India the natural home of cholera. In the absence of any breakthroughs in knowledge about the cause and mode of infection, the Conference stressed the need for stricter implementation of rigorous and lengthy quarantine both in sea and land movements, greater cleanliness and disinfection of ships, houses and merchandise, and care to avoid overcrowding. The central consensus of the Conference was that the spread of cholera epidemics was due to rapid movements of groups of people and their personal effects, water and food supplies. It pronounced that in the case of India the movement of pilgrims and large congregations at fairs and festivals was the single and most powerful of all the causes which conduce to the development and propagation of epidemics of cholera. (Cholera Committee Report, 1867). In the opinion of the Conference when the pilgrims congregated, the cholera spread among them and when they dispersed they carried the contagion with them over long distances. The Conference recommended elaborate preventive, sanitary and curative arrangements at pilgrim centres and on pilgrim routes.

The international arrangements outlined for quarantine and the recommendation proposed regarding pilgrims, by the Constantinople Conference, were particularly irksome to Great Britain which had the largest international maritime trade as well as the most frequent troop and naval movements to and from its colonies. In the face of stricter quarantine restrictions imposed by the Constantinople Conference and the international pressure to control cholera within India and prevent its spread therefrom, Great Britain responded by instituting its own investigations into the authenticity of a quarantine policy, i. e., whether it was local conditions of soil, air and water rather than contagion carried through people and their effects which caused the spread of epidemics, and whether there was a possibility of coping with cholera through effecting sanitary

improvements rather than quarantine. Professional medical opinion in England also provided support to such a move and a special enquiry came to be sanctioned by the Secretaries of State for War and India into the mode of origin and transmission of cholera.

While the results of the scientific investigation were being awaited, practical sanitary measures were intensified in relation to all cantonments, smaller military stations, troops on the march, jails, hospitals and seaport towns. By 1872 local medical officers in all the various military stations were doing simple qualitative analysis of water. The prohibitions upon soldiers going into the Indian cities or cholera affected areas were more strictly enforced and "sanitary cordons" (suggested by the Constantinople Conference) were erected around cantonments to prevent persons residing in nearby villages and localities and those suspected of carrying cholera, from entering the area. Infected cases in cantonments were isolated and barracks, jails and hospitals fumigated.

Hitherto, troops on the march had been the most vulnerable to cholera attacks. The new sanitary rules governing the marches also included rules regarding railway travel, such as provision of good drinking water and wholesome meals at halting stations, isolation of the troops from the native towns and bazaars en route and at destination, thirty-minute stops every four hours and travel for not more than twelve hours at a stretch.

Systematic statistics about cholera were accumulating with the regular publication of annual sanitary reports. These statistics pointed to direct personal contact as an extremely unlikely cause of infection. Nor was land quarantine doing much good; and nor did cholera appear to travel along highways and major lines of communication. As regards sea travel, however, stricter control was instituted, mainly in deference to international pressure.

Until the end of the 1880's, cholera of all diseases pressed most heavily on British soldiers in India, being the most important cause of mortality although not adding significantly to the sickness rates. The investigations of Lewis and Cunningham, by going into the question of sub-soil water levels, had launched on a relatively fruitless line of enquiry which failed to produce conclusive evidence on the cause of cholera. But although their study (Lewis and Cunningham, 1876) made little impact on the

control of cholera, it was valuable in that it stressed the importance of looking elsewhere than into contagion through personal contact. But by the period 1870-79, the combined effect of sanitary measures and other reforms had brought average mortality due to all diseases among European troops down to 19.34 per 1000 of strength, of which cholera accounted for an average of 3.22 (calculated from Annual Sanitary Report for relevant years). By the end of the century the severity of cholera came down even further and after 1900 rarely one person in 10,000 among the European troops came down with cholera (Annual Sanitary Reports, 1899-1929).

The year 1883 was one of the major landmarks in scientific investigation into disease causation. A German Commission led by Robert Koch discovered the Cholera 'Comma' Bacillus in Egypt and visited Calcutta in the same year to confirm the discovery. Koch's discovery was a significant contribution to the germ theory of disease causation which had emerged in Western Europe in the 1860's and studies like his and those by Pasteur, which linked a specific organism with a specific disease, helped to firmly establish the theory in the 1870's and 1880's. This modern scientific revolution in medicine challenged and ultimately triumphed over the earlier miasmatic theories.

c) General Population

The Constantinople Conference's declaration of India as the source of epidemics, its condemnation of the British government for failing to control these epidemics and the latter's own recognition that the Indian population constituted a secondary source of infection, provided the compulsion for broadening the scope of health policy and include the general population in its purview.

In keeping with the theory of contagion, the places of pilgrimage and pilgrim routes became the starting point of health policy in relation to the general population, and the formal motions of attending to the problem were gone through. Committees were appointed and reports prepared. But when it came to giving a concrete course to the policy, however, the government's attitude remained evasive.

While the suggestions of the Constantinople Conference regarding the desirability of sanitary precautions in relation to large groups of people on the move was quickly given effect in the case of troops on the march. In order to prevent

the outbreak of epidemics among them, the question of epidemics at the pilgrim centres was treated as a puzzle, and various other considerations such as finance, religion and race clouded the issue. However, at the 1867 Kumbh Mela, the government as a test case made some ad hoc sanitary and hospital arrangements. These had proved successful in curbing cholera on the fair grounds. But no sooner had the pilgrims dispersed, than the cholera that they carried spread in the regions through which they passed and in their ultimate destinations even as far as 700 miles away. This seemed to imply that not sanitation alone but land quarantine measures were required. The official position was to see this as an intractable problem, for quarantine was not considered to be a feasible measure in the case of people who would be dispersing over a large area. The response of the Government of India was to rest content with the prohibition of pilgrims from entering military stations or even their neighbourhood.

In fact, the whole question of pilgrims taking cholera back with them to their towns and villages raised the uncomfortable issue of an extensive public health machinery for the general population on a continuing basis, which would be the only countervailing force against epidemic cholera emanating from pilgrim movements and congregations.

But sanitary reforms were expensive and unremunerative. The MacKenzie Committee appointed to go into the pilgrim question recommended that the government should undertake the responsibility for at least a few such measures at pilgrim centres. If public health measures for the general population at large could not be adopted, at least the enforcement of conservancy measures at fairs and pilgrim centres and demonstration by the government thereby of the desirability of sanitation would act as an incentive for the general population to voluntarily adopt the modern sanitary principles in towns and villages. The Committee argued that such a step was also in the interests of the European population. But the government rejected the idea of expenditure on conservancy measures and sanitary police at pilgrim centres, and policy floundered on the issue of whether pilgrims should be made to pay for sanitary arrangement through a sanitary tax. (MacKenzie Committee Report, 1868)

Progress on sanitary reforms concerning the general population was blocked on the ground that

no measures could be enforced, as any element of compulsion would offend the people's religious sensibilities and be construed as interference in their customs. The bogey of interference in the religion and customs of the people was not new, but was more self consciously applied after the 'Mutiny.' Eighteenth century East India Company officials many of whom recognised in India a superior civilisation, had been replaced in the early nineteenth century by administrators who saw their mission as 'civilizing' and 'modernising' Indian society. Indian society was seen as a *tabula rasa* waiting to be recast in the Western mould. The civilising influence would be Western social and economic institutions and Western religion, i.e., Christianity. After the 'Mutiny', however, the enthusiasm for remaking Indian society declined. The climatic and socio-religious theories gave way to theories of racial exclusiveness, as Britain established itself as the supreme governing power and as the European establishment in the country perfected the mechanisms of physical and social segregation. Indians now came to be seen as a distinctly inferior race incapable of appreciating or successfully adopting British habits and institutions. That interference in social and religious practices would offend Indian sensibilities, was only the rhetoric, offered for government inaction to bring into force a public health machinery and sanitary reforms in India along modern lines.

As far as the people themselves were concerned, the MacKenzie Committee which sought Indian opinion on the matter of sanitary measures at pilgrim centres, found that the people were willing to submit to any measures calculated to promote their health. There was also evidence that the arrangements at Hardwar in 1867 had suitably impressed the pilgrims.

While the government persisted in its evasiveness the railway companies, realising that pilgrims were good business, were cashing in on the age-old enthusiasm of Indians for undertaking pilgrimages. A large number of pilgrim centres existed across the country, and it was the aspiration of every Indian to visit at least one of these centres in his lifetime. There were also certain specific religious festivals which drew large numbers at certain times of the year. In the old days the journey used to be long and arduous and done on foot or by animal carriage. There were accepted pilgrim routes and halting places at villages en route where accommodation and food or facilities for cooking were available.

Most of these were free and maintained by philanthropists.

The introduction of railways offered a universal opportunity for undertaking pilgrimages and the possibility of a single person perhaps undertaking several in his lifetime, and railway travel for this purpose became extremely popular. The railway companies responded quickly to this source of profit, offering return tickets and half fares for children. But the facilities were appalling. Pilgrims were stuffed into dirty goods wagons with no ventilation, lighting, drinking water and sanitary arrangements on board. The doors used to be fastened from the outside and not opened for hours at a stretch, as allowing the pilgrims to climb in and out at stations en route would cause delays. The few third class carriages allotted for pilgrims were impossibly overcrowded. And for a long time no provision existed for clean accommodation, drinking water or meals at halting stations. Death from suffocation and disease in the goods wagons and cholera epidemics on railway journeys and at pilgrim centres became more frequent as the pilgrim traffic increased and the rapid communications spread disease more rapidly. Pilgrims now poured into holy places in much larger numbers than these places had been provided to cope with and problems of sanitation were further aggravated. Even as cholera had almost disappeared among the troops, epidemics continued to rage among the general population. The Committee which investigated the matter recommended that government move in to check the worst abuses of railway travel and regulate the conditions of pilgrim movements, conveying pilgrims in closed air-tight wagons meant for goods should be discouraged, eating houses at railway stations be licensed, and provisions made for drinking water and toilets at stations.

The salient feature of the pilgrim movement now was that the congregations of people did not take place only at certain times of the year; rather, the pilgrim centres had a constant flow of people round the year. Ad hoc measures, therefore, could no longer be considered an effective solution to the epidemic problem.

The last decade of the nineteenth century was a period of significant landmarks in determining the course of the colonial health policy. The two governing landmarks were the plague epidemic which broke out in Bombay in 1896 and the discovery in India by Ronald Ross of the Indian Medical Service of the mode of transmission in malaria in 1897. The

responses to these two events reflected the growing complexity of Britain's international position and rise of British imperialism, Britain's perception of India's place within the Empire, the internal changes effected by the Government of India to adapt India to its new role, and the contradictions within the Government of India's policy.

The neglect of public health measures among the general population; accompanied by the intensification of trade and commerce and the growth of population in the seaport towns; as well as the increasing impoverishment in the rural areas and the flow of migrants into the towns and cities in search of work; came to a head when the plague epidemic which broke out in Bombay in 1896 was followed by successive epidemics which spread the disease to large parts of the country, and which by 1918 had taken a toll of almost 10.5 million lives. What was striking was that all the plague deaths occurred only among the Indian population.

Plague was known to have been endemic to Europe since early times but by the end of the seventeenth century it had completely disappeared. When the plague broke out in Bombay, the spread of the epidemic within the city and to other parts of the country combined with the movements of destitute people out of the rural areas and into the towns due to the widespread famine, threw the authorities into a flurry of confused activity. The Bombay plague committee was set up on a crash basis for the period 1897-1898. In the absence of any scientific knowledge about what caused the disease, it was treated as contagious. House to house searches were conducted with the aid of police cordons to register deaths and remove sick persons for isolation, dilapidated houses were vacated and disinfected and the inmates removed to camps, rural migrants to the city were detained in camps to prevent disease conditions exacerbating in the city, and at the railway stations passengers and their baggage were disinfected.

But these ad hoc measures were no solution to a situation which was rapidly getting out of hand. The single most important cause of bubonic plague was insanitation which created the conditions for a large number of rats to live in and around human dwellings, and poorly constructed, dark, ill-ventilated houses where rat fleas could take refuge away from air and sunlight which were their most effective killers. As long as drainage, sewerage and planned housing remained severally defective or non-existent, the plague, once introduced, would

continue to remain endemic. The transmission of the disease from the rat to man through the rat flea and not through human contact as in pneumonic plague (familiar to England as the 'Black Death') rendered isolation and detention camps useless.

The plague epidemic could have provided a take-off point for a more far reaching public health policy. True, the unreformed sanitary conditions among the general population exacerbated by the impact of colonial economic policies and natural calamities had worsened public health conditions. While the urban centres were undergoing a haphazard development, the countryside was becoming increasingly impoverished. But the result of the plague inoculation drives, the first major attempt at epidemic control, was the growing awareness of, and desire for sanitary reform among the general population. Representations were made by Indians requesting the government to take the initiative in maintaining the struggle against the plague, and in widening the scope of sanitary reform. The need to create an effective public health machinery had also been unequivocally stressed by a body of expert scientific opinion from England who, in elucidating the mode of transmission of bubonic plague, had pointed to insanitation as the single most important cause, and had even drawn up a tentative scheme for public health administration.

The scheme remained unimplemented by the Government of India, and once again, the official response was the rhetoric of caution in quickening the pace of sanitary reform for fear of pressurising public opinion. In fact, as far as the government was concerned, the living conditions of the general population were "beyond the influence of sanitary effort..." (Annual Sanitary Report, 1900-01). Articulated public health policy was growing into one of leaving the Indians to their own efforts.

The plague epidemic and Ronald Ross' malaria breakthrough had been the threshold for the developments between 1900 and 1935. A step could have been taken in the direction of focusing policy on evolving a public health machinery. However, the possibility of research also presented itself at this moment and the colonial government for its own reasons chose the latter option.

In England, the public health system had come into its own by the time of the scientific advancements in medicine, and the new stream

of scientific ideas while they revolutionised health care, did not replace the public health machinery which continued to enjoy a relative autonomy. In India, the metropolitan sanitary science was addressed only to the colonial population resulting in what we had earlier referred to as a colonial mode of health care. It, however, had a demonstration effect on the general population, which began to see its potential in the last few years of the nineteenth century.

Public opinion was beginning to form the basis for a potential sanitary movement in India. The Indian elite showed eagerness to lay the foundations in the country for the growth of medical science in which Indians could participate and benefit therefrom. The various international sanitary conferences and the British Plague Commission were an added source of pressure upon the colonial government to pay attention to public health.

Just at a time when the situation afforded the compelling basis for a far-reaching public health policy, the colonial government found an escape route in the new research possibilities, and public health policy as in the past remained sporadic and ad hoc. The Sanitary Department was most unpopular with the colonial medical bureaucracy and by the time sanitation and public health were made a provincial subject in 1919, the Sanitary Department already lacking a coherent policy or substantial financial provision, was depleted of most of its supervisory personnel. In the remaining decades of colonial rule nothing occurred to change this pattern. No single authority responsible for the efficiency of health measures throughout India came to exist, and nor was there any single Public Health Act as in England. The only concern of the Imperial Government was port quarantine. Vital statistics remained very defective due to the absence of a wide deployment of medical personnel.

With the superseding of the era of active sanitary reform by an era of emerging professionalisation in medicine in England, the consequences for Indian public health in terms of the lost historical possibilities were far-reaching. Medical education had been initiated in the Indian Presidency towns by the mid-nineteenth century, mainly to train hospital assistants for military and civil hospitals. The medical colleges also received a steady influx of Indians right from their inception. When the bacteriological advances of the late

nineteenth century put curative medicine on a scientific basis and led to its increasing professionalisation this served as an argument for colonial policy to encourage the expansion of the private medical profession (both European and Indian) — for a few medical colleges were a cheaper alternative to expending government resources on sanitary reforms for the general population. The growth of preventive and social medicine was irremediably pre-empted and the rising medical profession made its spoils from the ever-expanding disease market.

The Present Health System and its Contradictions

The 'functional approach', which sees health as 'fitness' to undertake one's work as a productive member of society, and ill health as the result of malfunctioning of one particular part of the body which can be corrected through medical interventions, arose out of the conditions of maturing capitalist development in Europe in the 19th century, and achieved final consolidation with the development of the germ theory in the last two decades of the 19th century. (Doyal, 1979) But the functional approach could come into its own mainly on the strength of effective declines in mortality and morbidity due to the control of infectious diseases brought about by the State in the pre-germ theory era through effective public health measures which stressed the predominantly environmental — 'filth' or 'miasma' — causes of disease and death.

In India this functional approach, carried over from the experiments during the colonial rule, has remained partial and ineffective. In those spheres where the regular supply of skilled and physically fit manpower has been crucial, as for instance the army and capital- and technology-intensive sectors of the economy, the 'colonial mode has been the preferred pattern: social and physical segregation of employees and their families into exclusive residential areas or housing colonies with clean and sanitary environments, access to subsidised and good quality medical and clinical care, educational facilities, etc. To take care of the possibility that the rampant infection, particularly in the poorer urban areas given their haphazard growth and insanitary environments might break out in epidemic form, vaccinations, hospitals and selective measures for improving drinking water and sewage disposal have been resorted to. Otherwise the rural areas and the

urban slums where most of the population lives, remain by and large untouched by the existing health system. For the health system to reach them in any significant way, within the functional approach, requires heavy doses of public expenditure. In the absence of effective preventive measures, the individual's own approach towards health care has been that of coping with repeated attacks of infectious diseases only through medical interventions. The private consumption expenditure on medical and health care as estimated from the 28th round of the NSS in 1973/74 was three times the public expenditure on this activity (Lakdawala, 1978).

Since effecting public health measures through environmental sanitation and provision of housing and safe drinking water is an expensive proposition, the Indian State, helped by advancing medical technology and international assistance, resorted to the easy alternative of tackling communicable diseases through vertical programmes that involved the use of known and tested technology such as vaccination and DDT spraying in the case of small pox and malaria respectively, and isolation and treatment as in the case of the other major communicable diseases such as TB and leprosy. With the exception of vaccination and revaccination against small pox, all the other known medical interventions presupposed the existence of effective public health measures and in a situation where the latter condition did not exist, could be expected to have only limited efficacy.

Next to small pox, the vertical programmes showed some signs of success in the case of malaria, supported through international aid for the import of powerful insecticides and drugs which had proved successful in malaria control in the second world war. Between 1953 when the National Malaria Control Programme started (it was stepped up to 'Eradication' in 1958) and 1965, the incidence of the disease was brought down from around 100 million cases and 1 million deaths to 1 million cases and no reported deaths (GoI, 1977:64 Table 51). These achievements, as Cassen (1978:86) has argued, must surely be recognised as the single most important cause for the steep decline in mortality that India has been able to effect after independence. The 1965 record, however, regressed soon after, and the incidence of malaria has been showing a sharp upward trend (GoI, 1977:64, Table 54). While the resurgence of malaria may not have affected mortality so far because of the dominance of the milder *vivax* malaria, it has grave consequences for the population.

particularly since malaria tends to become chronic and debilitates its victims leaving them open to all other infections, and since malaria has been demonstrated to be a major cause of infant mortality. This regression in the case of malaria demonstrates the floundering of the functional approach. Apart from the 'human factor' — premature acceptance of success and complacency in sustaining the momentum of progress — and organisational problems, the main reasons for its failure structural in nature. They emphasise the need for coming to grips with the problems of disturbances in the ecology, centre-state relationships, crisis in the economy and the general conditions for research and training. In the absence of planned research even while the eradication programme was in progress, full knowledge of the epidemiology of malaria and the ecology of the mosquito was lacking. Changes in the behaviour of vector and parasite partly due to developed resistance to insecticides and partly due to the disturbances in the ecosystem — in the form of population movements and congregation due to war, floods and large scale public works projects, clearing of forests for cultivation and refugee settlement and large scale use of insecticides in agricultural production, without an integrated approach to the environment — have contributed to the aggravation of malaria in the country (Ramasubban, 1978). The sluggishness on the part of the state governments to commit necessary funds of Malaria Eradication units, initially centrally sponsored and subsequently handed over to the states for the maintenance phase, represents the uneasiness in financial equations between the centre and the states. The shortage of insecticides for malaria control in the wake of the oil price rise and competition from the agricultural sector further highlights the interdependence of the communicable disease control programmes with the rest of the economy.

