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Vol I Number 1

HEALTH CARE IN POST-REVOLUTIONARY SOCIETIES

Editorial Perspective

Issues in 'Post-Revolutionary' Health Care

HEALTH care system and the health status of the people, like all the other aspects of social life, have undergone tremendous changes in those societies where the rule of capital has been challenged in a revolutionary fashion by the toiling masses. The class nature of the forces that led the revolution or of those which rule these societies at present, may be controversial, the direction taken by these societies after the revolution may be criticised, but the fact that there have been dramatic improvements in the health status of the people of these societies following the revolution cannot be denied. Conventional health indicators have shown amazingly rapid improvement (as compared to capitalist societies of comparable size, population and levels of development) in the USSR, China, Vietnam, Nicaragua, Mozambique and the East European countries. These societies are being categorised here as post-revolutionary (PR) societies. (We use the term 'Post-revolutionary' rather simplistically in place of the more controversial 'socialist', though we are aware that the use of this term too, is not free of problems.)

Several features distinguish the health care systems of the PR societies from those of the capitalist societies. They include, public ownership of health care institutions and allied industries like the pharmaceutical industry, the near absence of privatised medical care, free or heavily subsidised health care, rationalisation of health care delivery, strong emphasis on the promotive and preventive aspects, disease control by mass action rather than by biomedical interventions alone, decentralised control, integration of traditional systems and their practitioners into the existing delivery system and so on. Not that all of these could be found in any one or all of these societies. For instance, emphasis on decentralised control and self-reliance at the local level prevailing in China may not be found elsewhere (Sidel and Sidel, 1982). But one or more of these are generally to be found in the health care systems in all the PR societies.

Rapid changes in conventional health indicators characterised by steep falls in infant mortality rates; reduction in morbidity due to infections like tuberculosis, malaria, schistosomiasis and Sexually Transmitted Diseases (Sigerist, 1947; Alderguia and Alderguia, 1983; Quinn, 1973) and reduction in population growth rates cummulatively point to the improvements in the health status of the people. They have been brought about no doubt, as a result of better nutrition, sanitation and hygiene, easy availability of safe drinking water, improvements in housing, improved facilities for women (as compared to those in the capitalist countries), better medical care as well as better work environment indicated by more stringent environmental and industrial safety standards (Derr *et al*, 1982). The two most important factors responsible for these improvements, can be identified.

Rapid Modernisation and Abolition of Absolute Poverty: Though not a uniform phenomenon in all the PR societies, this has been the most important factor in improving the health of the people. This was made possible as a result of the defeat of the old bougeoisie and their allies in these societies. Now, whether the ensuing modernisation was 'socialist modernisation' as envisaed by Marx or not is a moot point. Similar quantitative improvements have also been seen in the advanced capitalist societies during the 19th and early 20th centuries and therefore, they by themselves cannot be said to be the characteristics of 'socialist' nature of modernisation in PR societies. Still, in the process, these societies were indeed able to meet the basic requirements of food, clothing, shelter and medical care of all the people, irrespective of their incomes and thus therefore, resulted in a healthier population.

Better Access to Medical Services: Medical services being by and large free and extensive, are easily accessible to most people. One's economic position does not prevent one from availing oneself of the best medical care available. This has indeed affected morbidity and mortality patterns in the PR societies.

But whether the health care structure that has emerged is really democratic and 'socialistic', operated by the working class possessing the necessary skills and knowledge is a debatable issue. There are indications to show that it is not. There are strong tendencies towards professionalism and technocratic control. One also needs to assess whether or not a sexist bias against women exists in the field of health care and medicine. Therefore, it is not adequate to apply only the conventional health criteria to assess the nature of the health care system and the health status in societies generally recognised to be different from capitalist societies. More sensitive indicators like comparisons of differences brought about in health and disease patterns in USA and USSR (or India and China), wage differentials among medical and health personnel, the proportion of women occupying high positions, the extent of homogenisation (narrowing down of sex, race, class, occupational and regional differences of health and disease indices) and so on need to be applied. Only such characteristics can differentiate a developed 'socialist' pattern of health care from that of a developed capitalist society. Whether the health care systems in PR societies has indeed reached such a stage is an issue requiring much analysis and discussion.