Epidemic cholera, which alone among the faecally related diseases has come under specific control measures — inoculation and chemotherapeutic measures — has been far more difficult to control, being food and water-borne rather than contagious and finding fertile ground in the widely prevailing unhygienic conditions of food and water use. The incidence of cholera which came down drastically from 176, 307 cases in 1950 to 22,065 in 1954 steadily rose to 66,076 in the following four years, came down briefly to 14,617 in 1959/60 but saw a sudden spurt again to the 1954-59 levels (Gol, 1977). Here, again, the effectiveness of the

control measures was greatest in reducing mortality, and the deaths due to cholera which accounted for 2.4 per cent of all deaths towards the end of the colonial rule came down to 0.4 per cent by 1966/67 (Cassen, 1978). But given the absence of protected water supply and environmental sanitation, cholera continues to pose a threat of epidemic outbreaks during droughts, famines and floods.

The policy of vertical programmes for the control of communicable diseases also included TB, leprosy and filariasis. TB has remained more or less firmly entrenched since 1958 (Cassen, 1978 : 90) and nearly 2 per cent of the population is estimated to be suffering from TB, of which 25 per cent are infectious sputum positive cases (Gol, 1980 b). It is significant that in spite of a National Programme for domiciliary treatment launched in 1969, the total number of cases detected as a percentage of total estimated cases is only 30 per cent (Gol, 1980). Although several "operational lapses" were identified as reasons for failure in an assessment done by the Indian Council of Medical Research (ICMR, 1976) the more fundamental problems are those of poor nutrition and overcrowding. Moreover, the chemotherapeutic domiciliary treatment is still too long-drawn (18 months duration) for an average TB patient to sustain, given the long distances to be travelled to the health centres. The deceptive feeling of improvement in the first phase of treatment may also be responsible for discontinuation and relapse, in the absence of regular supervision (Cassen 1978). The growing evidence on the ineffectiveness of BCG in several cases and its temporary nature in providing immunity, points to the inevitability of taking cognisance of the structural factors. The National Leprosy Control Programme which was launched in 1955 has also not made any headway. More than half the population (Gol, 1974) is exposed to the risk of contracting this disease which flourishes under insanitary and overcrowded conditions. There are 3.2 million estimated cases of leprosy in the country of which 20 per cent are infectious, and another 20 per cent suffer from various deformities. The total number of cases detected as a percentage of total estimated cases is 60 per cent while disease arrested cases is only 20 per cent, which goes to show that the Control Programme has not really been effective and there has to be a much more concerted effort in controlling this disease. Much the same picture holds for filariasis which came under a Control Programme in 1955.

The control of communicable diseases through vertical programmes poses difficulties because

these diseases have linkages with multiple factors and dealing with them requires socio-economic changes and a concerted action in the field of public health measures. Accomplishment of this task within the context of the health system would require greater expenditure on health by the central and state governments and/or effecting redistribution within the health system in favour of public health measures, and reorientation of health policy, backed by determination to act in that direction, to tilt the balance in favour of the rural areas. Here, again, the main challenge lies in resolving the contradictions giving rise to the dominance of curative services over preventive services, the urban-rural dichotomy and the lack of commitment on the part of the State to provide necessary funds in the health sector.

The Indian medical profession has a longstanding record of service, and in its development it would rank quite high in comparison with many developing countries and is recognised by the Indian population as efficacious and functional in combating disease.

Western medical education had its early origins in colonial policy, when the first medical colleges were set up in the mid-19th century. Right from their inception these colleges received a steady influx of Indians. Around the turn of the century when the bacteriological advances of late 19th century led to the increasing professionalisation of curative medicine in the west, simultaneous with the visible and rapid deterioration in India of the health conditions among the general population, the colonial authorities found it a cheaper alternative to respond to the incidence of disease through extension of medical education and encouraging medical practitioners (both European and Indian) rather than spend government resources on sanitary reforms for the general population. The medical professionals, however, remained concentrated mainly in the urban areas, which also meant constant contact with sources of power. The rural areas remained by and large ignored and left in the hands of the practitioners of the traditional systems of medicine.

The concentration of health services in the urban areas continues even thirty years after independence, and it is only very recently that we are witnessing an increase in the flow of practitioners in the western system of medicine to the rural areas. State action to provide health services to the rural population was initiated through a network of Primary Health Centres (PHCs). The PHCs, when set up, were not meant to remain curative centres.

It was envisaged that an integrated preventive, promotive and curative structure could be built into the PHC system, and that this was just a matter of creating a team reflecting the three areas of work. The concern of the PHC, therefore, was meant to be mother and child welfare, control of communicable diseases, environmental sanitation, school health, basic health education, collection of vital statistics, immunisation and medical care services. Obviously too much was being expected from the PHCs and given the overall national bias towards curative and family planning services, the PHCs, too, in practice, soon turned into curative centres.

* This article is an abridged version of an earlier research report by the author, *Public Health and Medical Research in India: Their Origins Under the Impact of British Colonial Policy* (Stockholm, Sarec, 1982). This is also why the detailed reference to source material has been kept to the barest minimum here. While the above-mentioned research report is exclusively concerned with the developments in the colonial period, in this article a section has been added on the present public health system in order to demonstrate the continuities and contradictions arising therefrom. A fuller account of post-Independence developments in health policy, is contained in my paper 'The Development of Health Policy in India' in Tim Dyson and Nigel Crook (eds), *India's Demography: Essays on the Contemporary Population* (New Delhi: South Asian Publishers, 1984).

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TRANSFERRING MEDICAL TECHNOLOGY

Reviving an Umbilical Connection?

meera chatterjee

The American Association of Physicians of Indian Origin and the Medical Council of India have recently agreed to sponsor a new scheme for training Indian doctors in the latest medical techniques. This article describes the elements of the scheme and discusses its implications especially in terms of its relevance to the Indian health scene and the dependency relationship it would reestablish and strengthen. The author contends that government has devised an ideal plan to keep an important restless and fairly politicised group — medical professionals — happy at only a small financial outlay. Could this money not be better spent on strengthening existing sources of medical knowledge such as professional foreign journals or available medical equipment? Or for that matter, could the money not be better spent on strengthening basic health care?

The scheme goes into operation sometime this year and needs urgent consideration. We invite readers to critically examine the scheme and to generate debate around the issues it raises in SHR and in other forums as well.

A new scheme to "transfer high technology" in the field of medicine has recently been announced by the Health Ministry. The Ministry has joined hands with the Medical Council of India (MCI) to support a venture of the American Association of Physicians of Indian Origin (AAPIO). We are told that this scheme was cleared "at the highest levels" last year, and will commence during the course of this year (*Statesman*, 1985).

What is the proposed content and mode of functioning of the scheme? From the information available, it appears that Indian doctors residing in the USA will be invited by the Medical Council to train their local counterparts in the latest medical developments. Training will be "on the job", using demonstration techniques — "most probably" on patients. "New" medical technology is to be used. It is proposed to train doctors at 20 centres and in 20 different medical specialities in the next few years. Each group of trainers is expected to consist of 50 doctors. The first such group will travel to the major cities of Bombay, Delhi, Jaipur, Madras and Trivandrum by the end of this year. They will undertake training in urology, neurology, cardiology, etc., staying for "no more than three to seven days" at each centre. The cost of the scheme is intended to be borne by the individual doctors from the US — an estimated 100,000 dollars this year — except for their local transportation and stay costs which will be met by the Indian Government. The scheme is proposed on an "ongoing basis".

Several points need to be made about the proposed scheme and some questions raised alongside. First, one must note that the programme is

geared towards the training of local specialists in the use of recently developed medical technologies rather than to the transfer of *manufacturing* know-how. It would be interesting to know specifically which medical technologies will receive attention, and whether the equipment involved is manufactured locally. The only clue we have is the emphasis placed on "new" technologies and "specialist" centres and personnel. This leads one to believe that the training might be in sophisticated medical techniques for which the equipment is not locally manufactured. In the absence of specific plans for the concurrent importation of blueprints to manufacture the equipment indigenously, one can only conclude that the government intends to import ready-made equipment from abroad for use by the trained specialists (or has already done so). Is it the government's intention to enter into schemes which provide a market in India for exogenously manufactured equipment? If this be the case, I must opine that the government should not be spending the very scarce resources of the health sector — however little of them — on such an objective.

A second question that must be raised is: Is the scheme a good way to bring local medical specialists up-to-date with the latest technological developments? To answer this question one can compare the circumstances in which the 'trainers' acquired their knowledge, and those in which they seek to impart it. The American medical practitioner practices his speciality in a milieu replete with the latest medical technology. The American doctor is inundated with information on the latest developments through literature, sales men, the media, access to professional associations and speciality conferences

(where, incidentally, a prominent part is usually played by the promoters of new drugs and equipment), not to mention his everyday work environment. On top of all this, according to a spokesman of the AAPIO, US-based doctors study their speciality an extra 50 hours a year to bring themselves abreast of the knowledge required to pass their licensing exams.

In contrast, the scheme proposes "three to seven hours" of demonstrations for the local doctors at specialist centres. The Indian medic, though also exposed to a fair amount of promotional literature from drug and equipment firms and some of the other 'aids', does not have an easy access to broad-based scientific literature which can assist him in making reliable judgements on the use of new materials. As a case in point one can cite the rapidity with which private practitioners prescribe the latest formulation of a drug. The culture of "kickbacks" from company salesmen (calendars, plastic knick-knacks, tickets to dinner at a local five-star, free samples, support for travel to conventions, and much more) has tended to subvert the spirit of scientific enquiry, and even clinical ethics. On the other hand, practitioners may hesitate to acquire even time-tested diagnostic equipment at their private clinics, largely because they have no shortage of clients, regardless how 'backward' the service they deliver. (None of this is to say that such abuses do not take place in the US as well, but the points of check-and-balance are considerably different.)

The situation of public medical personnel — including those at specialist centres — is similarly problematic. They work in intensely over-crowded and poorly supplied circumstances. There are severe bureaucratic and financial constraints to the acquisition of new equipments. Adjunct medical libraries are mostly in a sorry shape. Few professional associations bring out high quality journals, and personal subscriptions to foreign ones are prohibitive. There are few incentives or opportunities to upgrade one's knowledge and skills. Thus, the very different milieu of trainers and trainees will make the transfer of knowledge extremely difficult. *One might suggest, provocatively, that the 100,000 dollars the AAPIO proposes to spend annually on airfares to India would be better spent on supporting journal subscriptions for Indian institutions, or on schemes to provide young Registrars and Senior Residents who are anxious to upgrade their skills access to the "interesting" difficult cases and specialist equipment which are usually nabbed by their seniors.* Such efforts to fertilise

the soil before the specialist knowledge is transplanted may result in a richer harvest.

It is in this context that the fact that the proposed scheme does not mention the importation of any equipment or blueprints gains extra significance. "Three to seven hours" of demonstration will not overcome the problem of short supply of equipment extant at most centres. Does the government see this as a lesser constraint to the proper functioning of its health institutions than a lack of training in the "latest medical developments" of its doctors? Of course, much sophisticated medical equipment is already manufactured locally and therefore does not need to, indeed should not, be imported. But the heavy burden on specialist health centres, the lack of adequate procedures and facilities for maintenance and repair of equipment, the bureaucratic red-tape which delays or prevents the acquisition of replacements, as well as the politics and mal-practices regarding the use of certain types of equipment at public health institutions remain major problems the government needs to tackle. The third point then is that, even assuming that the training programme is successful in transferring the requisite specialist knowledge, it is difficult to see how the specialists will be able to apply their training given existing conditions.

A fourth and related question is: Are the Indian doctors travelling home from the US the most suitable trainers for our local specialists? We must recall that most of these doctors would have left India after their early medical education, acquiring the bulk of their specialist expertise abroad. Notwithstanding their Indian origins and basic exposure to medical care in India, how appropriate is their practical expertise when transplanted from the sterile, almost martial, atmosphere of a US hospital or clinic, to a local centre where even the supply of gauze and cottonwool, leave alone adequately aseptic instruments and operation theatres, is in doubt? The main reason, however, to concede their suitability (assuming — only momentarily — that a training scheme is necessary or desirable) is that it is difficult to think of a better alternative. Non-Indians from the West have the same handicap, perhaps without the mitigating factor of cultural empathy. Sending local specialists abroad for training is of course a greater burden on the exchequer, and runs the risk both of irrelevance and of further 'brain drain' although this has worked in many instances in the past.

Returning to the proposed scheme, one is compelled to ask, who are the intended beneficiaries? In view of the very short training that will be given and the lack (to our knowledge) of concurrent plans to overcome the bottlenecks of inefficient management, poor logistics, highly politicised working conditions, and low pay that hamper the functioning even of our super-speciality centres, it is doubtful that the local specialist trainees have much to gain. The patients on whom the techniques would be demonstrated would merely be playing the roles of guinea pigs, the likelihood of a spread of benefits to vast numbers being most remote. Thus, one is forced to seek the answer to this fifth question elsewhere, for example, in the participating Association of Physicians or in the individual physician trainers themselves.

As the membership of the AAPIO currently numbers some 25,000, it is worth investigating whether the scheme passes muster on the ground that a sizeable group of important people would be benefited. Simple arithmetic, however, tells us that over the next 16 years (until the year 2000 by which time the world community is striving to achieve "Health for All"), at the current rate of 50 doctors per year, 800 may participate in the scheme. Alternatively, if one allows for a five per cent per annum rate of growth in numbers of participants in the scheme, the total may rise to 1200. Even this higher figure is less than five percent of the current membership of the AAPIO (which will inevitably increase over the years)—a figure so small that one would not expect sizeable benefits to accrue to the Association at large, especially as we have not been told of any mechanisms that the Association proposes to introduce to "spread" the effects of such a scheme among its members. We must remember too that the AAPIO is an umbrella organisation comprised of 15 other associations of Indian physicians resident in the US. The smaller organisations and their members are scattered throughout the country, a land two-and-a-half times the size of our own vast one. Doctors in the US also work under most rigorous, albeit better facilitated and more remunerative, circumstances. *So, how a 1000-odd fellows who have participated in training their counterparts for "three to seven days" on one occasion in India can benefit their own larger community remains to be disclosed.* How their participation in such a scheme can help to bring about the political clout that they aspire to within the American medical fraternity and with the US congress is certainly impossible to see.

In the absence of the possibility of wider fallout from this programme—either to the US-based or indigenous professions, one can only conclude that the main beneficiaries of the scheme would be the participating doctor trainers. To put this into perspective, it must be realised that many of these doctors moved away from the land of their birth and early medical training with feelings of despondency and in search of better opportunity. Thus, we need to consider their participation in the scheme at a purely human level. The scheme provides a mechanism through which they can make up in some small part what they have taken from their homeland and the government (and thereby "the Indian people") in the way of a highly-subsidised and western-oriented medical education. In my ten years of residence in the US, I knew many Indians including professionals in the health field, who felt intense feelings of guilt on this score, and constantly and earnestly searched for ways to assuage this guilt. Another feeling was that of confusion about cultural identity to which many emigres are subject and Indians in the US — doctors included — are no exception. This is manifest in a desire to have both worlds—the better-heeled, more efficient working and living environment of the west, as well as the more "homely", colourful, and meaningful life of India. Thus, the scheme at another level provides an opportunity to bring this dream to fruition. If nostalgia, aged parents, or the search for a prospective son-in-law (a doctor who will qualify for a Green Card?) draw participants to the scheme, after the seven days of training will come the family reunion, the shopping spree, the trip to Kashmir. Given the groups of 50 or more, the scheme may be "development tourism" in its most disguised form yet.

In sum it is possible that the doctors of the AAPIO would benefit from this scheme, but as far as I can see the benefits would be social and psychological rather than professional.

Lest the reader misunderstand, let me be perfectly clear. Both the sets of feelings mentioned are perfectly human and one sympathises deeply with those who experience them. But the question here is: is it necessary or appropriate for the Indian government to use its money and materials supporting local transportation and stay costs, not to mention the valuable time of the trainees and the fanfare that will undoubtedly accompany the training, to assist a few individuals (who are fairly comfortably off) to overcome their pangs of conscience or estrangement? I think there are more pressing priorities for the very scarce resources of the health sector.

If the scheme fails the test of its overt intention — professional development — we must consider a sixth issue, its possible "hidden agenda". The first item on this agenda could be the conduct of collaborative research between the two groups of doctors. India, as we well know, provides a huge sea of human beings on which experiments could be conducted, a vast range of pathologies which pose real scientific problems or can be used as "models", and sufficient institutional facilities for highly sophisticated experimentation. Similar material is hard to come by in, say, a US situation while the medical-scientific community there faces immense pressures to do significant original research, "publish or perish". Many Indian practitioners also would welcome opportunities for collaborative research because they may have insufficient funds of their own, they may be devoid of ideas, or they may be facing a problem "getting published" in reputable international journals. These problems could be overcome through collaborative efforts. The scheme under discussion may well intend to foster such 'mutually beneficial' arrangements. As a young doctor friend of mine put it, "in 'three to seven days' there is little the US-based doctor can teach — but much he can learn" and, I would add, arrange.

On the face of it, such collaborative efforts should perhaps be welcomed if they further the cause of science. But the point at issue is whether this government-appointed scheme will provide any safeguards against the abuses with which we are aware the system is already rife. While in the west, human experiments and trials are rigidly controlled by law, medical ethics review committees have been widely established (particularly in large hospitals affiliated with teaching or research institutions), and wronged patients or unknowing individuals have legal recourse through malpractice suits, in India the field is almost wide open. We have no laws expressly controlling human experiments, other than torts. The potential of medical technology to be misused in our social and economic context is amply illustrated by the saga of amniocentesis and fatal sex determination, and legal lacunae by the governments inability to bring unscrupulous medical practitioners to book in this case. Ethical guidelines issued by the Indian Council of Medical Research are at best applicable to its own institutions and projects, and not binding on others, nor on private practitioners. Although consent may be sought at hospitals and clinics for various invasive procedures, this is rarely "informed".