While noting the positive aspects of health and health care in the PR societies, one cannot fail to take note of several features which raise vital issues regarding the nature of health care in these societies, having wider implications outside the field of health and medicine.

It is noticed that indicators like life expectancy at birth, IMR and others have reached a plateau and are even regressing.

Also, a tendency towards overmortality of males over females is noticed (*International Journal of Health Services*, 1983; Gidadhubli, 1983) due to steep increase in cardiovascular diseases, cancer and accidental deaths. A similar phenomenon is noticed in the advanced capitalist societies also (see Doyal with Pennel, 1983). These diseases have been associated with over consumption, stress and other environmental factors. Whether high incidences of such diseases signify a life-style and an environment resembling those in the advanced capitalist societies or not is a question that needs to be resolved.

In the USSR, an increasing concern is being felt about the rise in alcoholism. Various legal and administrative measures have been initiated to curb this problem (Lindgren, 1985) Alcoholism is associated with psychosocial stresses. Under capitalism, besides other factors, a lack of creative pleasure in work, leads an individual to avenues of superficial pleasures. Alcohol is one of them. Is a similar process still at work on an increasing scale in PR society like USSR? This

rather uncomfortable question needs to be faced squarely in order to comprehend the real nature of the processes affecting the psychosocial health of the people in these societies. Another related indicator reflecting the sociopsychological disharmony is the incidence of mental disorders and suicides.

Though quantitative indicators of health do give an idea about the health status of a society, but it does not give the total picture. It can be shown that early development of capitalism also produced improvements in the quantitative indicators of health care. What it did not improve was the quality of health care: doctor-patient relationship has become depersonalised, the aged are marginalised; the mentally sick are heavily drugged and dehumanised. What is the situation in the PR societies?. How and how much different is the quality of care to the sick, the aged, the minorities, the women and the mentally sick from those in the capitalist societies? What one finds would point to what could well be an important differentiating feature of a 'socialist' health care system.

In a capitalist society, medicine reflects and reinforces the bourgeois ideology. Thus, a disease is reduced to a biological phenomenon, ignoring the role-often a determining one-of social, economic and cultural factors in its causation. Such a view justifies the use of biomedical interventions causing a growth in the demand for industries producing the required technological inputs. On the other hand, the hierarchical relationships in the medical field amongst the medical personnel, between doctors and patients-reflects the bourgeois ideology of class, race and sex dominance. Now in the PR societies, how do health planners, doctors as well as people view health and disease. How are the relationships amongst various health personnel? These are questions of vital importance that should be resolved while assessing the health care systems of PR societies.

There have been disturbing reports of dissidents in PR societies being labelled as 'behavioural deviants' and of use of psychotropic drugs to bring about behavioural conformity. This is a blatant example of the use of ideology in medicine to serve the political needs of a class or a group by converting an essentially political issue into a medical problem. What are the compulsions that such practices persist in PR societies is also an issue related to the question of ideology in medicine in PR societies.

In some countries like Poland for instance, chronic shortages of drugs, equipments and staff are reported. (*International Journal of Health Services*, 1983) Now whether this shortage is real, that is as related to the needs of the people or false that is as related to the needs of the socially more powerful medical profession remains to be seen. A false shortage could be felt if there is a tendency towards overmedicalisation of life; by replacing community level health care personnels and paramedics by doctors; by the demands of doctors for more technological inputs of doubtful value and so on. If the shortages are indeed real, a study of the underlying socio-economic processes could reveal much about not only the health care scene of the society but also about the problems of 'socialist' reconstruction during the PR period.

Towards a Dialectical Understanding

Now, the causes of these problems and the underlying processes can only be understood in the context of the prevailing social and economic conditions of the existing social formation. An analysis of these problems brings us to the very crucial question of the relationship of a social formation and substructures thereof. Though developments in health and health care systems come under the influence of socio-economic factors in movement—that is of history—this relationship is not one -to-one and deterministic. It is a highly complex relationship of mutually dependant dialectical interactions. And therefore, each problem has to be understood within its specific historical and social context.

Thus, while studying health and health care in any social formation, one important point needs to be kept in mind. A 'socialist' health care system develops in the historical context of the process of 'revolution' and thus carries with it the stamp of the specific processes of the society with all their contradictions. Neglecting this aspect may lead one to an incorrect understanding of these societies as well as their health situations (Segall, 1983). One may be led to a narrow empiricist position; a position which adopts a static view of social structures and considers the health care system existing in a society as directly reflecting its socio-economic processes. Taking an isolated view of the events that went into making up the health care system in a PR 'Socialist' country, this position labels whatever exists there as being 'Socialistic' in nature. On the other hand, it may also lead one to take an idealist view constructing an abstract 'Socialist' model of health care devoid of any socio-historial context. Various characteristics are ascribed to such a model. Out of these, which constitute the necessary and the sufficient conditions for a 'Socialist' health care system are unspecified. Therefore, mere absence of a few characteristics of this idealised model, in an imperfect concrete health care system, full of contradictory tendencies of a PR society, leads one to label it 'non-socialistic'. Worse still, it denies the possibility of waging struggles to incorporate some of these feature into the health care systems of capitalist societies.

It would not be entirely out of place here to mention a related problematic of the role of struggles in a capitalist society to imparting to the health care system, some of the 'Socialist' characters. Whether a movement for greater social control over health care services and allied industries is a movement towadrs a 'revolutionary' health care system or not is a crucial question for those fighting for fundmental social changes. One exteme view, might see such a struggle itself as a revolutionary movement thereby overlooking the overall persepctive of such a system. On the other hand, an equally extreme view may call such a movement as 'reformist' as it does not touch the root-cause, thereby overlooking the vital importance of stages in the movement for 'revolutionary' health care. Several other factors like the leadership, mass mobilisation, methods used for raising people's awareness, modes of organisation and struggles also need to be assessed before making any judgment. A thorough analysis of the inter relationship of a health care system and a social formation would go a long way to resolve a constant dilemma faced by those involved in such struggles.

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In this issue: Amar Jesani writes about the problems and process affecting health in Nicaragua; Malini Karkal discusses the population policy in China and Padma Prakash draws attention to the changes brought about in the health care system in Mozambique after 1975. Bob Deacon's reprinted article raises relevant issues regarding health and health care in the three post-revolutionary societies, Soviet Union, Hungary and Poland. And we introduce 'Update' a section for reports, notes and comments.

—dhruv mankad

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work is different from other so-called successful projects in this respect. Most health projects unless they are willing to take large funds from donor agencies, or be supported by big institutions, cannot do any worthwhile work in the field of delivery of health services. (Chattisgarh Mines Shramik Sangh's health work in Rajhara is an exception which hopefully, would duplicate elsewhere.) Health education/conscientisation as a part of broader political work is a low-cost but challenging and important work which has so far not been attempted. This is in contrast to the numerous funded projects in the field of delivery of health care. It must be pointed out that the report under review does not cross this conventional barrier.

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A Bird's Eye View of Psychology

Psychology In A Third World Country—The Indian Experience by Durganand Sinha, 1986, Sage Publications.

THE term 'psychology' is a concept borrowed from the West. Thus initial studies were naturally based on Western concepts. This of course does not mean that psychology has not evolved any roots of its own in India. But it is undeniable that Western psychologists and ideas have permeated every aspect of our life and behaviour. Sinha repeatedly brings out this truism in this book covering the psychology scene in India. The purpose of this monograph, done at the instance of UNESCO, was broadly to examine the impact and role of psychology in a Third World country like India.

It is but natural that psychologists in India are very much influenced by the West in the kind of reserach work done. The offspring is bound to imitate its parent till such time that it can form its own ideas and opinions and finally enter its own creative phase. Psychology today in India could be said to have arrived. We are not only able to evolve our own theories and concepts but are also in a position to influence the world at large.

Sinha traces the growth of 'psychology' in India in four phases pre-Independence, post-Independence phase of expansion, phase of problem-oriented research and finally the phase of indigenisation. This can be looked at another way in developmental terms. The infant stage of being shackled to the West; the childhood period where aping went on; the adolescent phase when Indian psychologists tried to break away from the bonds of the West, attempted to coin their own terms and asked questions of their parents and their motives, changed and adapted values and attitudes to suit their environment; and the adult phase where indigenous research is being done and a certain amount of influence being wielded on others, especially in the Third World countries.