There is a second possible item on the scheme's hidden agenda. It may simply be another way of

attracting investment from non-resident Indians. Indian doctors in the US are certainly a group worth enticing as the most successful among them would have annual earnings of over 1,000,000 dollars and considerable savings. Their membership of associations makes them easy to reach with investment propaganda. The doctors also enjoy prestige among other non-resident Indians (NRIs), and so there could be some 'snowball effects' on investment. Without going into the pros and cons of NRI investment I should like to take a close look at whether the mechanics of this scheme would meet this objective and, more importantly, at what the side effects may be for the country's health system. Regarding the mechanics, I have already pointed out that the number of doctors the scheme can reach is small. Although we do not know yet what criteria would be used by the AAPIO to select participants in the programme, if a good proportion of them are to become investors, selection would have to favour those who are 'commercial-minded' and have large bank accounts. In the US, as in India, wealthier doctors tend to be in private practice rather than in public hospitals or academic institutions. They are likely to be the best participants in the scheme from the investment point of view. But they may not be the best candidates (even from among the members of the AAPIO) from a professional point of view, suggesting a diametral contradiction between the scheme's overt and possible covert aims.

There are also other possible negative "side effects". In the hope of attracting financial investment, are we potentially adding to the "brain drain" of doctors out of the country? We must not be blind to the continued desire of many Indian doctors to emigrate — and this scheme may provide a good opportunity for the 'recruitment' they seek. There is a growing disenchantment with emigration to Africa, the Middle East and the Gulf, and a renewed effort to get to the countries of the west is evident. There may also be signs of a relaxation in the embargoes placed by Western countries on immigration of South Asian doctors five or seven years ago when their health systems were saturated and when a sense of international responsibility in the wake of the Health-for-All movement may have prevailed. A demonstration that an emigrating doctor can have his cake and *roti* too may act unconsciously to motivate others to follow suit. Thus, while the scheme may meet its unspoken investment objective, it may obliquely harm the existing medical services. It is worth recalling the Hippocratic oath — and hoping that our policymakers and the doctors who propose

to participate in the scheme will do the same; "First, do no harm".

As an aside, it is possible of course that this scheme is seen (at the same time as being investment-motivating) to be precisely an answer to the brain drain issue. By making specialist training available locally, it may be hoped that the desire of young doctors to go abroad, ostensibly in search of such training, would diminish. *It is also easy to see that by putting out a relatively small amount of funds, the government has devised a 'plum' to keep an important, restless, and fairly politicised group of professionals — medical specialists — happy and feeling that India will enter the 21st medical century on time.* Neither of these situations is likely to obtain, however, in the continued presence of the irritants discussed earlier, which motivate both the outmigration phenomenon as well as the political volatility of young doctors.

Another possibility that deserves some consideration is that the scheme has some actual or potential connection with the programme of concessions to attract non-resident Indian professionals to return to India — to reverse the brain drain, as it were. All that needs to be said on this, in the light of the foregoing discussion, is that concessional strategies tend to gloss over the underlying causes of the exodus. Thus, in lieu of them — if there is any connection — the government would do better to concentrate its attention on improving the working conditions of those doctors who remain in India, preventing not just legally but substantively, a further drain.

Returning to the investment possibility, one can further refine it. The government perhaps hopes that the US-based doctors will invest not just generally in Indian enterprises, but specifically in the medical and health sector. It may be with such prescience that the vice-president of the AAPIO has expressed confidence "that this Scheme will do a lot of good to the cause of the Indian medical services" (for, as we have suggested, it is unlikely that the training itself will achieve this broadside.) The dual health economy is well-ensconced in India. Many large hospitals and specialist treatment centres have been established by private investors including major industrial houses such as the Mafatlal and Modi groups. Privatisation is also being seen as the future mode. The recently-framed National Health Policy specifically calls for the encouragement of private investment in speciality and super-speciality services, as well as for the government to "utilise and assist" private voluntary organisations to

participate in health services. At one level, these are welcome suggestions because of the innovation likely to be brought to the health sector through these mechanisms, and more so because they are intended to reduce government expenditures for sophisticated medical care, thereby making more monies available for primary health care and public health services. The proposed scheme may be seen as a step in this direction, but there is also the grave possibility that the cart has been put in front of the horse. There is already considerable investment in specialist health facilities in terms of their share of the health pie. What is needed, first, for "health for all" is a reallocation of funds (at least plan funds) to rural health schemes. It is also essential to enlarge the total allocation to health. To put further investment into the sophisticated medical sector (however small the amount) without such reallocation is to relegate much of the National Health Policy to the status of a lame duck. If the budget to the health sector does not increase, both in real terms and in terms of per cent of GNP, such skewed investment may be tantamount to the government opting out of health for all altogether. To attempt to attract external investment through a scheme "update" specialised medical personnel in the "latest developments in medical science" is to give the lame duck a further kick in the pants.

This brings us the most crucial question of all: is the proposed scheme relevant at all to the country's needs? The National Health Policy itself has called the existing system of sophisticated health services "inappropriate and irrelevant" to the country's needs. Is a scheme which proposes to upgrade them any less so? The specialities mentioned thus far are certainly not those required to treat the major diseases or prevent the untimely deaths in our country. In this respect, the scheme is what Lewis Thomas has called "halfway" technology rather than "real high technology" which is addressed to significant problems, is effective, inexpensive and inconspicuous. In the latter category are many potential points of collaboration between the government and the AAPIO.

If the government is at all serious about its commitment to primary health care, it should perhaps encourage the AAPIO to 'invest' in establishing clinics to supply basic health care and medicines to the remotest rural areas, and to "donate" personnel time to training trainers

of village health workers. But note : any collaborative venture or technology-transfer must resist the malproportions of one of Mr Raj Narain's efforts to provide medical services to rural areas. If the import of the 300-odd over-sized mobile medical vans has come to be known as the "white elephant scheme", any encore deserves worse epithets. If the absorption of such donations into the public rural health sector presents problems, there are innumerable private, community-based health programmes which would do good work with them. Thus, the two aforementioned aims of the Health Policy might be collapsed into one more in keeping with its overall intention — private collaborative enterprise for rural health care. However, I broach this idea with caution because, of course, the countryside is also dotted with agencies who wouldn't do any work at all, there are many examples of foreign donations being frittered away, and I know of at least one major unhappy experience of an NRI-supported rural "entrepreneurship" programme going awry. The point here is simply that the challenge lies in rural health, and that a programme of greater benefit to more people than the proposed one might be designed around this challenge. Even the small funds envisioned to be spent on this scheme could be used to establish basic health care, so that by the end of the century a few more of our countrymen and women and children might be closer to the dream that is "health for all". As it is currently conceived, the proposed scheme may reestablish an umbilical connection, but the product is likely to be stillborn.

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MONOPOLY CAPITAL AND THE REORGANISATION OF THE HEALTH SECTOR

j warren salmon

The 'health care crisis' proclaimed by Richard Nixon in 1971 revealed the health sector's interconnections with the overall political economy. These extend simultaneously to problems in the health status of the people; the effectiveness of medicine itself, and the organisation and financing of medical care services. The ruling class has attempted to resolve the present crisis by introducing a structural reorganisation of the health sector. The corporate class has become increasingly active in health policy and programme development at national as well as local levels. This article, reproduced from 'Review of Radical Political Economy' briefly looks at the role of monopoly capital in this reorganisation. What is the capitalist perspective on the crisis in health care? How are they advancing their class interests by themselves and through the state for a redesigned health care delivery system? The author reviews the discussions, activities and important publications of a few selected capitalist planning bodies, showing their ideological development as they educate the corporate class. These discussions are a key to shaping a class stand to eventually transform health services delivery under monopoly control.

"There is a better way to go and that would be to strip the medical societies of the power to inhibit more efficient methods of delivering medical care — corporate organisation, for example — and the various restrictions on competition."

Editorial, *Wall Street Journal*
January 16, 1976

The present organisation of the health sector, with its excessive use of resources, has come into contradiction with the needs of monopoly capitalism today. A petty-bourgeois mode of health services (structured around solo fee-for-service medical practice and cost-reimbursed hospital care) will yield over the next few decades to a new, qualitatively different stage of development¹. This emerging delivery system may eventually be dominated by Health Maintenance Organisations (prepaid group medical practices) sponsored by large corporations financed by some form of national health insurance, and regulated by corporate-controlled planning bodies.²

Monopoly capital recognizes the health services industry as organisationally backward compared to other sectors of the economy. Although several modes of production coexist, a small scale mode still predominates, principally controlled by petty-bourgeois physicians. This condition entails institutionalised waste, including low productivity of the health labor force, substantial clinically unnecessary care (and its related high hospital utilisation), and the allocation of substantial resources to non-productive segments of the population (e. g., the poor, disabled, aged). From the monopoly capitalist perspective, the health sector diverts a substantial portion of state funds and an increasing amount of variable capital costs (in the form of

fringe benefits) from the sphere of monopoly capital. The surplus generated in the delivery of medical care is chiefly appropriated by physicians, hospitals, medical schools, and nursing homes³.

These conditions contribute to escalating and yet-to-be controlled costs,⁴ under the present organisational form and control. There are two aspects of this cost problem.

1) 118.5 billion dollars were spent for health services in 1975, more than a 200 percent rise since 1965. Health expenditures are thus rising more rapidly than the overall rate of inflation in the economy, propelling them to 8.3 percent of the GNP last year.

2) 57.9 billion dollars were spent by government — 42.2 percent of these total expenditures — and is critical in light of the fiscal crisis of the state.⁵

Over the past decade the federal and state governments have instituted increasing cost controls; however, the cumulative effect of these policies has been minimal.⁶

This problem of escalating costs is related to an additional one concerning doubts about the general effectiveness of medical care services in ameliorating disease patterns related to heart, cancer and stroke. The leading mortality indicators for Americans under 45 — accidents, suicide and homicide — are conditions which the medical care system does not, and cannot, address, given its present form.⁷ Studies are showing that health levels are not altered significantly now by incremental medical care services⁸. A growing ideological

response may shift attention away from medical care institutions to contain the costs of the health sector.¹¹

The drastic decline of U.S. power in the world capitalist system has shaped an international situation which has aggravated the acute domestic stagnation. To cope with these conditions, the capitalist class has been looking more and more at the potential of the health services industry for greater social efficiency. In the present economic crisis, the containment of social consumption expenses can provide funds for private investment in the production sectors. Health policy has been encouraging attempts at general rationalization (cost cutting, profit maximization, forcing higher productivity).

At the same time, various segments of capital are responding to opportunities for greater profits to be derived from both the production of health services¹⁰ and the circulation of commodities through the health sector (e.g. drugs, hospital equipment and supply, construction, systems and communications, legal, accounting and management services, etc.).¹¹ As industrialisation proceeds in the health sector (mass production, elaboration of the division of labour, greater capital intensification, bureaucratisation, etc.), these industries will seek greater capital flows toward the sector.

Renaud has demonstrated how capitalist growth, while giving rise to disease patterns in society, also institutionalises "solutions" to disease which are compatible with capitalism, in the form of a commodification of health services.¹² With alienation and disease creating a greater dependency by the working class on health (and other human) services, these services must function more and more as mechanisms for social control.¹³ However, the present structure of health care delivery has not developed sufficiently for monopoly capitalism today. A new organisational form is required, and it will arise under conditions similar to those other sectors where petty-bourgeois or pre-capitalist forms historically were smashed or co-opted.¹⁴

It is surely not new for capitalists to be actively restructuring the health sector. Berliner has detailed how the Carnegie and Rockefeller Foundations in the beginning of the century virtually rebuilt the entire medical care system by endowing research institutes and selected medical schools.¹⁵ This intervention strongly influenced the rise of the presently-dominant organizational form in the health

sector, which has served through to the present period.

Stagnation and crises necessitate a growing awareness of monopoly capital's common interests (as well as its conflicts). The coming together of major capital segments to discuss and formulate general policies in itself yields a greater measure of class consciousness.¹⁶ Policy-planning organisations, (such as the Trilateral Commission, Business Council, Committee for Economic Development, Business Roundtable, etc.) have lately become the arenas for working out programs for the capitalist class as a whole. Their activities provide a system of cooperative interpersonal and interorganisational relationships based upon a commonly-held class perspective. The role of these "consensus-seeking" groups becomes critical, with the mounting contradictions of advanced capitalism and the crescendo of challenges to the American capitalist system on both the international and domestic levels.¹⁷

Today the "class-conscious corporate directorate"¹⁸ is speaking directly to monopoly capital's needs from the health sector in a number of important publications and conferences. The following sections will review a few of the activities of selected planning bodies, showing their ideological development as they educate the corporate class. As yet, no definitive analysis on the nature and function of the health sector has developed, nor has a comprehensive strategy for the capitalist class as a whole emerged. Nevertheless, a class stand is shaping as the problems for monopoly capital are detailed and potential solutions are discussed.

In contrast to the last decade, *Fortune*, *Forbes*, *Business Week* and the *Wall Street Journal* have been devoting major amounts of space to health care problems and editorializing for a changed structure to favor capitalist interests.¹⁹ The *National Journal* provides frequent indepth analyses of health care issues to apprise business leaders of legislative developments. All of this interest by the business press (coupled with the popular media's attention to health and health care inadequacies)²⁰ is a marked escalation over their coverage prior to 1970 — a change which parallels the new interest by capitalist planning bodies

Committee for Economic Development

The Committee for Economic Development (CED) is one of the central educational and policy-making organisations of the corporate class; Domhoff calls it the "major spokesman for the

business viewpoint." Highly influential in state policy formulation, it addresses their societal concerns in lengthy policy statements.²⁰ It represents a more "progressive" capitalist perspective (generally the longer view of reshaping society) and produces studies that are somewhat broader and less detailed than the issues analysed by the liberal Brookings Institution²¹ or the right-wing American Enterprise Institute for Public Policy Research (AEI).²²

The CED provided a beginning outline of their design for the health sector in a report entitled *Building a National Health Care System* in April 1973. It recommended health maintenance organisations (both profit-making and nonprofit) for restructuring the delivery system. A health maintenance organisation brings together a comprehensive range of medical services into a single organisation, providing services in a benefit package for a fixed contract fee which is paid in advance. A proposal was made for health care providers to be financed through prospective budgeting, with fees and charges fixed in advance. A national health insurance program, providing a basic level of health benefits for all Americans, would be administered by a National Health Insurance Advisory Board. This basic benefit package for all Americans, of course, would be a phased and "practical program that does not raise false hopes by promising services that cannot be made available and does not lead to unwarranted increases in costs with little benefit to people."²³ Three categories of financing would be established: 1) employer-based insurance would be phased in for all workers and their dependents; 2) Medicare would be retained for the aged and disabled; 3) care for the poor, nearpoor, unemployed, and others would be provided through federally-sponsored community trusteeships. The policy statement further recommended a control and planning mechanism — which has now been enacted in Public Law 93-641, The National Health Planning and Resources Development Act of 1974.

In short the statement by the Committee for Economic Development essentially endorsed the health policy of the Nixon Administration and countered most of the stands taken by the American Medical Association, which has fought all attempts at restructuring and cost control.

The Business Roundtable

Perhaps the major capitalist lobbying group on health care has become the Business Roundtable (BR) and its associated Washington Business Group on Health. Made up of the chief executive officers

of the 160 largest corporations, BR was formed in the early 1970's to develop class discussions and to formulate corporate policy on labor problems.

In June 1974 the Business Roundtable convened a conference on health care legislation to build a consensus among chief executive officers about what business should be getting from the health sector. In an opening address, the chairman of Eli Lilly Company, the drug manufacturer, noted that "at a recent meeting of the Business Roundtable there was complete agreement that the importance of the health issue to every company should have a very high priority as an issue in future months towards which we should devote our continued and dedicated attention."²⁴ The panel of speakers was impressive. Chairman of the Business Roundtable's Subcommittee on Health Policy; Chairman of the CED Health Policy Committee; former Congressman William Roy; who authored the Health Maintenance Organisation Act of 1973; a representative from the office of the HEW Assistant Secretary for Health and Scientific Affairs; and Russell Long, Senate Finance Committee Chairman and sponsor of a health insurance bill. While endorsement was encouraged for Senator Paul Fannin's National Health Standards Act (the national health insurance bill of the Chamber of Commerce), what seemed to be emerging was a firm conviction that restructuring the delivery system was a necessity before legislation on the national financing of health care. In the midst of the recession, coupled with the state's fiscal problems, capital was displaying its fear of increased labor costs.

The Conference Board

The Conference Board based in New York City, is a research organisation concerned with "business economics and business management." Its numerous studies address problems of the firm, which it then relates in its published findings to social policy issues. Their message promotes the common interest of capital in the "efficient operation and sound development of voluntary productive enterprise."

The CB conducted several extensive studies on health care funded by the U.S. Department of Health, Education and Welfare and a consortium of large corporations and foundations. *Top Executives View Health Care Issues* (1972), the first product of this broad CB study in health, surveyed 118 executives about: 1) the nature of the nation's major health problems, the need for new legislation to deal with them, and the particular pending

legislation; 2) the ways in which health costs to business might best be controlled; 3) the desirability of companies creating or expanding their own in-house medical services; 4) a strong business role in community efforts at health services planning, controlling hospital and other health costs, and developing prepaid group practice plans and other new health delivery forms; 5) potential changes over the next decade in corporate health care activities; and 6) the order or priority that business should assign to health care relative to other social issues (e.g. environment, product safety, minority employment and urban redevelopment).

A subsequent study on *Industry Roles in Health Care* surveyed eight hundred large firms to provide a statistical examination of present corporate health care programs. The narrative description of these programs and the suggestions on the "appropriate management response" to the health sector delineate specific policies and activities of corporations in restructuring health care delivery arrangements for their workers and surrounding communities.

Another publication, *National Health Insurance and Corporate Benefit Plans* grew out of two surveys on corporate health programs (a separate one on executive health), which secured the cooperation of 1800 companies for their extensive detail. The national health insurance bills before Congress were analyzed for their effect on industry benefit plans, along with an assessment of labor union attitudes and actions. The report concluded that "a substantive intervention by the Federal Government would have a major impact on the benefit planning, cost sharing, and bargaining, but little direct effect on the benefit coverages to be provided to workers. Benefits to low-wage workers and unemployed would increase greatly."²⁶

These reports provided a foundation to the forward and sophisticated thinking presented by the speakers in a CB-sponsored *Health Care Issues for Industry* Conference in April 1974. Over 200 corporate executives and health and government representatives met to discuss the "heavy health-related costs in the form of taxes, employee benefits, workmen's compensation, absenteeism, impaired productivity, and business stake in the allocation of the nation's resources and the health of its economy."²⁷ Walter Hamilton, former Deputy Assistant Secretary of Commerce under the Nixon Administration and now a CB Vice President, began the conference by observing that health care is "an industry whose methods and structures the business

community has both the right and the obligation to study and seek to improve."²⁸ Dr. Paul M. Ellwood, Jr., the chief architect of the Nixon Administration's Health Maintenance Organization Strategy, decried the lack of capitalist leadership in designing national health policy and suggested that:

"... free enterprise solutions that have been effective in solving the problems of conventional business can be applied with similar effect within the health industry, and that you are in the position to apply them. In other words, I am suggesting that you take certain active steps to make the health care market work, by encouraging HMOs to compete with the present system on the basis of prices and benefits."²⁹

Dr. G. H. Collings, Medical Director of New York Telephone Company, urged corporations to become the "health care manager" for workers through their industrial medicine departments. An executive of Kaiser-Permanente, the largest HMO in the country with over two million subscribers, presented information on a cost-benefit analysis of occupational health measures to aid companies. A corporate officer from Motorola discussed his company's conflicts with hospitals in Phoenix, Arizona and Motorola's attempts in the community to contain their costs. A vicepresident of General Mills spoke of the corporate-sponsored HMO effort being designed and implemented in the Twin Cities area. Equitable, Prudential, Honeywell, General Mills, 3M, Pillsbury, and Mutual of New York are among the twenty corporations there reporting attempts to centralize health services into health maintenance organizations. With the information on the nature and extent of corporate involvement in health care activities from this conference and the CB studies, monopoly capital has positioned itself to initiate a more class-conscious analysis of the health sector and its relation to capital accumulation.