The author seems to have taken an unduly critical attitude particularly in his reivew of the post-Independence period—like a harsh parent! Fortunately, as the review proceeds a more objective account is seen.

The bulk of the presentation is in terms of enumerating the research work done in India covering different areas and branches of psychology. But in the area of testing, there do seem to be some gaps. Several tests have been adapted and are apt to our conditions do not figure, e g, Bhatia's tests and child development tests.

Psychology has made quantum jumps in the 60s and 70s but what has not been done is to dispel the wrong notion that psychology means something to do with abnormal people—being the layman's understanding. All the reserach done is commendable, but what has this resulted in terms of follow-up actions and policies? The author himself puts the impact of psychology in these words, "Psychology in India has made significant contributions to the individual and unlimited spheres of our life like in industry, educational and clinical fields because they share many characterstics of similar institutions in western societies where this discipline has developed. But on a macro level and on larger social issues such poverty, inequality, social justice and social change, psychology has yet to make a significant impact." The author's message to practising psychologists and scholars to be 'indigenous' and 'Indian' in their pursuits is very apt for psychology to enlarge its role in our national life.

The book would have added to its stature if the author, with his vast knowledge and experience, had given more emphasis to the future trends and directions that Indian psychology should take—to make it more meaningful and relevant to our society and solving its problems.

The overall merit of the book lies in its broad canvas giving a bird's eye-view of the psychology scene in India. It could be a good reference source for scholars and educationists alike to be aware of what is happening around the country. Its bibliography is in itself a mine of valuable information. Altogether, the book is a commendable effort.

Purnima Rao

(Continued from p 2)

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Health in Nicaragua

Epidemiology of Aggression

amar jesani

Though the Nicaraguan revolution is still fighting for survival against escalating US aggression, it has ushered in far-reaching changes in the field of health and health care. These changes are examined in this paper. The author refers to the role health workers played in the Nicaraguan revolution and discusses the post-revolutionary reforms introduced in the health care system and the consequences of US imperialism's continuing war against Nicaragua for the people's health. Health professionals, the author argues, will have to understand the epidemiology of war better since the world is likely to witness more revolutionary upheavals and crises as well as imperialist aggressions.

A QUARTER of a century ago, the victory of the socialist revolution in Cuba, till then the so-called backyard of the US imperialism, generated a new wave of revolutionary movements, not only in the Carribean basin, Central America and Latin America, but all over the world. The revolutions in Grenada (March 1979) and Nicaragua (July 1979) widened the breach opened in the imperialist empire by the Cuban and Indochinese revolutions. The revolution in Grenada was, however, crushed by US imperialism before the whole process could completely unfold and get fully consolidated. The revolution in Grenada nevertheless inaugurated changes in the health and health care system of that country, though it is beyond the scope of this article to deal with them. Also, the information available to us is very fragmentary to allow us to discuss the changes in detail. On the other hand, although the Nicaraguan revolution is still fighting for its survival against escalating US aggression, it has unleashed far more profound changes in all aspects of people's social life, including in the field of health and health care, enabling us to examine them in considerable detail

There are few regions which have been so much the object of the foreign policy of an imperialist power as Central America and the Carribean. It has been the theatre for permanent US intervention for 85 years. The US has always claimed the right to lay down the law there. It considers this whole region to be an integral part of its 'defence system' and has 40 to 50 military bases there and is building many new ones. In 1982-83, 20 per cent of entire US military budget was earmarked for this region. Behind this military involvement is the US economic interest in the area which is a major communications and trade route as well as a great raw material reserve and source of cheap labour power in the international division of labour (Fourth International, 1985, p 89). This is the reason why the countries in this region are kept strictly subordinated to imperialism to such an extent that the political regimes there are 'created' by the US.

The super-exploitation of people there by imperialism has led to deterioration of living standards to abysmal levels, extreme poverty, unemployment, and so on. The resistance to this exploitation has also grown so much so that people are in a state of permanent war with the military state machines. The health consequences of this continuous war are far-reaching; to the extent that the health professionals are suddenly required to scientifically understand the health consequences of war or the epidemiology of war and agression.