The Health Maintenance Organization Strategy

Active state intervention to restructure the health sector was taking place amidst these conferences and publications by capitalist planning bodies and the upsurge in volume of health articles in the business press. The HMO strategy initiated by the Nixon Administration in 1970 had created an awareness among monopoly capital firms of investment possibilities in health care delivery. It was designed for "using the forces of the private sector" to "modify the entire system of health care."³⁰ Dr.

Paul Ellwood³¹ of *Interstudy*, a health policy think-tank, has consulted extensively with large corporations urging them to establish profit-making HMOs, converting their industrial medical departments into HMOs in order to "realize a substantial savings over present health expenditures for employee health care benefits."³² Through changing the present "sickness-oriented, piece-work basis" of the delivery system, the HMO "creates a profit motive "to concentrate on keeping people healthy" and provide "greater efficiency."³³ HMO patients have a markedly lower rate of hospital admissions and a shorter length of stay than those covered by indemnity insurance plans of Blue Cross and the commercial insurance companies. According to Ellwood, HMOs would strengthen the role of competition by introducing economic incentives, and minimize the need for regulation by relying upon market mechanisms. Ellwood's dream of a revamped delivery system envisioned approximately 1000 HMOs across the country, organized similarly to large corporations (possibly as their subsidiaries) to serve up to several million persons each. One of his latest suggestions, as an ideological entrepreneur on health for the capitalist class, urges federal government subsidies (up to one million per year) for the nation-wide expansion of the "superclinics" (e.g. Mayo, Cleveland, Palo Alto, Marshfield, Geisinger, etc) as models for a national network of HMOs.³⁴ The state's role in this redesign of the delivery system would enhance monopolization and assure a rationalized organizational form.

To stimulate corporate-controlled HMOs, HEW under the Nixon Administration designed a program to attract funds from venture capital and investment banking firms, commercial insurance companies, and banks. Capitalist interest in HMO operations, both as commercial ventures and as a more efficient organization of present health care providers, rose as they understood how HMOs could control the runaway costs of the health sector and contain their labour costs.³⁵ A list of corporations who have been involved in HMO activity reads like the Fortune 500: Westinghouse, Texas Instruments, Sun Oil, North American Rockwell, Zenith, General Foods, DuPont, IBM, Kodak, Xerox, Upjohn, Mobil Oil, Standard Oil of Indiana, and a few dozen others. However, tight money over the past few years and the lack of substantial financing of the Health Maintenance Organization Act of 1973 (P.L. 93-222) by the Ford Administration have temporarily slowed this whole development.

Both profit and non-profit HMO plans have continued to expand, having doubled their enrollment (to approximately 8 million persons) over the past three years in 178 HMOs across the country.³⁶ However, new HMO projects are dependent on corporate and union support in their "marketing" activity (i.e., acquiring enrollees) to ensure their existence and growth. With the economy on the upswing and several problems resolved in the new HMO law, corporations may reinstitute their involvement in HMO activities and follow the example of R.J. Reynolds, which this year established its own HMO for its workers.³⁷ The National Association of Employers for HMOs, based in Minneapolis, was just formed this year by several corporations to guide firms in their HMO development.

Occupational Medicine Developments

While monopoly capital's investment in HMOs has not reached levels predicted by the Nixon Administration, corporate medical directors and employee benefits managers nevertheless have been developing mechanisms within their firms to eventually integrate industrial medicine and occupational health programs with the medical care of workers' families. Writing in a special issue on HMOs of the *Journal of Occupational Medicine*, one corporate medical director evoked the view that: "the scope of proper concern of the occupational physician has expanded quite far beyond his involvement with occupational injuries and disease. It now extends to the non-occupational health problems of the worker and his dependents, and the ways in which the health services they require are organized, delivered, and paid for."³⁸

Another corporate medical director has said, in a speech entitled "The Balance Sheet in Employee Health Conservation," that the industrial physician may become the primary care physician of the future for the worker and the family.³⁹ William Jend, Jr., Medical Director of Michigan Bell Telephone Company, has argued that the "workplace is probably the ideal locale to practice real preventive medicine on a wide and effective scale."⁴⁰

This ideological thrust,⁴¹ coupled with actual program formulation,⁴² by industrial medicine physicians, represents a slow but deliberate shift which may lead to a personnel system in which the firm will be able to provide health maintenance services to assure the productivity of the individual worker. This implies a profound change in

the content and control of medicine from that practiced today.⁴³

In a larger context, the employer as "health care manager" will deal with worker alienation and disease, contain laborpower reproductive costs, and promote greater social control in an attempt to reduce the level of absenteeism and disability, turnover rates, wildcat strikes, sabotage, and poor quality products. The development of workplace medicine is one more step in the transfer of health services delivery to eventual monopoly capital control.

Directions and Contradictions

While these conditions are shaped and shape themselves from the outside, rapid change is concurrently happening within the health sector. Concentration and centralization in the production of medical care services have been rearranging patterns of control in the financing and delivery of care. Health industry groups such as the American Hospital Association, Group Health Association of America and Blue Cross are becoming more closely aligned with monopoly capital. Stimulated by increased efforts for bureaucratization and the application of managerial economics, the industrialization process in the health sector is bringing forth fundamental changes in its social relations of production. Meanwhile, regional planning efforts by health systems agencies and the forthcoming passage of some form of national health insurance may help create material conditions for further monopolization and a greater capitalist invasion.

As the rationalization of health services occurs during the present period of economic crisis, monopoly capital's class stand on health policy is being developed. Discussions have been centering around containing cost inflation in health care, redirecting medical dollar flows through the monopoly sphere, and eventual consolidation of health services delivery by large corporations. Recognition of their interest in more rational and precise social investment may lead monopoly capital to mold an organizational reflection of their need for human capital maintenance.

As the larger crisis of accumulation is addressed, the outlook of monopoly capital is becoming more highly developed. How capital can assure stability and predictability in the international and domestic situations is certainly receiving more and more class attention and action. It is crucial for us

to analytically grasp this beginning ruling class coordination in the health sector also.

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Notes and References

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1. See both: Sander Kelman, "Adventure in the Undialectical." Book review of Robert Alford's *Health Care Politics: Ideological and Interest Group Barriers to Reform* in *Journal of Health Politics, Policy and Law*, 1:1 Spring 1976, pp. 122-129; and Sander Kelman, "Toward the Political Economy of Medical Care" *Inquiry* 1:3, 1971, pp. 30-38.

2. A case example of corporate control over health planning may be found in: Health Information and Action Group, *HSA's May Be Dangerous to Your Health* (Philadelphia: Medical Committee for Human Rights, 1975).

3. For details on conflicts between monopoly capital and smaller capitals see: James O'Connor, *The Corporations and the State* (New York: Harper Colophon, 1974).

4. For a capsule analysis of the cost problem, see: Council on Wage and Price Stability, *The Problem of Rising Health Care Costs* (Washington, D.C.: U.S. Government Printing Office, April 1976).

5. James O'Connor, *The Fiscal Crisis of the State*. (New York: St. Martin's Press, 1973).

6. The federal government has adopted cost containment measures through the economic stabilization program: utilization review of hospitalizations under Medicare insurance for the aged and Medicaid for the poor; monitoring hospital admissions and length of stay by Professional Standards Review Organization, federally-mandated organizations, set up by county medical societies; and authorities for planning construction and equipment purchases given to new regional health systems agencies. Further, state governments have regulated commercial and non-profit insurance firms, and enacted certificate-of-need legislation for hospital and nurs-

ing home facilities construction, and hospital rate-setting legislation. See: Anthony R. Kover and Edward J. Husk, "State Regulation of Health Care Costs" *Medical Care* 13:8, August, 1975, pp. 619-629.

7. Victor Fuchs, *Who Shall Live? Health, Economics and Social Choice* (New York: Basic Books, Inc., 1974)

8. Lee Benham and Alexandra Benham, "The Impact of Incremental Medical Services on Health Status, 1963-1970" in Ronald Anderson, et al. *Equity in Health Services* (Cambridge, Massachusetts: Ballinger Publishing, 1975); and Victor R. Fuchs, *Who Shall Live: Health, Economics and Social Choice* (New York: Basic Books; 1974).

9. By no means has any consensus been reached from outside or within the health sector: nevertheless, the critiques of medicine are being given serious attention. See Howard Berliners "Emerging Ideologies in Medicine." *Review of Radical Political Economics*.

10. For detail on capitalist inroads in health care delivery, see: J. Warren Salmon, "The Health Maintenance Organization Strategy: A Corporate Take-over of Health Services Delivery", *International Journal of Health Services* 5:4, 1975, pp. 605-623.

11. For a detailed description of the functions of the health sector and the production and realization of surplus value in health, see Leonard Rodberg and Gelvin Stevenson, "Health Care Industry in Advanced Capitalism," *Review of Radical Political Economics* (this issue).

12. Marc Renaud, "On The Structural Constraints to State Intervention in Health, *International Journal of Health Services* 5:4, 1975, pp. 559-572.

13. Gelvin Stevenson, "Social Relations of Production and Consumption in Human Service Occupations" *Monthly Review* July-August 1976, pp. 78-87.

14. Maurice Dobb, *Capitalism, Development and planning* (London: Routledge and Kegan Paul, 1967)

15. Howard Berliner, "A Larger Perspective on the Flexner Report," *International Journal of Health Services* 5:4, 1975, pp. 513-592.

16. See the entire issue of: G. William Domhoff (ed). "New Directions in Power Structure Research" *The Insurgent Sociologist* 5:3, Spring 1975.

17. Notwithstanding the instrumentalist overtones here the author is merely stating that *Conditions* are propelling this development. Limitations, both

on theoretical and empirical levels, exist in power structure analysis of this sort and obviously the varying theories of the state must be considered. See John Mollenkapf, "Theories of the State and Power Structure Research" *Insurgent Sociologist* 5:3 Spring 1975, pp. 245 - 264.

18. James O'Connor, *The Fiscal Crisis of the State*, p. III

19. Perhaps the first major indictment by monopoly capital against the health sector was the entire January, 1970 issue of *Fortune* 81:1 entitled, "Our Ailing Medical System". The issue strongly advocated health maintenance organizations as did M. Rothfield, "Sensible Surgery for Swelling Medical Costs" *Fortune* 88.4. 1973, pp. 110-119: "Is There an HMO in Your Future?" *Forbes* March 15, 1973, p. 21; "A Revolutionary Plan to Keep People Healthy" *Business Week*, January 12, 1974, p. 58 "Still Waiting for that Revolutionary Health Plan." *Business Week* January 13, 1975, p 53, Dublin. "Unhealthy Start: Prepaid Medical Plans Run Into Difficulties as Enrollment Falters," *Wall Street Journal* February 11, 1975, p. 1, plus numerous other articles on aspects of the health care crisis.

20. Every major television network ran specials on the health care crisis. Today newspapers and magazines follow health care developments quite extensively often not missing opportunities to attack the present medical care structure. For example, see the week of front page articles in the *New York Times* January 26-30, 1975.

21. On each of its policy statements the CED writes that "by enabling businessmen to demonstrate constructively their concern for the general welfare, it is helping business to earn and maintain the national and community respect essential to the successful functioning of the free enterprise capitalist system." It is not uncommon for a CED policy statement to precede federal policy or legislation on the issue.

22. The Brookings Institution in Washington, D.C. has published the following studies related to health care: Rashi Fein. *The Doctor Shortage: An Economic Diagnosis*; Herman Miles Somers and Anne Ramsay Somers, *Medicare and the Hospitals: Issues and Prospect*; Karen Davis, *National Health Insurance: Benefits, Costs and Consequences*: among others.

23. In 1973 the AEI established a Centre for Health Policy Research which has published:

C. Stewart and C. Siddayao, *Increasing the Supply of Medical Personnel: Regulating Health Facilities Construction* proceedings of an AEI Conference; Judith R. Lave and Lester B. Lave, *The Hospital Construction Act*; Sam Petlzman, *Regulation of Pharmaceutical Innovation*. Rita R. Campbell, *Food Safety Regulation: a legislative analysis. National Health Insurance Proposals*: David Schwartzman, *The Expected Rate of Return From Pharmaceutical Research*; William M. Wardell and Louis Lasagna, *Regulation and Drug Development*; Alex R. Maurizi, *Public Policy and the Dental Care Market*. Cotton M. Lindsay, *Veteran: Administration Hospitals. An Economic Analysis of Government Enterprise*; *Drug Development and Marketing. Proceedings of an AEI Conference, Health Insurance What Should Be The Federal Role?* proceedings of an AEI Roundtable television show; and Robert Stewart Smith, *The Occupational Safety and Health Act. Its Goals and its Achievement* Quite an extensive undertaking for only three years work! See also: David Pauly, "Celebration on the Right." *Newsweek*, May 17, 1976. p. 81.

24. Committee for Economic Development, *Building a National Health Care System*, New York, 1974, p. 66.

25. Business Roundtable, *Washington Health Organization Conference on Health Care Legislation*, June 20 1974, Washington, D.C. pp. 3-4.

26. Commonwealth Fund, which has long been active in health: Rockefeller Brothers Foundation, Andrew Mellon Foundation, as well as New York Life insurance company, Johnson and Johnson Company and medical supply firm and CIBA-Geigy Company and Upjohn Company, both drug manufacturers.

27. David A Weeks, *An Interim Report: National Health Insurance and Corporate Benefit Plans* (New York Conference Board 1974). p. i.

28. Seymour Lustermann (ed.), *Health Care Issues for Industry*. (N.Y. Conference Board, 1974) p.i.

29. Walter A Hamilton, "Conference Aims" in *Ibid* p. 10.

30. Paul M. Ellwood, Jr, "Business and the Changing Health Care Scene." in *Ibid.*, p. 54.

31. U. S. Department of Health, Education and Welfare, *Towards a Comprehensive Health Policy for the 1970s: A White Paper* (Washington, D.C. U.S. Government Printing Office, 1971).

32. See Paul M. Ellwood, et al, "Health Maintenance Strategy" *Medical Care* May-June, 1971, p. 291,

Paul M. Ellwood. "Implications of Recent Health Legislation" *American Journal of Public Health* January 1972, p. 20. Paul M Ellwood, "Health Maintenance Organizations: Concept and Strategy," *Journal of American Hospital Association* 45:6 1971., pp. 53-55 Paul M. Ellwood "Big Business Blows the Whistle on Medical Care Costs" *Prism*, December 1974, pp. 13-15; Paul M. Ellwood, "Models for Organizing Health Services and Implications of Legislative Proposals" *Mibank Memorial Fund Quarterly* October 1972. among numerous others.

33. Paul M. Ellwood and Michael Herbert, "Health Care: Should Industry Buy It or Sell It?" *Harvard Business Review* July-August 1973, pp. 99-107

4. Richard Nixon "Building a National Health Strategy: Special Message to Congress." Washington D C. February 18, 1971

35. "Spur 'Superclinics' Expansion to National Scale Ellwood Urges" *Medical Group News* 8:1. March 1976.

For a thorough assessment, see David Gaynor, et al. "Implications of Corporate Involvement in HMOs. HMOs in Historical Perspective" unpublished paper. (Ithaca, New York Cornell University 1974).

36. See ref. 13. For a thorough assessment, see David Gaynor, et al, "Implications of Corporate Involvement in HMOs, HMO in Historical Perspective" unpublished paper. (Ithaca, New York Cornell University 1974)

37. U. S. Department of Health Education and Welfare, *Forward Plan For Health FY 1978-82* (Washington, D.C. U.S. Government Printing Office. 1976). p. 50, and U. S. Department of Health, Education and welfare. *Health Maintenance Organizations. Survey of F. Y. 1975 Annual Report*. DHEW Publication No. (HSA) 76-13036.

38. "R.J. Reynolds to Open New HMO for Employees" *Health Services Information* April 2, 1976, p. 6-7

39. Dean J. Warshaw, "The Expanding Scope of Occupational Medicine" *Journal of Occupational Medicine* 17:10, October 1975, p. 624..

40. Miles Colwell, "The Balance Sheet in Employee Health Conservation," presentation to Annual Meeting of the Industrial Health Foundation, October 13, 1970.

41. William Jend, "Where Do we Want To Be in Occupational Medicine." *Journal of Occupational Medicine*, 15:7 ; July 1973, pp. 517-579.

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Census Bureau showed that the number of Americans living in poverty had risen to its highest level in 18 years. As a result of Reagan Administration tax policies, families earning less than 10,000 dollars annually suffered a net loss of dollars 400 or 4 percent of income, whereas those earning over 80,000 dollars gained 8,270 dollars or about 10 percent. This will further limit the number of blacks who can climb out of the poverty and degradation they are born into. Increasingly large US cities have a black majority population. The white exodus from the cities is matched by a loss in jobs in the manufacturing, wholesale, retail and service industries. In the past 10 years alone New York, Chicago, Philadelphia and Detroit have lost a million jobs with white unemployment levels staying relatively static whilst black unemployment levels have zoomed to nearly 55 percent for teenagers. These trends are likely to continue.

"Profit has made America what it is" is the proud slogan of American capitalism, which wishes to be known by its new, gleaming, dazzling, for-profit hospitals where the birth of a baby is celebrated by the parents with champagne. In their shadow lies the decay of overstrained public hospitals serving non-white citizens and bearing an uncanny resemblance to large municipal hospitals in India. Their burden will be greater than before as for-profit hospitals both "cream" off capital and resources and leave to them unprofitable diseases and the care of minorities and poor people.

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42. Two particular issues of the *Journal of Occupational Medicine* detail tasks for corporate medical directors: a special section on "Cost Effectiveness of Occupational Health Programs" in *JOM* 16:3, March 1974; and a special issue on "HMOs and Occupational Medicine" in *JOM* 17:10, October, 1975. See also Jesse Steinfeld. "The Workplace as a Health Care Resource," *JOM* 12 8. August 1970, pp 315-317; Robert O'Connor, "The Role of Industry in the Health of the Nation." *JOM* 10:3, March 1968, p. 379; and J. Williamson and M. van Nieuwenhuizea, "Health Benefit Analysis: An Application in Industrial Absenteeism." *JOM* 16:4, April 1974. pp. 229-223.
43. For an excellent discussion, see: Sander Kelman "The Social Nature of the Definition problem in Health" *IJHS* 5:4, 1975, pp. 625-642.

ILLS OF THE HEALTH INDUSTRY

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"Corporate Crime in the Pharmaceutical Industry" By John Braithwaite Routledge & Kegan Paul, London 1984, £ 25.00

Illicit drug networks, contraband smuggling and terrorist gangs constitute popular international crime syndicates against which most countries have evolved elaborate and sophisticated means of counter. Transnational Corporations (TNCs) also operate an equally organised crime syndicate but to which invariably the states' regulatory and enforcement machinery look the other way or are deliberately kept as inadequate.