Nicaraguan Revolution: Historical Background

The Subjugation: Nicaragua, like other parts of Central America, was conquered in 1523 by the Spaniards and they subjugated the Chorotec Indians of the Aztec family. It become a centre for slave trade for more then three centuries under Spanish rule. It attained "independence" in 1821 and slavery was abolished in 1824 (Weber, 1981, pp 1-5). Ever since its "discovery" Nicaragua has always been of interest to the great powers. The US has militarily intervened in Nicaragua at least three times.

The first US armed intervention took place in the mid-nineteenth century at the time of California gold rush. This intervention, though short-lived, opened a way for US financial and political interests which, in the course of half a century, converted Nicragua into a coffee exporting country with a plantation economy. Coffee constituted 50 per cent of the value of Nicaraguan exports till the cotton boom of the 1950s. All exports were chiefly to the US. The second US intervention took place in 1909 and US forces continued to occupy the country from 1909 to 1925. When the US withdrew its forces in 1925 it thought that the regime backed by it would survive, but the rebellion against the puppet regime led to the third US intervention within months after the withdrawal. This time the US continued to occupy Nicaragua till 1933.

During this third intervention, the US helped create a military force, called the National Guard, in 1927. The National Guard was at the beginning commanded, equipped, trained and financed by the US. The chief of the National Guard, Anastaslo Somoza Gracia, seized power in 1936 and established a US backed family dictatorship lasting for almost fifty years (Weissberg, 1981). Under Somoza, Nicaragua acted like a true puppet of the US and, through the National Guard, provided counter-revolutionary military forces during the 1954 attack on the progressive Arbenz regime in Guatemala (which incidentally, profoundly politicised a doctor, Ernesto 'Che' Guevara, who subsequently led the Cuban revolution with Fidel Castro) and during the 1965 offensive in the Dominican Repubic. It was from Nicaragua, moreover, that the CIA mercenaries left for the 1961 Bay of Pigs landing in Cuba, the most concerted (albeit unsuccessful) US attempt to destory the Cuban revolution (Weber, 1981, p 30).

The Revolution: The third US intervention in 1925-26 inspired a nationalist uprising led by general Augusto Cesar Sandino. The war of resistance, fought on the lines of guerilla warfare, lasted till the murder of Sandino on 21st February, 1934. But it helped in radicalising many individuals who had been also influenced by the October Revolution. The 1959 Cuban revolution gave the struggle in Nicaragua further impetus and in 1962 the *Frente Sandinista de Liberacion Nacional* (Sandinista National Liberation Front, FSLN) was formed. The FSLN combined guerilla military warfare and rural and urban mass organisation and mobilisation for 18 years to lead the revolutionary insurrection on 19th July, 1979 that overthrew the Somoza regime, destroyed the erstwhile state power and created a completely new state apparatus under the leadership of the FSLN. It is under the leadership of the FSLN that the reconstruction of the Nicaraguan society is under way.

Before we take up discussion of the changes in the Nicaraguan health services after the revolution, it would be useful to know what role the health functionaries played in the revolution, although this aspect of the revolutionary movement is not very well documented. While the health care services have long been deficient in the Central American region, doctors, medical students and other health functionaries have participated in and even led struggles for social reform. Some examples can be given easily. Che Guevara in Guatemala, Calderon in Costa Rica, Romero and Castillo in El-Salvador, Bolanos and Rosales in Nicaragua and Morales and Alvarado in Honduras led political movements and governmental efforts toward the establishment of social security systems, workmen's compensation, the legalisation of unions, and agricultural reform (Garfield and Rodrigues, 1985). In Nicaragua, besides the above-mentioned doctors, reference can be made to a hunger strike by the health workers in the capital, Managua, in January 1979, in protest against the killing of dozens of people participating in a gigantic demonstration to mark the first anniversary of the assassination of Pedro Joaquin Chamarro, an anti-Somoza editor of the bourgeois paper *La Prensa* (Weber, 1981 p 4).

Post Revolutionary Health Services Reforms

Basic Principles

Nineteen days after the victory of the Nicaraguan revolution the new government issued a declaration outlining the basic principles of the new health care system. These principles are:

1 Health shall be a right of everyone;
2 Health services will be a responsibility of government;
3 The public will participate in health policy determination at all levels and
4 All health services will be planned on a regionalised, systematic basis, (Braveman and Roemer, 1985).