Pharmaceutical TNCs are probably the worst of their kind. The pharmaceutical industry forms the nucleus of the health industry. It determines the nature of the health industry and controls the latter completely. Pharmaceutical firms play a central role in health (as well as general) policy making and planning, education of doctors and other health personnel, and of course socialisation of consumers into a 'pill-popping' culture.

Pharmaceutical business is essentially transnational and therefore, its crimes acquire an even more serious concern, especially because there is a gross inadequacy of protection against the ills of the health industry. For instance even in the USA, where the consumer movement is probably the strongest in the world, marketing a drug with dangerous side effects is not even an offence unless the product is actually banned or there has been criminal negligence.

Dr. John Braithwaite in *Corporate Crime in the Pharmaceutical Industry* cites innumerable cases revealing that the transnational pharmaceutical industry has a worse record of international bribery and corruption than any other industry, a history of fraud in the safety testing of drugs, a disturbing record of criminal negligence in the unsafe manufacture of drugs, of unethical practices in pushing drug sales including smuggling and of global law evasion and financial fiddling whose worst victims are third world countries.

Unlike the times and crimes of Hitler, the brutalities of today's leading pharmaceutical corporations have yet to find a prominent place in world history. Many authors have documented in horrifying details the brutalities of the 'drug TNCs' that have

built up an industrial empire through inhuman criminal undertakings.

For example, Germany's I. G. Farben (today divided into Hoechst, BASF and Bayer) which operated a massive chemical plant at Auschwitz with slave labour of 300,000 concentration camp workers, tested drugs on a large number of workers who died in the drug-testing programme. The following extract from letters written to the camp at Auschwitz by I. G. Farben indicates the grave nature of the criminal offences indulged in by the pharmaceutical companies to multiply their profits:

"In contemplation of experiments with a new soporific drug, we would appreciate your procuring for us a number of women . . . - we received your answer but consider the price of 200 marks a woman excessive. We propose to pay not more than 170 marks a head. If agreeable we will take possession of the women. We need approximately 150 Received the order of 150 women. Despite their emaciated condition, they were found satisfactory. We shall keep you posted on developments concerning this experiment The tests were made. All subjects died. We shall contact you shortly on the subject of a new load."

Today Hoechst and Bayer are the largest and third largest drug companies in the world. They made capital through incriminating means; they were criminals and twelve of their top executives were sentenced to terms of imprisonment, for slavery and mistreatment offences at the Nuremberg war crime trials. (It must be noted, not for corporate crimes in which allied forces were equally involved). But once allied control loosened two of the criminals, Friedrich Jaehne and Fritz ter Meer, were appointed chairmen of Hoechst and Bayer, respectively.

Braithwaite introduces his book on *Corporate Crime* with this horror story and subsequently moves on to expose the various areas and mechanics of crime in the pharmaceutical industry with interesting but emotionally disturbing case-studies.

The Pharmaceutical Global Empire

The foundation for the transnational nature of the drug industry was laid sometime at the turn of

the century but only consolidating itself in the inter-war period. The modus operandi was invariably international traffic in illicit drugs. Bayer, at the turn of the century, used the same mass marketing tactics for heroin as it uses for aspirin or Baygon, the cockroach killer. Bayer even promoted heroin as a panacea for infant respiratory ailments! Parke Davis similarly promoted with great enthusiasm the therapeutic virtues of cocaine, marketing it as coca-cordial, cocaine cigarettes, hypodermic capsules, ointments and sprays. Roche was heavily involved in the supply of morphine to the underworld and the Canton Road smuggling case — Shanghai, 1925 — revealed extensive involvement of Hoffman-La Roche in the illegal drug trade.

Thus "some of the great pharmaceutical companies of today owe their existence to profits from the trade in heroin and morphine in an era which laid the foundations for the self-perpetuating cycles of addiction to these drugs in modern societies. The next generation might look back on the activities of Hoffman-La Roche in pushing Valium and Librium with disgust equal to that we feel today towards their heroin sales between the wars".

The entire pharmaceutical industry is virtually controlled and dominated by private firms from four countries — USA accounting for 34 percent of world production, Japan 20 percent, and West Germany 13 percent, Switzerland 10 percent, Hundred pharmaceutical firms out of an estimated ten-thousand in the world account for 90 percent of world shipments of drugs; out of these the top 25 TNC's (half of them from USA) account for 50 percent of this sales (UNCTC, 1979).

In 1980, out of the 83530 million dollars production of drugs the developed countries (including East Europe) accounted for 88.5 percent and the developing countries only 11.5 percent (UNIDO, 1980). And within the developing countries India, Egypt, Brazil, Argentina and Mexico accounted for two-thirds of the drug production (UNCTC, 1979). As regards drug consumption the developed world consumes 80 percent and the developing world (including China) 20 percent of the world production (UNIDO, 1980) — an awesome irony when the population ratio is just the other way around. To quote Halfdan Mahler, "the public health services of the 67 poorest developing countries, excluding China, spend less in total than the rich countries spend on tranquilisers" (Mahler, 1981).

On an average drug consumption in some of the poorest countries works out to less than 50 pence per capita, whereas in some industrialised nations it is 35 pounds per capita (Faltorusso, 1981). These figures underline the lack of purchasing power of the third world poor. Essentially, they reveal more about wealth than health. It is, for example, highly debatable whether the level of drug consumption in much of the rich world represents a particularly 'healthy' state of affairs. But one conclusion is inescapable: whereas rich countries can afford to be extravagant with medicines without risking acute social consequences, poor people and their governments cannot. Because they have so little money, it is crucial that it is spent only on essential drugs (Melrose, 1982). Ironically, even the "little money" in the third world is largely spent on drugs which are not necessary at all — this is because of the overwhelming control of drug production and trade in these countries by the TNC's.

Thus as a consequence of this global oligopolistic control and domination (even in free enterprise USA 20 firms account for 80 percent of all drug sales) the pharmaceutical industry has established a position through which any amount of abuse may be hurled at the people without any adverse consequences to the former.

Braithwaite's book consolidates most of the earlier work since the early sixties and puts it together into a comprehensive whole. He also draws a great deal from the US Security and Exchange Commission (SEC) files and rounds it off with 131 interviews with executives of 32 TNC's in five countries. Braithwaite covers a whole range of crimes from simple payoffs and kickbacks for hastening administrative procedures to criminal practices in drug-testing and manufacture, from financial fiddling and oligopolistic practices to malpractices in drug pushing, and from smuggling and international law evasion to abuse of the third world nations.

This survey of pharmaceutical criminal undertakings is adequately supported by a wide range of case-studies from most of the prominent drug TNC's. Here is an overview of the crimes and a few of the case-studies recorded in the book.

Bribery

Bribery is considered as normal and acceptable business practice. "Almost every type of person

who can affect the interests of the industry has been the subject of bribes by pharmaceutical companies: doctors, hospital administrators, cabinet ministers, health inspectors, customs officers, tax assessors, drug registration officials, factory inspectors, pricing officials and political parties'.

Braithwaite, after a thorough search of SEC files, lists 29 US pharmaceutical firms that have disclosed substantial amounts of questionable payments. No other industry, he adds, has anything approaching this record of *documented* corrupt payments, sustaining the conclusion that the pharmaceutical industry is more prone to bribery than any other international business. Possibly this is because like aerospace, arms, petroleum and other heavy capital goods industry, pharmaceutical firms deal with big win or lose situations — the new billion dollar product to be approved or the multi-million dollar supply contract to a third world government. Passing of a plain envelope of currency notes under the table is not the only method of bribing. In fact, most often more sophisticated methods are used. Braithwaite points out for instance, that if the secretary of a hospital board, owns an architectural firm, a law firm, or a public relations firm, then you can hire his/her firm, perhaps even get some genuine services from it, but pay extravagantly for such services. You can even rent a property from the person concerned at an unusually remunerative rental. The pharmaceutical disclosures show that paying on an invoice to the company for services not actually rendered, or overinvoicing by the company so that an excess can be put aside for the recipient of the bribe have been the most commonly reported practices in the pharmaceutical industry. What is most interesting is that most questionable payments are treated as tax deductible expenditures which means a substantial loss to the state exchequer. For instance Merck, which reported 3.6 million dollars as questionable payments in 39 foreign countries claimed tax deductions and after the disclosure agreed to pay the US Internal Revenue Service additional tax of 264000 dollars. Similarly Warner-Lambert had an additional tax liability of 325839 dollars.

Corruption often reaches highest levels of government as in the following incident reported in the New York Times: In Italy a dozen manufacturers, including some American companies, once banded together to back an industry sponsored bill in the Italian Parliament that would have allowed manufacturers to sell their non-prescription

products in supermarkets and other retail outlets. There, they would no longer be subject to price control. One million dollars (80,000 dollars per company) were paid into a war-chest of the ruling Christian Democratic Party.

There is an even more interesting case involving Hoffman-La Roche, who bribed two Kenya government pharmaceutical buyers for favouring their products. *The two health officials were convicted and imprisoned and it was revealed that they had brought quantities of an anti-bacterial and a tranquiliser from Roche that would last the nation for a decade—not a healthy situation with products having a shelf-life of only couple of years.*

What has been done to curtail the menace of bribery? Nothing of consequence is Braithwaite's conclusion. He cites the instance in Mexico when Portillo came to power. Eight top executives of pharmaceutical TNCs were arrested and jailed; also a number of senior government officials were dismissed. This raid was in reality aimed at launching a moralising campaign to turn into reality the aims set forth by the new government of the republic at Inauguration Day, as also to remove officials who would be a problem to the new government. Of course, after a few days the defendants were released on a bail of one million pesos each and some months later even the charges were dropped! But such dramatic gestures cannot be sustained for long because once the international business community recoils from the shock and regroup, it is a worthy adversary to the state in institutional power. Similarly in the USA the SEC disclosures have been firing blanks: who gets hurt in consent settlements? The SEC gets a notch in its gun. The law firm gets money, the public is happy because they read 'fraud' in the newspaper and think criminality right away. The company neither admits or denies anything. Its the perfect accomodation. And its all one big charade.

Drug Testing

Bribery as a crime seems inconsequential when one looks into the fraudulent practices in safety testing of drugs and unsafe manufacturing practices of the pharmaceutical industry. The crimes in these two sectors have caused irrevocable human damage. At one end there is gross manipulation and cheating in drug research and on the other end cutting corners on product quality in the manufacturing process.

Morton Mintz's exposure of the frauds of the drug industry was a pioneering effort and set in an

era of greater vigilance towards illness-business. In 1962 the FDA made multiple seizures of Regimen tablets (phenylpropanolamine hydrochloride), marketed by the Drug Research Corporation as a 'reducing pill', on charges of misbranding. In depositions by two doctors who had 'tested' the drug it was revealed that the results were complete fabrications. For instance one doctor reported that her report was untrue in its entirety—57 of her 75 patients' charts were complete fabrications and of the remainder only the patients' initials and starting weights were correct! (Mintz, 1967).

Two investigators in drug testing Dr. Bennett Robin, who had tested 45 products for 22 reputable pharmaceutical companies and Dr. Leo Cass, director of Harvard Law School Health Services, who had undertaken 84 research projects for testing and 25 projects for product marketing applications were identified for scrutiny by the FDA. It was revealed that a substantial proportion of the 'testing' was 'graphited', that is, by invention of pencil, rather than by actual testing. The FDA revealed that many of the patients on whom 'tests' were done had been deceased earlier or were never hospitalised and treated. Also, for those who were treated the statements made, including claims that treated patients had certain medical conditions, were untrue. This was in the early sixties.

Even in the late 'seventies, after substantial tightening of regulations and monitoring by FDA, graphiting and distortion of results in drug testing were rampant. Between 1977 and 1980 FDA discovered at least 62 doctors who had submitted, manipulated or downright falsified clinical data. Add to this the fact that most fraud in clinical trials is unlikely to even be detected; most cases which come to public attention only do so because of extraordinary carelessness by the criminal physician.

The 1978 hearings of the Kennedy Subcommittee on Health has catalogued a list of abuses which are still of major concern: (1) Case reports on fictitious subjects, and on subjects who were never administered the investigational drug; (2) Case reports containing the results of clinical laboratory work which was not actually performed; (3) False representation of Institutional Review Board approval of a study; (4) Misrepresentation of patient diagnosis and demographic data; (5) Consent (informed consent) of the clinical subject not obtained; (6) Drug doses given, far exceeding protocol limitations. (7) Drugs given to inappropriate subjects

(especially pregnant women); (8) Serial use of investigational drugs to the exclusion of accepted therapy; (9) Administration to subjects of two or more investigational drugs at the same time and the administration of other significant and perhaps interfering drugs with the investigational drug; (10) Inadequate medical attention to the test population through excessive delegation of authority, lack of follow-up; and (11) Representation of investigational drugs as marketed products and/or the sale of such drugs.

This (researcher dishonesty) is indeed an alarming situation but worse still is the situation in third world countries where consumer protection is almost totally absent. Drug companies opt to test particularly dangerous drugs in the third world because poor people are regarded as more dispensable, and in some measure this is undoubtedly true, concludes Braithwaite. But there are also other more practical reasons for going to the third world first with drugs for which fears of side-effects are great. *Peasants do not sue global corporations for injury. Informed consent regulations for drug testing do not exist in the third world.* Moreover, given that the patent life of a new discovery is finite, and that monopoly profits will only accrue while the patent lives, there are incentives for companies to get a product registered wherever they can as early as they can. And if the product is found to be unsafe by subsequent, more sophisticated, testing in a developed country, then at least the company has made some money in the third world while the going was good.

Unsafe Manufacturing Practices

Pharmaceutical transnationals have a high reputation, especially in the third world, as regards their product quality and manufacturing practices. But Braithwaite cites a number of cases even within developed countries to prove that this is not wholly true. Yes, it is a fact that manufacturing practices of TNCs are relatively superior to those of other industries but in the third world their standards are very lax in part due to lack of well-defined standard codes in most of the third world.

Many countries have legislations pertaining to quality control such as Good Manufacturing Practices (GMP), Good Laboratory Practices (GLP) and Standard Operating Procedures (SOPs) but the legislations provide adequate loopholes, and monitoring and control is a fairly difficult process and therefore a very constraining task for the state

whose resources are limited. And as one quality control manager put it 'government inspectors ensure the quality of your records, not the quality of your deeds'.

However, there is no doubt that the worst quality standards are in the third world countries where due to limited resources short-cuts are invariably adopted. In the drug industry cutting corners on quality can have very serious consequences for consumers and therefore "bath-tub" manufacturing which is extensively prevalent in the third world, needs greater regulation. In fact, in many third world countries TNCs try to push up quality control - GMP and SOP - Standards because for manufacturers in the third world high quality means cost constraint, which in turn pushes up market prices and in a poor country high priced products could mean loss in market share. Higher quality standards puts the TNCs, who have virtual monopoly of high quality technology, in a domineering position, as well as assures them of a relatively competition-free market.

Drug Peddling

Most countries have restrictions about what claims are made about the products efficacy and use as well as regulations pertaining to indications about side-effects about the drugs, and its contra-indications. However, as in the case of other areas the scope of malpractice in advertising is also greater in the third world revealing once more the double standards of the drug TNCs. The cost of promotion and consequences of criminal malpractices therein are ultimately borne by consumers. The UNCTC (1979) indicates that approximately 20 percent of all drug sales at the manufacturer's level, goes for promotion. In the US the drug industry is easily at the top of league of the heaviest advertisers, with the soap and detergent industry its only close rival; even tobacco, alcohol, food and soft drinks lag well behind (Haslemere Group).

In the third world the expenditure is estimated to be even higher. In Columbia the money spent each year by foreign companies on marketing their drugs adds up to more than half the country's national health budget (Braun, 1980). The Concentration of sales representatives to doctors in the third world is much greater than in developed countries. In Britain, there is one medical representative for 18 doctors, whereas in Bangladesh the ratio is 1:7; in Tanzania 1:4; in Nepal, Brazil and Central American countries 1:3 (Melrose, 1982).

The Kennedy Senate hearings have documented gifts to doctors of freezers, tape recorders, stethoscopes, golf balls with Pfizer stamped on them; indeed, almost every type of consumer product imaginable. Further, in 1973, 20 drug companies in the USA gave 12.8 million gifts to members of health care profession and over two billion samples of free drugs. Drugs companies have provided free to 80,000 doctors in 35 cities F M radio sets tuned to the Physicians Radio Network that constantly churns out medical news and features of interest to physicians.

The major consequence of such heavy promotion of drugs is that where people have access to drugs there occurs a substantial amount of over-medication, especially of the non-prescription drugs that 'ease our ailing heads, noses, chests and bowels' giving us 'fast action and rapid relief'.

Oligopoly and Price Fixing

High profitability is the lifeline of the drug industry, contrary to what OPPI and IDMA would like us to believe. Since World War II pharmaceuticals has been the most profitable business. The UNCTC observes that from 1953 to 1967 in the US, the equity capital in drugs increased 584 Percent whereas for the entire manufacturing industry the increase was only 183 Percent in the same period. Most American companies have been recording on an average, net profit between 30 percent and 40 percent a year; SKF, Carter-Wallace, and Rohrer between 40 and 47 percent; Syntex, A.H. Robins and Marion Laboratories over 50 percent and Upjohn even during the depression between 1930-35 recorded an average of 30 percent.

Braithwaite rightly argues that excessive profits in the pharmaceutical industry arise in considerable measure from the peculiar features of the market which shelter producers from price competition. Consumer sovereignty is absent in the prescription drug market because it is not the consumer who makes a decision to purchase, but the physician. Doctors have no reason to be price-conscious. Moreover, the need for effective medical care is relatively price inelastic in affluent societies.

The Kefauver hearings before the US Senate Sub-Committee on Anti-trust and Monopoly (1977) found that the average production costs for 15 major drug firms were 32.3 percent of the whole-sale price at which the manufacturers sold their product. Not one of the 50 companies compared

from other industries had production costs lower than the highest production costs among the 15 drug companies; only Coca-Cola came somewhere near with a production cost of 42.6 percent of ex-manufacturer sales.

Besides the drug market structure, the legal back-up of patent holding for 16-17 years makes the pharmaceutical industry oligopolistic. Patent-holding along with branding gives the pioneering company an advantage because the brand name becomes a habit and late-entrants to the market find it difficult to break the original brand's monopoly of the drug market. Thus the higher price of the brand-leader is no threat to its market share. As a result fortunes have been made because of patenting and branding, and quite often through direct oligopolistic deals as happened in the case of tetracycline, quoted at length by Braithwaite.

Pfizer and Cyanamid were dominating the broad spectrum antibiotics market till 1953 with their patents on chlorotetracycline and oxytetracycline. This patent protection helped them maintain high prices and massive profits. But in 1953 when the therapeutically superior tetracycline came on to the scene their profits were threatened. Both the firms wished to avoid this competitive market structure and therefore manoeuvred a deal that managed to restrict tetracycline sales to five firms—Pfizer, Cyanamid, Bristol, Squibb and Upjohn—all of whom recognised Pfizer as the patent holder.

Thus price-fixing was inevitable. Keauver's investigations revealed a conspiracy that was in violation of the Anti-trust law of USA (The first charge was made in 1958 by the Federal Trade Commission). A long drawn out legal battle began which acquired an international dimension (including India). The various civil cases are still going on but criminal charges have been inconclusive. So far damage worth 250 million dollars have been paid by companies—the US government itself is claiming overcharges of 376.5 million dollars.

However such price-fixing conspiracies are not possible today because all governments (USA being the only exception) have a price control policy. Of course, this is no guarantee that the pharmaceutical TNC's will not club together to influence what to their understanding is a fair price. Oligopoly has become the basic operating principle in the pharmaceutical industry. The most classic instance, ironically, being free enterprise USA itself. In spite

of the Anti-trust Law five massive mergers of pharmaceutical TNC's have taken place in the last decade or so: Mead Johnson and Bristol Myers; Plough and Schering; Ciba and Geigy; Parke Davis and Warner-Lambert; Dow and Richardson-Merrell.

Then, as the markets and courts have failed to regulate pharmaceutical prices effectively, and since self-regulation of pricing would be to put Dracula in charge of the blood bank, the only course, argues Braithwaite, is for greater political administrative price control.

Financial Fiddling

Financial abuse is an area of crime that probably has the worst consequences for the third world nations. Other areas of crime discussed earlier affect health of consumers directly as individuals or may be even as a class but financial fiddling can cause irreparable damage to a third world nations' economy.

For instance, a large proportion of transaction on the books of an international company, writes Braithwaite, are sales from parent to subsidiary, subsidiary to parent, or one subsidiary to another. Intracompany *transfer prices* can effectively shift profits from one part of the world to another. For example, drugs might be shipped from a high-tax country to a low-tax country at below market prices in order to shift profits to where they will attract least tax. Transfer pricing is therefore a classic law evasion strategy. Tax laws of the high-tax country are not violated, they are evaded. In one celebrated case vitamins were manufactured in France at a cost of Fr. 50 per kilo, exported to West Germany, from there sent to Switzerland, thence Monaco, and eventually reimported to France at Fr. 250 per kilo under a different trade name. It sometimes happens with such cases (especially in the third world) that shunting around the circuit happens only on paper without the corresponding physical movement of materials.

The most important tax heaven in the pharmaceutical industry is Puerto Rico. A large proportion of transactions between the USA and other parts of the world, comments Braithwaite, go through Puerto Rico. Wall street analyst John Buttles II calculates that Warner-Lambert had a 110 percent return on its investment in Puerto Rico plant and equipment in 1976. For Abbot the figure was 101 percent while for Schering it was a meagre 90 percent. In 1977, Schering recorded 59.2 percent of its world-wide profits in Puerto Rico; Squibb 53.7

percent; Abbot 48.4 percent; Smithkline 45.7 percent. But Searle outdid everyone: while Searle's worldwide operations in 1976 and 1977 ran at a loss (at least were shown as so) its Puerto Rico subsidiary recorded over 100 percent of its worldwide profits.

A study of third world countries shows that pharmaceutical imports into Columbia by foreign owned companies were overpriced by 155 percent, very much higher than the overpricing of other imports. Vaitos estimates that if Columbia had been paying average world prices for its pharmaceutical imports, the country would have saved a charge of 20 million dollars to the Columbian balance of payment in 1968. Approximately half of 20 million dollars in excess profits repatriated by transfer pricing would have gone to the Columbian government in taxes (Vaitos, 1974).

Besides fiddling books, repatriation of profits from third world countries can be achieved by fiddling packages. A European transnational was found to be importing into South America sealed packages of drugs which contained less than 30 percent of the declared contents. By paying 100 percent of the declared cost to the patent company (through a tax haven) the subsidiary was able to transfer 300 percent increased profits to the parent.

There are many reasons apart from evading tax, indicates Braithwaite, for a parent to charge high prices for intracompany sales to an affiliate, and low prices for sales from affiliate to parent. It might be done to circumvent dividend repatriation restrictions, reduce the affiliate's exposure to currency devaluation and expropriation risks, lower apparent profits when excessive profits might encourage labour unions to escalate wage demands and local customers (and governments) to demand price reductions, or simply to allocate markets by making the exports of a subsidiary noncompetitive.

Thus, if the control and domination of the drug TNCs has to be broken, their abuse of human health eliminated and their crimes in the manufacture and marketing of health terminated, the fight necessarily must be a political one and not one of improving the market and legal situations as most countries are resorting to today. The TNC power is derived from their ability to control and manipulate political affairs of both developed and developing countries. Only a manifestation of power of an equal force can offset the drug TNC's choking hold over people's health and well being.

Case Studies

(1) **Richardson-Merrell**: In 1960, a subsidiary in the USA began the marketing of a blood-cholesterol reducing drug, MER/29 (triparanol). In its first 12 months 300,000 Americans used MER/29. Soon reports flooded the market about its side-effects - baldness, skin damage, changes in reproductive organs and blood and serious eye damage including cataracts. It was later revealed that the drug had problems in the testing stage. On grounds of integrity, Mrs. Benhah Jordan had quit Merrell. There was gross manipulation of data in the animal testing (monkeys) programme and gross misreporting of facts to FDA, inspite of the fact that comparative studies by Merck and Upjohn had reported severe side effects. Even in the human testing stage doctors reported severe side-effects but Merrell chose to ignore them and fabricated the data for FDA approval. It was also revealed that the supervisor on the project 'Dr' William King had not yet been awarded his medical degree! In the criminal case that followed the defendants pleaded 'no contest' and after six month's probation and a paltry fine (dollars 80,000) the three executives were let free. In civil suits that followed Richardson-Merrell paid 200 million dollars, mostly in out-of-court settlements.

(2) **Dawes Laboratories**: In 1971, many workers complained of sexual impotence - some men had developed enlarged breasts, in one case requiring surgical removal. Plant conditions were bad - ventilation was practically non-existent and the whole interior of the plant was covered with dust containing as high as 10 percent DES (a hormonal product) by weight. An enquiry by OSHA resulted in a fine of only 21000 dollars.

(3) **Hoffman-La Roche**: In a patent hearing in Canada it was revealed that the wholesale price of Valium is 25 times that of gold. It costs dollars 87 per kilo for the raw material for Valium (diazepam). To put the raw material into final dosage form and to label and package the tablets brings the cost upto dollars 487 (high estimate). The final retail price is dollars 11000 for that same original kilo which has now produced 100000 ten milligram tablets. The selling price is 140 times the original cost of materials and twenty times the total production cost. Roche sales of Valium in the USA alone in 1972 was worth 200 million dollars. Roche sells Valium in Germany at four times its price in Britain (both belong to EEC). In Sri Lanka Valium was quoted by Roche to the government as 70 times the price charged by an Indian company.

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- If you would like to obtain copies of any of the above documents please write to us sending 0.50p per page, in advance. If the number of pages exceeds 30 please add Rs. 5.00 postage (ordinary book post).
- (For MFC fact finding team's February report and for information on its forthcoming report of the medico-social survey in Bhopal, write to Dr. Ravi Narayan, 326 V Main, 1 Block, Koramangala, Bangalore 560 034)

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In Britain, Roche was sued for abusing monopoly power by its pricing of Valium and Librium. In out-of-court negotiations in 1975 Roche agreed to pay 3.7 million dollars for over-pricing their product in the previous live years and also agreed to reduce the price at half the level of 1970. The importance of this case was that it focussed international attention on overpricing and anticartel suits followed in various countries.

(4) Upjohn and A. H. Robins : Upjohn's Depo-Provera, an injectable contraceptive for women, was found through early American research to be associated with such a welter of side-effects that the FDA has not only indicated that the product is not approvable in the US, but has forbidden human testing of the drug in the US. But huge quantities are being dumped on the third world. Throughout Central America one can walk into a pharmacy and purchase Depo Provera without a prescription. Earlier even most of the testing of the drug was done in third world countries like Brazil, Thailand, Chile, Philippines, Sri Lanka, Hong Kong, Egypt, Honduras, Peru, Mexico and Pakistan. "When research into its possible effect on the weight and blood pressure of women taking the injections was carried out in South Africa, the researchers saw fit to examine these features by experimenting with Negro (75 percent) and Asiatic (25 percent) women, rather than on women with the same coloured skin as the researchers".

Similarly A. H. Robins has dumped Dalkon Shields, an IUD, in some 40 third world countries.

It was recalled from the American market after 17 women were killed. In an enquiry later it was revealed that in the teststage physicians had reported unfavourable effects like uterine perforation and ectopic pregnancies.

The staggering thing about the dumping in the third world in this case has been the involvement of the US government's office of Population with the AID. USAID purchased the contraceptive device at discount rates for assistance to developing countries after the product was banned in the US. Double standard for third world consumers were even more remarkable when Robins sold USAID unsterilised shields in bulk packages at a 48 percent discount. USAID justifies the discount Dalkon dump on the grounds of getting more contraception for the dollar.

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TRAGEDIES AND TRIUMPHS

Health and Medicine in Bhopal

padma prakash

March 23, 1985 : A premature baby, born two months too early died at the hospital at the DIG bungalow after a nine-hour unequal struggle to live. The mother was a gas victim and had brought the baby to the hospital five hours after its delivery by a dai. The child had been put on oxygen. The baby and the mother lay uncared for on the floor of the ward until 8 p.m. when a visiting paediatrician just happened to look in on the doctor-in-charge. He was directed to the child. By then it was too late. No attempt had been made to clear mucous from nose and throat of the child and although the suction apparatus, dusty and rusted, did work, the hospital had no stock of small-sized catheters. The heart had stopped, the hospital had only coramine which of course, was of no use. The child was declared dead and a certificate was issued. There was no post-mortem although it was actually a gas-related death. The mother had attended the antenatal clinic of the hospital three weeks before and had been given an injection — presumably TT, but had not been given any advice about her pregnancy or the necessity of a hospital delivery especially if premature.

March 24, 1985 : A seminar on Pulmonary Medicine was organised at the Gandhi Medical College, (GMC) Bhopal. The afternoon session was on effect of MIC on the lungs. There were several eminent speakers — Dr. S. R. Kamat of the K. E. M. Hospital, Bombay rapidly projected innumerable slides and summarised his findings on treating 113 gas-hit patients who had been admitted to the hospital. Prof. Heeresh Chandra, head of the Forensic department of GMC talked of autopsy findings screening slides which even his colleagues at the college had not been allowed to see until then. His findings, he said, pointed to cyanide poisoning and vehemently advocated detoxification with Sodium Thiosulphate (NaTS). Dr. N. P. Mishra peppered his presentation with long quotes from medical researchers from UK and USA to whom he had written. He declared that the gas victims had died of carbon monoxide poisoning. His own trials with NaTS showed that it caused a reaction—two out of 200 patients developed gastrointestinal

symptoms and rashes — and so he was opposed to NaTS. There were many others — all of them taking great pains not to reveal the full details of their studies. In the discussion that followed everyone seemed to forget that the focus here was not a scientific thesis but the future and death of lakhs of people.

Sitting in that lecture hall one could easily forget the larger theatre of disaster across the city. These two events illustrate the emerging situation in Bhopal. In the gas-hit bastis the nightmare of December 3rd continues to haunt the people — their health is deteriorating, state-run medical relief is almost at a standstill, equipment is inadequate, information supplied is nil, doctors are uncaring and in any case, no medicines help. In the hallowed halls of medical and scientific institutions researchers are engrossed in intricate debates to prove their favourite hypothesis quite losing track of immediate concerns. The macroworld of two lakh suffering people has been reduced to the microcosm hundred of odd hospital patients in the 'MIC wards'. Typically the medical profession has transformed the stupendous medico-social situation into a laboratory-based clinical/medical problem.

Reviewed here is the health picture in gas-hit Bhopal as it has developed during these months and the manner in which the medical community has responded to it.

The Black days

The Bhopal disaster has been called the world's worst industrial disaster, and with reason. The number of dead mounted in terrifying proportions — 350 by the end of December 3, 500 by the 4th, over 1600 by the 5th December. One week after the disaster a conservative estimate put the death toll at 2,500. Unofficial estimates put the numbers closer to 6,000. But the exact numbers will probably never be known.

By the end of the third day over 20,000 people were being treated in the city's seven hospitals. They came with complaints of burning eyes, lacrimation, cough, breathlessness, nausea and dizziness.

That first day alone saw over 10,000 patients in one hospital showing signs of eye damage.

Bhopal's 350-400 doctors worked round-the-clock at numerous centres — make-shift tents, medical aid posts and the wards. Hospitals ran out of medicine and had to buy out stocks from the city's shops, oxygen had to be obtained from other cities. A hundred more doctors were brought in from the near-by towns.

For a time no one knew for certain what the killer gas was. Some said that it was methyl isocyanate, others phosgene. None of the doctors knew how to treat the victims.

It is now known that the Union Carbide (UC) knew of the results of six animal studies initiated by the company which provided enough evidence of the chemical's high toxicity. (Three of these listed in the Box) Moreover the Occupational Health Guidelines for MIC states clearly that MIC might well decompose into hydrogen cyanide, oxides of nitrogen and carbon monoxide at high temperatures (of over 200°C). UC's own standard line of treatment prescribes intravenous hydrocortisone, oxygen inhalation and if cyanide poisoning is suspected then amyl nitrite. If there is no effect, sodium nitrite and NaTS are to be administered. Yet, in the first week when Bhopal's doctors desperately needed information to save lives UC held back vital information.

Many of the doctors of Hamidia were on the Carbide plant's medical panel. Also UCIL had been giving generous funds to the hospital and GMC and had set up a respiratory research unit and ward. This indicates a close enough association between at least some of the hospital doctors and the plant's medical personnel. It is curious that the former did not know of the standard line of treatment for such 'accidents' which had apparently been long established at UC.

By all accounts the efforts put in by hundreds of people — the doctors, nurses and medical students, the army, the police, the NSS and the NCC volunteers and voluntary groups — in that first week was of heroic dimensions. (Many of them later suffered from delayed exposure to MIC). But the government machinery took time to dissociate itself from the electioneering, recover from the shock and coordinate relief measures.

Operation Cover-up

By December 6th it was, as one writer put it,

'back to business' for government doctors and others. Private doctors and nursing homes were also minting money and death and medical certificates were being sold at thousands of rupees. Hordes of experts began to arrive in Bhopal and everyone who was anyone began to make statements about the consequences of exposure to the gas. Speculation about the real nature of the gas ran rife. And the government put an embargo on information. Even the death toll was not revealed on the grounds that 'it was not advisable in public interest'.

Autopsies were performed from the third day but reports were not released. They showed fluid-filled lungs two-to-three times heavier than normal, ulcerative changes, cherry red appearance of organs, arterialisisation of blood ... To Dr. Heeresh Chandra the autopsy surgeon, they indicated cyanide poisoning.

Even as experts in the government and outside it glibly began to assure people that there would be no after-effects, many people who had earlier been treated and discharged began to come to hospitals with new symptoms — shivering, yellow appearance, dryness of mouth, vomiting, nausea, stomach ache, diarrhoea, skin irritation and headaches and more seriously, conditions like cerebral palsy indicating the involvement of the central nervous system. More than 1,000 patients were on the critically ill list and at least 50,000 had serious eye problems. Some estimated that at least 500 of them would go blind but others like Dr. N. R. Bhandari, the superintendent of Hamidia Hospital said that there was no cause for anxiety and that the blurring of vision was due to the administration of atropine. "The worst is over" he stated and ruled out the possibility of the gas affecting the brain. Dr. M. N. Nagu, Madhya Pradesh's director of health services said that there might be ulceration and appealed for eye donations so that corneal grafting facilities could be offered.

Scientists from UC's Research and Development centre stated that the gas would be excreted from the body in due course and only bronchodilators were necessary. Scientists at the Industrial Toxicological Research Centre (ITRC) Lucknow opined on the basis of their study of literature that there would be no further damage because of the gas. And agricultural scientists were reassuring people that there was no environmental damage and cautioning them to only make sure that vegetables were washed, water and milk boiled before consumption.

With thousands still suffering from debilitating symptoms the only treatment being meted continued to be symptomatic — eye drops, antibiotics and corticosteroids. Interestingly, the WHO toxicologists approved of the then current of treatment and insisted that there was no known antidote for cyanide poisoning. Two lone voices were heard to assert that there was antidote which seemed to be effective — NaTS. One of these supporters of NaTS therapy was Dr. Max Donerer, a German toxicologist who had arrived in Bhopal with ampoules of NaTS and had started using it. The other was Dr. Heeresh Chandra who on the basis of his autopsy findings believed that NaTS would be effective and had taken it himself. When two patients who had been given NaTS died, the German was quietly packed off. NaTS therapy was discontinued much to the relief of UC's Dr. Loya and his supporters Dr. Mishra and Dr. Bhandari. Dr. Chandra was methodically isolated and ignored. Why was NaTS therapy discarded so precipitously? The deaths it appeared, were merely excuses, because the real cause was never investigated. Also curious is the fact that no one seemed to have questioned why the second telex from Union Carbide reversed the advice given in the first to administer NaTS. One of the arguments against using NaTS was that although there was evidence that people who had been administered NaTS seemed to recover, there was no 'proof' that it worked! The history of medicine has seen any number of situations when a therapy which has been found to be effective has been used because it is needed and only years later has the mechanism of its action in the body been worked out. The tragedy of Bhopal is that it is now acknowledged that thousands of lives could possibly have been saved if detoxification with NaTS had been undertaken in those first days.

By the end of the first week operation cover up was well on its way. The panic-stricken state government seemed more concerned about absolving itself of any responsibility for the disaster than about helping the victims. What is most shocking is that a section of the medical community collaborated with the government in keeping medical information under wraps. There was deliberate falsification of records, x-ray and pathological reports were refused to patients, autopsy reports were not given to those concerned. In normal times such a gross disregard for ethical practice would have been soundly condemned. But in Bhopal it was and is justified as being in the interest of controlling public panic and anxiety.

Expert vs Expert : While people suffer

A full eight weeks after the disaster the deleterious effects of the gas were still evident. New signs and symptoms were appearing — damage to the liver, kidneys, gabrahat, anxiety, depression, loss of memory, confusion and lack of co-ordination deafness and impotency. By the end of the second week there had been 800 doctors working in Bhopal's 64 round-the-clock medical centres. But two months after the disaster most of the state-run operations were winding down. Mobile hospitals were still plying but people had generally realised the ineffectiveness of medicines. Many had turned vendors of antibiotics, antacids and vitamins. At no time had any attempt been made by the government agencies to give medical and health information to the public. People were distraught and confused. Controversies abounded and the situation was made worse by the cloak of secrecy.

Earlier the team sent by the Royal Commonwealth Society for the Blind had asserted that no permanent damage or blindness was likely to result. American ophthalmologists were of the opinion that opacities were highly likely to develop in the centres of the corneas thus affecting sight.

The ITRC team reported that the delayed effects and neurological symptoms perhaps indicated the presence of phosgene as well. They also reported that pulmonary fibrosis was a possibility in the survivors. American experts saw clinical evidence of diffused lung damage. Others denied that there could be any permanent damage — they attributed the high incidence of lung complications to the previously existing high rates of tuberculosis and other chronic lung problems. In Bombay Dr. S.R. Kamat was reported to have found evidence of permanent pulmonary damage, of changes in haemoglobin and neurological damage in gas-affected patients at the K.E.M. Hospital there. These patients were put on levamisole (so far used as an anti-helminthic) and the results were said to be promising. But the full report is yet to be published or presented.

Around this time another controversy which had been brewing for some time erupted. And it reads like a horror story. Since the second week there had been reports of stillbirths and abortions among the affected pregnant women. Some Hamidia doctors had reported finding traces of phosgene in the aborted fetuses. Abortions in gas-hit animals had also been recorded. Defence Ministry sources were quoted as saying that MIC was known to cause

damage to the foetus. Although the Sultania Zenana hospital had set up a special antenatal unit, most of the distressed and anxious women were turned away with assurance that the babies were safe. A survey in February / March of 1,900 households showed 100 cases of abortions and 22 stillbirths. Neither the government nor the medical pundits were willing to concede that there just might be some danger to the foetus either directly because of the toxic gas or indirectly because of the mother's health conditions. Given the state of knowledge at that time all one could have done was to offer facilities for amniocentesis examination and ultrasonography and abortion services to those who opted for it. This did not even necessitate a stand being taken on whether MIC affected the foetus or not. But the authorities consistently brushed away these suggestions made by activist and health groups. When the Medico Friend Circle fact-finding team report in February suggested such a course of action, the bigwigs of medicine came down heavily on it for causing 'unnecessary panic'. In February two members of the Medico Friend Circle conducted a clinic-based study of gynaecological problems among the affected women in two bastis. They found high rates of menstrual disturbances, non-specific white discharge and evidence of pelvic inflammatory diseases. Up until then these conditions had neither been recorded nor reported. But again, no efforts have been made to set up special basti-based clinics or centres for women.

Medical Research in Bhopal

Not until January did the ICMR and other research agencies meet to work out the strategy for studying the impact of MIC. In the same month irked by the heavy atmosphere of secrecy leading newspapers had carried severe editorials criticising the ICMR's unwillingness to divulge relevant information. Perhaps as a result of this or because the lines of authority had now become clear, the ICMR released a first report on Bhopal. Unfortunately the report said little but listed out the various projects which had been approved. Surprisingly no comprehensive plan of research has been prepared nor priorities determined! Research projects have apparently been sanctioned on ad hoc basis. Despite the Director General's earlier announcements there was no large-scale epidemiological survey listed. Earlier the MP government had instituted a detailed medico-social survey by the Tata Institute of Social Sciences in Bombay under strict surveillance and supervision of the government authorities. For some unstated reason only a small portion of the survey was reported to have been completed, the rest

being taken over by the government. And so there will never be a full-scale epidemiological survey of the consequences of the world's worst industrial disaster.

According to the ICMR's latest update, it has funded twenty projects with a total budget of over 156 lakhs. Only three of the projects are of less than two years duration. ICMR's ad hoc approach will certainly result in a series of research monographs years from now, but how much will it help the affected population? In all likelihood they will never even hear about the results. The ICMR should have made it mandatory for all projects which dealt directly with the affected population to include a 'health education' component. If it had, we would not have the situation existing today of people being prodded, poked, examined x-rayed, and bled but never being given any information or advice about their health, their pregnancies. Bhopal's affected population is being treated by researchers as a set of guinea pigs in a gigantic laboratory.

In the middle of February the ICMR finally released the results of its NaTS double-blind trial and issued a notification recommending NaTS to those in whose families death had occurred; those living within a radius of two km of the factory and those with specified symptoms such as nausea, tachycardia (high pulse rate), anorexia (lack of appetite) and so on. But the state government took no action on this until April when the ICMR issued a further set of guidelines. The centre could undoubtedly have acted to get the state to implement this decision. But it has conspicuously and distressingly kept out of the health scene in Bhopal.

There are some in the scientific and medical community who believe that debate on scientific and medical issues must be confined to the pages of scientific journals or seminars. The establishment's desire and its need for controlling information supports this archaic notion. In Bhopal this combined stand of the state and the professionals has had disastrous consequences for the people.

(Most of this material has been drawn from articles in newspapers and periodicals written by a number of people. Some of them are Kannan Srinivasan and Kalpana Sharma, Indian Express, Radhika Ramaseshan and Jyoti Punwani, Sunday Observer, Praful Bidwai, Times of India, Darryl D'monte, Illustrated Weekly and Arun Subramanyam, Business India. Other material utilised: ICMR's Update on Bhopal, Rani Bang and Mira Sadgopal's report of the study of gynaecological problems, MFC fact finding team's February report, ICMR's press releases and minutes of the February meeting.)

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- If you would like to obtain copies of any of the above documents please write to us sending 0.50p per page, in advance. If the number of pages exceeds 30 please add Rs. 5.00 postage (ordinary book post).
- (For MFC fact finding team's February report and for information on its forthcoming report of the medico-social survey in Bhopal, write to Dr. Ravi Narayan, 326 V Main, 1 Block, Koramangala, Bangalore 560 034)

(Contd. from page 37)

In Britain, Roche was sued for abusing monopoly power by its pricing of Valium and Librium. In out-of-court negotiations in 1975 Roche agreed to pay 3.7 million dollars for over-pricing their product in the previous live years and also agreed to reduce the price at half the level of 1970. The importance of this case was that it focussed international attention on overpricing and anticartel suits followed in various countries.

(4) Upjohn and A. H. Robins : Upjohn's Depo-Provera, an injectable contraceptive for women, was found through early American research to be associated with such a welter of side-effects that the FDA has not only indicated that the product is not approvable in the US, but has forbidden human testing of the drug in the US. But huge quantities are being dumped on the third world. Throughout Central America one can walk into a pharmacy and purchase Depo Provera without a prescription. Earlier even most of the testing of the drug was done in third world countries like Brazil, Thailand, Chile, Philippines, Sri Lanka, Hong Kong, Egypt, Honduras, Peru, Mexico and Pakistan. "When research into its possible effect on the weight and blood pressure of women taking the injections was carried out in South Africa, the researchers saw fit to examine these features by experimenting with Negro (75 percent) and Asiatic (25 percent) women, rather than on women with the same coloured skin as the researchers".

Similarly A. H. Robins has dumped Dalkon Shields, an IUD, in some 40 third world countries.

It was recalled from the American market after 17 women were killed. In an enquiry later it was revealed that in the teststage physicians had reported unfavourable effects like uterine perforation and ectopic pregnancies.

The staggering thing about the dumping in the third world in this case has been the involvement of the US government's office of Population with the AID. USAID purchased the contraceptive device at discount rates for assistance to developing countries after the product was banned in the US. Double standard for third world consumers were even more remarkable when Robins sold USAID unsterilised shields in bulk packages at a 48 percent discount. USAID justifies the discount Dalkon dump on the grounds of getting more contraception for the dollar.

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Why The Scope of SHR Should Be Confined to Health & Medicine

Anant Phadke and Dhruv Mankad

The sharp yet substantive comments on the first issue of SHR by Imrana Quadeer and Bharat Patankar/Jogen Sengupta (in "Dialogue" SHR 1.3) are welcome and raise hopes of SHR becoming a forum for debate also. We are responding to Imrana Quadeer's criticism to clarify and defend the standpoint taken by SHR to restrict the scope of SHR to discussion on Health and Medicine. At the same time we offer some critical comments on the material published in the first two issues.

Though we agree with many of Imrana's points of criticism and with her plea for greater analytical rigor, we want to point out that the errors she has pointed out do not flow from the decision of SHR to restrict itself to health and medicine. Her criticism on this point flows from her own confusion.

The dominant bourgeois ideology considers Health and Medicine as primarily technical issues; and if and when it considers social aspects, it glosses over, hides the role of the essential relations ("economic base") and the class struggle flowing from it. On the contrary in the first issue the Editorial Policy of SHR clearly states our standpoint that "From a marxist standpoint, health can be considered as a part and consequence of economic, political and socio-cultural development of society..." (three more sentences on similar lines). Any discussion on Health and Medicine within this perspective would necessarily be based on an understanding of society in general. Within the left, different individuals, organisations have differences in their understanding of the society in general and these differences would naturally reflect in their analysis of issues in Health and Medicine. A rigorous, correct understanding of Health and Medicine would not be possible with a superficial understanding of society and hence Quadeer is mistaken when she says that "It seems to me that a debate concentrating on health and medicine alone, however rigorous, tends to treat these general concepts superficially." If somebody disagrees with a particular piece of analysis of Health published in SHR, one can show how that analysis is wrong by discussing that particular issue in Health and may also comment upon the basic understanding of the person being criticised but there is no point in having a debate in SHR on the nature of the Indian State, or of

imperialism. Debating on concrete levels is not "an easy way out" as Quadeer thinks. Since a discussion on health and medicine within the left is relatively new, it is a more difficult path chosen by SHR compared to the option of publishing in SHR debates on general issues in Marxism. Let us illustrate our point by taking the same example of Amar Jesani/Padma Prakash's article

The main weakness of this article is not that it has focussed on "Health and Medicine alone", but that, on the contrary, it has unnecessarily spent about three pages on some of the details of questions like the strength of the Indian bourgeoisie, the strategy of economic development after Independence and so on. This exposition of strategy of economic development is not organically integrated in their analysis of health and medicine in post-colonial India. For example, for their discussion of malaria and tuberculosis control programme, the details about number of strikes on the morrow of Independence, or evictions of tenants during the agrarian transformation etc were not necessary. The space devoted to these details could have been better spent on arguing as to what exactly was wrong with these health programmes, what were their contradictions and so on. We are only told that they are death-control programmes (is this bad?) and that they have been used to divert the attention of the people by equating disease eradication to technical measures. It is not made clear as to what exactly is wrong with these programmes. Would not there be a malaria control programme or BCG vaccination in a socialist society? Is it that the programme was correct but that its purpose and ideological use is being criticised? Or is it that the theoretical basis and the very organisation of these programmes is also being questioned? We need to take community medicine much more seriously. We need to study and identify how bourgeois ideology, interests, seep into the existing discipline of community medicine, and how a marxian approach can remedy this discipline into a fully scientific discipline which in turn would lead to appropriate health-interventions as an adjuvant part of socialist transformation. If this is done, (and this is "not an easy way out") our criticism of the existing health-system would be much more substantial and concrete. (This is of course, a collective responsi-

bility of all of us and hence it is not at all question of merely pointing out mistakes of those who have ventured to come forward with whatever analyses they have.) However, we also believe that a rigorous analysis of the concrete — Health and Medicine — keeping in mind its dialectical relationship with the society at large should and can point to the general direction of one's analysis of the society as well. Amar Padma's article fails to do so. Instead their analysis of health and medicine is disjointed from their analysis of Indian society. The two analyses are merely juxtaposed without any obvious interrelationship having been established. It is a much more demanding task since in India, such questions have so far not been discussed within the left with any depth.

What is the implication of Quadeer's suggestion not to leave out issues of wider social order? To continue to take the case of the article by Amar Jesani/Padma Prakash; such a suggestion would logically mean that if somebody does not agree with (for example) the authors' analysis of the strength and independence of Indian bourgeoisie he would go into that question and put forward a criticism and give an alternative. SHR would then read like an EPW, or a Social Scientist; and not a journal on Health and Medicine. On the other hand she could concretely analyse the health issues from one's political point of view and present an alternative view on political economy of health, thereby refuting at the same time the author's viewpoint regarding e.g. the strength and independence of Indian bourgeoisie.

Those "doctors and other health-workers who were attracted to marxism because in it we found a better approach to handle our own contradictions and for relating ourselves to the wider society..." would definitely find SHR very meaningful if it contains analysis of their own field from a wider perspective of historical materialism. The first three issues of SHR have demonstrated this by analysing different aspects of health and medicine on a wider basis without however getting involved into a discussion on the mode of production or the nature of the Indian State. We very much believe that the concepts of historical materialism need to be grasped and used accurately, rigorously (otherwise one makes statements like—"since a mode of production is reproduced not only at the economic but also at the political and ideological levels..." a statement betraying confusion between "mode of production" and "social formation.") but it is not

the task of SHR "to develop an analysis of society as well."

Articles in SHR need to be accurate on the technical matters as well. We would only register our strong reservations about C. Satyamala's analysis of dysmenorrhea (painful menstruation). See her incorrectly titled article: *Is Medicine Inherently Sexist?* SHR 1:2. At least our textbooks and teachers did not teach it the way Satyamala has put it. We also want to register our surprise about the way Srilatha Batliwala (Rural Energy Situation) SHR 1:2 has arrived at the caloric intake of a family (pp. 75) and used it as a basis for her startling conclusion of a daily deficit of 100 Calories for a woman and a surplus of 800 Calories for a man. One can't take up these questions in this short letter. We hope, somebody else would take up these questions in some detail.

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RACE AND HEALTH CARE

Perspective from Chicago

bindu t. desai

In the past 30 years the US expenditure in health care has multiplied several times now amounting to more than one billion dollars per day. This fantastic growth has not led to a closing of black-and-white health differentials. The health care system mirrors the racism and inequalities in American society. This article begins with a 'tour' of a medical centre complex in Chicago's financial and business district where the racial divide from a white, private luxurious hospital to a non-white, public, run-down hospital is unashamedly acknowledged. It goes on to show how black health statistics which had improved are now undergoing a reversal, and the Reagan administration's health budget cuts drastically affect the poor and the blacks. The oppression and exploitation of racial minorities is not unique to the US. The status of blacks in the US and the treatment meted out to them has obvious parallels to the situation of dalits in India. This article, we hope will motivate similar studies of casteism, communalism and sexism in the Indian health sector.

The United States and South Africa are the only two industrialised countries in the world lacking a system that guarantees medical care for all who need it. The past 35 years have seen an exponential growth in the United States both in the general economy and in the expenditure on health care which by itself now amounts to more than one billion dollars per day (Blendon and Altman, 1984). This growth has not led to equal access to health care or to a closing of black-white health differentials.

This perspective will examine health care in the US at different levels. First we will tour the conglomeration of hospitals and universities known as the Medical Center on the west side of Chicago. The outward differences noted on this tour will be shown to accurately mirror the larger racism and inequality in American society. We will then examine population-based health statistics as they pertain to race. After discussing medical education and affirmative action (the rough US equivalent of a reservation system in medical schools) we will analyse future trends in US health care.

A Tour of the Medical Center

About a mile west of the Loop, Chicago's financial and business district, lies the sprawling Medical Center complex comprising two medical schools, four major medical institutes and said to contain, with typical American hyperbole, "the largest collection of medical expertise in the world." The apex of this medical pyramid is the Rush Medical school with its Presbyterian-St. Luke's Hospital (PSL).

This complex occupies six buildings, four of which were built in the last 10 years, elegant hulks of steel and aluminium, spacious, airy, the newest resembling a Hyatt hotel, complete with an

atrium and indoor plants. Across the street from PSL is the bottom of the pyramid, Cook County Hospital (CCH). Consisting of eight buildings, a complex built at the turn of the century, CCH is the only institution for the poor of the Chicago area. Unlike PSL there are no carpets in the foyer of CCH, no cushioned chairs either. *When one crosses Harrison street, one crosses the racial divide in the US from a white, private, luxurious hospital, to a non-white, public, run-down, hospital.* A casual visitor cannot fail to notice that something very fundamental has changed in that short walk across a street.

A block away from CCH is the Abraham Lincoln School of Medicine affiliated with the University of Illinois (U of I) Hospitals. The medical school and hospital are run by the state of Illinois. They too have spanking new buildings, neat columns of cement and glass that are centrally air-conditioned, along with old red brick structures that house the prestigious Neuropsychiatric Institute and the old hospital. At the south-west edge of the Medical Center is the West Side Veterans Administration (VA) Hospital, an institution run by the federal government. The U of I hospitals and the West Side VA form the body of our pyramid.

These four institutions cover the different types of hospitals in the US except for the newest and fastest growing type of hospital — the for profit hospital — a separate entity in itself which we will discuss later. PSL dominates the area in terms of the facilities offered to the patient, both those providing physical comfort and the latest in medical investigative technology. At PSL there are no long waits in the Emergency Department (ED). The patient is admitted to a private or semiprivate room with an attached bathroom, each bed has a television set, a

telephone, and the hospital is centrally air-conditioned. A patient who requires an x-ray procedure or a visit to a subspecialty clinic is seen without long delay. The waiting rooms of these clinics are cheerful, provided with magazines, and so on.

In contrast, CCH patients often have to wait eight to ten hours before being seen in the ED. As the hospital has very few semiprivate rooms, most of the patients are in a large general ward. The wheel chairs could very easily be exhibited in the Smithsonian's museums, patients share a common bathroom, bring their own television set or radio and may use the few pay telephones that are available in each ward. Except for the Intensive Care and Trauma units there is no airconditioning. The many buildings of CCH are unsatisfactory both in summer and winter. The wards are stuffy and hot in summer and draughty and cold in winter. Leaky ceilings and falling plaster are not uncommon. In fact the author's office, which is on the third floor of an eight-story building, was flooded after a thunderstorm and many books and journals were damaged! The patients at CCH wait for nearly everything—wait to be seen by a physician, wait for the diagnostic tests to be performed, wait for their medicines, wait in the corridors and hallways of the hospital. No magazines are provided for these patients.

CCH patients also have to wait before a Health Systems Agency grants a certificate of need for expensive x-ray equipment. The hospital was amongst the last in the Chicago area to obtain a CT scanner and paid PSL nearly 500,000 dollars per year to use PSL's scanner. Presently PSL already has the equipment for Magnetic Resonance Imaging so that the trend of an "underfunded public hospital spending some of its scarce resources to enrich an already wealthy private institution continues" (Schlosser and Cohen, 1981). PSL and CCH are the two ends of the pyramid - the apex rich and powerful serving largely white patients, the base poor, relatively powerless serving largely black and Spanish-speaking patients, mostly from Mexico and Puerto Rico (Latinos). The U of I and Westside VA fall somewhere in between these two extremes in their facilities and equipment though in neither hospital are the patients forced to wait long hours in crowded halls nor do they have to be in a large general ward.

Since 1981 when President Reagan began cutting back on health expenditures, CCH has seen a phenomenal rise in outpatient visits and transfer of patients from other hospitals. Outpatient visits have

gone up from 114,262 in the first quarter of 1981 to 150,146 in the same period in 1984, an increase of 24 percent whilst transfers of patients, largely because of lack of third-party payment whether by private or governmental agencies, have gone up from 110 a month to 900 a month (Pharmacy Newsletter, 1984). There is the typical capitalist picture of smaller private hospitals closing units and laying off or dismissing staff whilst CCH becomes more and more overcrowded (Kotulak, 1984).

Let us now leave the Medical Center and survey the larger issues that determine the architecture, the distribution and the racial composition of the complex.

A Portrait of the USA

a. Demographic : The black population, which has risen from 9.9 percent of the total in 1950 to 11.7 percent in 1980, forms 26.5 million of the US total of 226.5 million people. The Southern states of the US account for more than half of the total black population, 14 out of 26.5 million. Blacks have moved from the rural areas to the centre of cities and the suburbs, whereas whites have moved out of the centre of cities to the suburbs. In the past two decades the population of farm workers who are black has dropped from 16 percent to 4 percent. In 1970 seven major cities had a black majority compared to seventeen in 1980. In an additional 13 cities blacks comprised 45 percent to 50 percent of the total population.

The seventies saw a decline in the number of male-headed family households from 73 percent to 63 percent and an increase in the number of households headed by women, for blacks it rose from 31 percent to 47 percent, for whites from 8 percent to 13.5 percent. Fifty-five percent of all black children were born to unmarried mothers compared to 9.5 percent of white children. Forty-two percent of all black children lived in two-parent families compared to 83 percent of white children. Forty-four percent of black children were living only with their mother compared to 13.5 percent of white children. Moreover, the marital status of these mothers differed considerably by race: 29 percent of the black mothers were single, 37 percent separated, 9 percent widowed and 25 percent divorced, whilst the figures for whites are 7 percent, 29 percent, 12 percent and 52 percent respectively

b. Income : In 1975, the peak of a 25-year upward trend, median black family income was 62 percent of white family income. By 1982 it had dropped to 55 percent. Black families with incomes

under 10,000 dollars rose from 36.5 percent of the black total in 1970 to 40.5 percent in 1980, whilst the figure for white families remained stable around 16 percent. In the past decade, the poverty rates have gone up for all races, for blacks from 31.4 percent to 35.7 percent; for Latinos from 22 percent to 28.4 percent and for whites from 8.4 percent to 12.1 percent (Pear 1984). The income gap between black and white families varies with the composition of the household and work experience. When a family has two earners black median income is dollars 20,000 compared to dollars 25,000 for whites (81 percent of white income) whereas for a family headed by a woman, black median income is dollars 7,425 compared to dollars 12,000 for whites (62 percent of white income) (Hacker, 1983).

Seven-and-a-half percent of black families earned more than 35,000 dollars compared to 17.5 percent of white families. At the highest income levels in excess of 75,000 dollars there were 548,000 white men (0.6 percent), 11,000 white women (0.01 percent), 4,000 black men (0.03 percent) and less than 500 (0.004 percent) black women. The programs of the past 20 years that were meant to aid minority businesses have had little impact. *The total assets of all minority business amount to less than 1 percent of the assets of the Bank of America alone.* The top 100 black business listed in Black Enterprise together have assets less than that of the 500th corporation listed in Fortune Magazine's top 500 corporations (Stokes, 1981).

c. Employment : The overall unemployment rate which was 7.1 percent in June 1984 is 18 percent for blacks and 4.3 percent for black teenagers. The proportion of black males participating in the labour force has declined from 83 percent in 1960 to 71 percent in 1980; whereas that for black women increased from 48 percent to 53 percent, and for white women from 37 percent to 51 percent. *Black Americans are over-represented in poor paying jobs such as garbage collectors (55 percent) and household servants (54), whereas they form fewer than 1 percent of all elected officials, engineers, lawyers and 2.6 percent of all university professors and physicians.* The public sector is a relatively better source of employment for black college graduates. Fifty-seven percent of black male college graduates were employed by the government, compared to 27 percent of whites. The figures for women are 72 percent of blacks and 56 percent of whites respectively. Whilst blacks comprise 14 percent of the federal civil service they form 30 percent of the army and 20 percent of all US defense forces.

These percentages have doubled in the last decade. However only 5.6 percent of the officers are black. Black employment in the public sector is a matter of necessity. The US labour market is generally manipulated by big business to keep blacks out of private sector jobs. They are discriminated against in hiring and are forced to take lower paying jobs regardless of their qualifications. For instance, black women with education similar to white men earn only half as much as white men, and earnings of black men are 70 percent of an equivalently qualified white worker. Blacks have low seniority because of past discrimination where certain trades did not admit blacks to their rolls, and they have less work experience because of unemployment and denial of equal training and educational opportunities. If there were equal opportunity in the labour market the black-white ratio of per capita earning would be 89 percent instead of 58 percent. The estimated losses due to employment discrimination exceed by a factor of 11 the estimated excess welfare payments to blacks (Swinton, 1983).

d. Crime and punishment : Blacks formed 22 percent of the total number of arrests made in 1980 and 48.5 percent of a total state prison population of 272,348 in 1981. The US black imprisonment rate of 498/100,000 population for 1981, which can be compared with South Africa's 471/100,000 for 1976. (King and Whitman, 1981), is the highest in the world. The US white imprisonment rate is 75/100,000. *Forty percent of the prisoners on death row are black.* Since 1930, when records were first kept, 405 blacks have been executed for rape compared to 48 whites. This figure does not include the men lynched by white mobs.

e. Education : In the past 15 years black enrollment in colleges has doubled from 5 to 10 percent. Although 70 percent of their parents had never attended college and 45 percent had not finished high school, these parents by working at two jobs and so on have guaranteed their children higher education which they themselves were deprived of. Government programs have also played a role but the Reagan administration has cut back aid and reduced spending for disadvantaged students by 17 percent and on loans by 27 percent (Pear 1984). Twenty five percent of black college graduates, 20 percent of high school graduates and 30 percent of high school dropouts were unemployed compared to 6.6 percent, 6.4 percent and 16.4 percent (respectively of whites). For black students 45 percent do not complete high school, another 30 percent graduate from high school and 25 percent go on to

college, whilst among whites the figures are 14 percent, 30 percent, and 56 percent, respectively.

The State of Black Health: The life expectancy for blacks (68.3) is shorter than whites (74.4) by 6.1 years. The infant mortality rate for blacks is twice the white rate, 21.8 vs 11.4 deaths per 1000 live births, a phenomenon attributable to low birth-weight, pneumonia, and influenza, and effect of maternal disease upon the newborn. However, as Sullivan points out, "These averages obscure some appalling figures in some rural areas and inner cities of our country. For example, in Georgia (in the Southern US) today the average life expectancy of blacks is 8.4 years shorter than that for whites. In six rural counties in Georgia, the life expectancy for black males is only 49.6 to 51.5 years whereas the average life expectancy for white males in the same counties is from 59.5 to 69.6 years. In Kenya, one of the less developed and poorer countries of the world, the average life expectancy of the male population is 51.3 years, exceeding that in some rural counties in Georgia. In 1980 in 50 rural counties among Georgia's 159 counties, the infant mortality rate for blacks was higher than 30 per 1000 live births and in 16 counties the rate was higher than 43 per 1000. Similar rates are found in many rural areas and inner cities all over the United States" (Sullivan, 1983). "A black mother is three times more likely to die of complications of pregnancy, labour and puerperium than a white mother. A black mother is more likely to have had very little or no prenatal care. In spite of the severe social and economic stresses on black families the incidence of recognised child abuse is similar for blacks and whites, around 11/1,000

The incidence and causes of head injury differ for blacks and whites, the black incidence for both inner-city and suburban blacks being twice that of whites (400 vs. 196/100,000). Interpersonal attacks were either the leading cause as in inner-city blacks (176/100,000) or the second most common (100/100,000) as in suburban blacks compared to the fourth most common cause for suburban whites 18/100,000 (Whitman et al, 1984). These head injury figures convey only the tip of the iceberg. For example, in 1979 murder was the leading cause of death to men 15 to 44 years of age in New York City and black men in this age group had "... a 1 in 20 chance of being murdered, a rate that is twice the odds of an American soldier being killed in combat during World War I" (Chicago Sun-Times, 1980) Homicide is the leading cause of years of life lost

Death Rates (per 100,000 Population) Homicide According to Race and Sex

	1960	1970	1979
Total	5.2	9.1	10.4
Black Males	44.9	82.1	71.3
White Males	3.9	7.3	10.1
Black Females	11.8	15.0	14.3
White Females	1.5	2.2	3.0

(Source: U.S. Department of Health and Human Services Health, United States, 1982. DHSS publication No. (PHS) 83-1232 Washington D.C.: US Government Printing Office Dec. 1982)

for non-white men in the US. Age-adjusted death for homicide have climbed steadily in the past 20 years (see Table). As the table indicates, the homicide rates for black men are seven times that for white men, whose rates are lower than those for black women. Blacks have a higher death rate than whites for 13 of the 15 leading causes of death. Other significant differences are in diabetes, nephritis, septicemia and chronic liver disease and cirrhosis, where the death rate is twice that of whites. Deaths from cirrhosis increased by 50 percent for whites in the past 25 years whilst for blacks they increased 20 percent.

Let us look at some other health statistics. Regular dental health care is usually unaffordable (APH, 1982). In 1978, 82 percent of rural Southern blacks did not visit a dentist. For a white family a perfect set of teeth with the ability to flash a brilliant smile is a status symbol, and middle-class families, of either race, can spend nearly 1500 dollars, per child for orthodontia. Semi-annual dental visits for regular cleaning of teeth are routine for them, while dental care is out of reach for poor families, black or white.

When asked in 1978 to rate their overall health and "well being" as part of a Federal National Health Interview Survey, black females reported the lowest level of positive well-being of all groups 37 percent compared to 70 percent among white males. Access to health care is dependent on income level. This strongly affects families headed by black women as 71 percent of them live below the poverty level compared to 40 percent for white and 51 percent for Latinos. Government — sponsored programs — Medicare and Medicaid and tax subsidies for private health care have spent a trillion dollars

since 1965. Yet 34 million people remain without health insurance of any kind. Only 33 percent of people with income below the poverty level are covered by Medicaid; 27 percent have no health insurance of any kind. Uninsured blacks have a 42 percent lower Physician visit rate compared to whites, lower rates of elective surgery, are less likely to have a regular source of care, and have to travel further to obtain care. It is estimated that one out of every four black adults suffers from hypertension, which develops earlier in blacks, is frequently more severe and results in higher mortality at a younger age. For black women of all ages the prevalence of hypertension is equal to or higher than that of black men.

Let us now turn our attention to the delivery of health care. Though forming 12 percent of the population, less than 2 percent of the faculties of medical schools are black. The percentage of black physicians in the country has increased only marginally from 2.1 percent in 1950 to 2.6 percent in 1980. Further, the proportion of black medical graduates has decreased in the past four years from 793 out of 14,393 graduates (5.5 percent) in 1978 to 763 out of 15,985 (4.8 percent) in 1982. Six medical schools in the US have no black enrollment and in 75 (61 percent of all medical schools) the black enrollment is less than 5 percent. Black physicians, who have always faced difficulties in getting hospital privileges, are likely to face more difficulties in obtaining these privileges as hospital administrators try to keep hospitals financially solvent amidst cost-cutting measures initiated by government and private health insurance agencies. Black physicians tend to have a patient load which is predominantly poorer, sicker and less likely to bring in revenues to the hospital. Administrators are expected to try to eliminate the physicians who admit those kinds of patients — another example of economic racism (AM News, 1984).

Note that the percentage of black physicians has increased only marginally even with the positive impact of affirmative action programs. The changing and increasingly right-wing political turn which began in the late 70's can be further expected to decrease black enrollment. Additional factors that will contribute to the decrease are of equal importance. Black students in high school and college are victims of a pervasive inequality in education. A survey of high school students in the Chicago area (which contains 92 percent of all minority students in the metropolitan greater Chicago area) showed

that 56 percent had seldom or never worked in a laboratory, the dropout rate at high school averaged 47.4 percent and about half of the graduating seniors from high school were deficient in the rigorous academic subjects that are required for medical school (Orfield, 1984). The cost of medical education rises each year; in 1984 the average medical student will owe a debt of 50,000 dollars. Financial assistance is becoming increasingly short with a very grave impact on black students, 80 percent of whom come from families earning less than 25,000 dollars a year. At other levels of the health industry blacks become more commonly represented as one descends in the hierarchy. In the nursing sector blacks form 11.4 percent of the registered nurses, but 30 percent of the aides and orderlies.

The American Health Care Industry

Between 1950 and 1982 US health expenditures increased more than 25 fold. The proportion of the GNP accounted for by the health sector has increased from 4.4 to 10.5 percent (Ninburg, 1984). In the past 10 years the number of people employed in the health sector has increased from 4.2 to 7.5 million. In sharp contrast to other sectors of the economy the health industry has expanded unaffected by any of the recessions of the past 30 years. Hospital room costs have gone up by 515 percent in the last 15 years and physician services by 311 percent. In 1981 hospital costs accounted for 41 cents of each dollar spent on health, physicians services for 19, dentists services for 6, drugs 8, appliances 2. Other costs included nursing-home care 8, public health 3, research 2, new construction 3, and administration and others, 8. Health care costs average 1500 dollars per American of which dollars 906 come from private funds and 594 dollars from public programs.

For-profit hospital chains, a relatively new phenomenon, have grown and are expected to own 20 percent of all hospitals by 1990. In 1982, the largest chain, Hospital Corporation of America, owned 351 hospitals with 50,000 beds with revenues of 3.5 billion dollars, up 47 percent from the previous year. Humana, Inc, another chain, had 14 billion dollars in revenues with stocks worth 18 dollars per share in 1968 now worth 336 dollars (Starr, 1982). The for-profit hospitals, which are touted as being more cost-effective, have actually charged more per patient than their not-for-profit counterparts, whilst generating a very high net income for their owners. (Relman, 1983). These chains are also moving into outpatient centres

called Emergicenters or Urgent Care Centers, which are open 12-16 hours a day, resemble the fast-food chains in their appearance, and have a potential market of between 2-5 billion dollars a year.

Health expenses in the US are met in two major ways, either by private health insurance or by government programs like Medicare and Medicaid. In 1974 the national average expenditure per non-white beneficiary was 57 percent lower than that for white (321 dollars vs 560 dollars). As we mentioned earlier, 34 million Americans are without any kind of health coverage, because they are too poor to afford private health insurance and earn more than the minimum requirements to qualify for government assistance.

The Indian Connection

The relationship between race and health care has obvious parallels for India, such as the hospitals based on class and the use of affirmative action in medical education, which is similar to the reservation system for Scheduled Castes and Tribes in India. Both in India and in the US there is yet another link, the Indian medical graduate (better known as F.M.G. or Foreign Medical Graduate), either in training or practising in the US. There are presently about 14,000 FMGs of Indian origin in the US, forming 10 percent of all FMGs and 3 percent of all physicians in the US. Note that there are more FMGs of Indian origin alone than the total number of black physicians in the US. A relatively large number of Indian doctors work in inner-city or county hospitals which serve the urban poor who are largely black. There is a decreasing number of Indians as one moves into the 10 most prestigious medical schools, the so-called Ivy League.

Black and Indian relations within the medical system have not been marred by overt conflicts, which is heartening considering the generally racist attitude of most Indian physicians. The federal government has backed affirmative action in admissions to medical schools though this backing has never been whole-hearted and can presently be said to be nonexistent. *White attitudes to affirmative action parallel those of caste Hindus in India. The very same arguments are used - selection should be on 'merit,' concern is expressed for lowered standards of medical care, and so on.*

The presence of large numbers of Indian doctors also strengthens relations between the Indian elite and the health care industry in the US. They have already begun to play a role in creating American-modeled hospitals in India like the Apollo hospitals in Madras and Hyderabad and the proposed Modi-

Hospital Corporation of America hospital in New Delhi.

Conclusion

Black health statistics which improved in the 60s and 70s as a result of political changes stemming from the civil rights movement which stimulated government programme appear to have peaked and a reversal may have begun. The statistics of black health must be viewed in light of the moneys poured into health care in the past 30 years. In that unprecedented period of economic growth when real income doubled for most Americans, medicine was an "important ideological prop for the ruling class in the maintenance of the domestic tranquility and social stability needed for production and profit... health care has been used by the ruling class to cushion some of the most savage aspects of capitalist industrialization and forestall more radical working-class demands" (Himmelstein and Woolhandler, 1984).

But the stagflation of the seventies has heralded some fundamental changes in government policies. The Reagan administration has cut the health budget and reduced funding for education for poor and handicapped people by 20 percent (Stokes, 1981). Maternal and child health received 25 percent less federal money in 1982. A rise in the overall foetal death rate from 10.2 to 12.2 per 1000 from 1979 to 1981 may be the first indication of the effects of present cost-cutting measures (Pouissant, 1983).

The increase in the number of black people below the poverty line, the general low income of black people, the poor opportunities for advancement in employment are not features that are unique to the US. A recent publication from England (PSU, 1984) describes the black population as occupying the same "precarious and unattractive" position in society as in the 50s. The British National Health Service encourages a "ghettostyle" employment pattern with hospitals having British porters, Spanish cooks and West Indian domestic staff (Lancet, 1984). Doubtless the pattern can be documented in other white nations with regard to their racial minorities — Turkish in West Germany, Algerian in France, Maoris in New Zealand and Australia, leading to the conclusion that "Racism is not a 'mistake' or a 'failure' of this society — it is one of its great successes" (Cooper, 1983).

As the US changes to an hour-glass economy, a large section of the population will be left in low-paying dead-end jobs. In August 1984 the US

Census Bureau showed that the number of Americans living in poverty had risen to its highest level in 18 years. As a result of Reagan Administration tax policies, families earning less than 10,000 dollars annually suffered a net loss of dollars 400 or 4 percent of income, whereas those earning over 80,000 dollars gained 8,270 dollars or about 10 percent. This will further limit the number of blacks who can climb out of the poverty and degradation they are born into. Increasingly large US cities have a black majority population. The white exodus from the cities is matched by a loss in jobs in the manufacturing, wholesale, retail and service industries. In the past 10 years alone New York, Chicago, Philadelphia and Detroit have lost a million jobs with white unemployment levels staying relatively static whilst black unemployment levels have zoomed to nearly 55 percent for teenagers. These trends are likely to continue.

"Profit has made America what it is" is the proud slogan of American capitalism, which wishes to be known by its new, gleaming, dazzling, for-profit hospitals where the birth of a baby is celebrated by the parents with champagne. In their shadow lies the decay of overstrained public hospitals serving non-white citizens and bearing an uncanny resemblance to large municipal hospitals in India. Their burden will be greater than before as for-profit hospitals both "cream" off capital and resources and leave to them unprofitable diseases and the care of minorities and poor people.

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42. Two particular issues of the *Journal of Occupational Medicine* detail tasks for corporate medical directors: a special section on "Cost Effectiveness of Occupational Health Programs" in *JOM* 16:3, March 1974; and a special issue on "HMOs and Occupational Medicine" in *JOM* 17:10, October, 1975. See also Jesse Steinfeld. "The Workplace as a Health Care Resource," *JOM* 12 8. August 1970, pp 315-317; Robert O'Connor, "The Role of Industry in the Health of the Nation." *JOM* 10:3, March 1968, p. 379; and J. Williamson and M. van Nieuwenhuizea, "Health Benefit Analysis: An Application in Industrial Absenteeism." *JOM* 16:4, April 1974. pp. 229-223.
43. For an excellent discussion, see: Sander Kelman "The Social Nature of the Definition problem in Health" *IJHS* 5:4, 1975, pp. 625-642.

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Voices of Silence

I'm nine years old
And I'll never die

One winter night
while I slept
and dreamt of
enchanted morns
piping hot jelebis
warm blankets
bright green kites,
and blood red kurtas
a monstrous shroud
of sticky white fog
smothered me in a
terrifying embrace
endless, eternal.

In another time
and another place
I was nine years old
and did not die.

One August day
forty years ago
a mushroom cloud
rose from the earth
killed thousands
maimed millions
wiped out generations
embalmed me
for ever.

I'm nine years old
And I'll never die
I'll haunt the ghouls
who thrive
on the blood of
men, women and children
I'll echo the
sobs, screams and gasps
of toilers in pain
the eerie
silence
of premature death
And I'll never die.

I'll sit on your
shoulder for generations
I'll goad you, worry you
anger you,
and never let you go
until you create a world
where Bhopals
and Hiroshimas
are mere nightmares
of a distant past
never to recur.

Until then.

I'm nine years old
And I'll never die.

—padma prakash