Special emphasis within the new system was put on maternal and child health, occupational health, and primary health care for everyone. To overcome the deficiency in the availability of health personnel, high priority was also given to producing them in much greater number and in a new mould.

Further, it should be kept in mind that these principles and new health care planning were inaugurated in the context of the thorough-going revolutionary reforms started in the entire social structure. The way the FSLN has introduced agrarian reforms, which undoubtedly have helped in improving the health status of the people will illustrate this point.

In July 1981, the first agrarian law was enacted which made it possible to confiscate land left lying fallow by owners holding 350 hectares or more of land on the Pacific Coast and 750 hectares or more on the Atlantic Coast. Another law enacted in early 1986 removed these limits of 350 and 750 hectares and has made it possible to confiscate land of all big landowners who do not plan for efficient production (Udry, 1986). The effects of these reforms can be seen in the fact that in 1978, 36.1 per cent of land was owned by those with more than 350 hectares, whereas they now (in 1984) own less than 11.3 per cent. The owners of more than 150 hectares of worked land, who possessed more than 50 per cent of the land in 1978, now have no more than 23.8 per cent. The land distribution has been carried through briskly. In the first fourteen months of the agrarian reform, the average rate of granting property titles was 647 per month, and the area of land involved was on average 15 hectares per family. In addition to the distribution of land for private cultivation, 38 per cent of land is under state ownership (APP 19.3 per cent) and co-operatives (10 per cent in Service Co-operatives, CCS and 8.7 per cent in Sandinista Agricultural Co-operatives, CAS) (Devilliers, 1984).

The contribution of these reforms to the improvement of the health status of the people cannot be underestimated, especially in a country which has a predominantly agricultural economy. Otherwise mere changes and improvements in health care delivery cannot achieve in seven years only, the tremendous improvement in the health status of the people. In short, what we are arguing for is not only that a revolutionary regime should seriously undertake thorough-going redistribution of wealth, but also that in order to make health a fundamental right of the people, people must be given the basic right over the means of production and the result of their productive labor power.

People's Participation

Another basic principle of the health services in Nicaragua is people's participation "in health policy determination at all levels". This term, 'Peoples Participation' is so much abused, particularly in the field of community health, that it must be put in a proper perspective in the context of Nicaragua. Fundamental to our understanding of people's participation is people's power—political and economic power in the hands of the working people, mediated through their own mass organisation and having decisive say in decision-making. Only if such people's power is existing can it get permeated in genuine participation of people in health care. Therefore, we must examine in brief whether these necessary pre-conditions for the genuine participation of the people, as envisaged in the basic principles, exist in Nicaragua.

The revolution in one stroke destroyed the essential part of the bourgeois state apparatus—its repressive forces—and created a new revolutionary army, called the Sandinista

People's Army (EPS), whose origin, composition, leadership structure and training was a *direct result* of the revolutionary struggle. The original police force was smashed and the Sandinista police was set up from working class fighters, thrown into unemployment because of war damage to the economy. In February 1980, the Sandinista People's Militia (MPS) was formed by arming tens of thousands of workers and poor peasants. The Sandinista Defence Committees (CDS) are another organised structure of the armed working people for their self-defence. While the EPS and the Sandinista police are part of the organised state structure, the MPS and the CDS are made of working people. The point to be noted is that the defence of the nation and exercise of power are not the functions of the state apparatus alone, but also of the armed volunteers from the urban and rural proletariat and the peasants. While discharging their duty as workers and peasants, the working people wield arms to fight against any attempt to take back the gains of the revolution. Therefore, even though the ruling classes are not completely expropriated—they continue to hold substantial economic power under the mixed economy—their *political* power is completely expropriated and any refusal by them to go along with the decisions taken by the revolutionary government is met with further expropriation, thereby deepening the revolution and consolidating the dictatorship of the proletariat.

Now let us see how these armed workers and peasants and even those who are not armed but come from the same classes have set up their mass and class organisations. We will mention five of them here: (1) the Sandinista Workers. Confederation (CST) and (2) the Associaton of Rural Workers (ATC). The CST and the ATC are trade union organisations representing about 75 per cent of urban and rural wage workers. They provide an organic link by their constant cooperation and thus materialising the workers and peasants alliance. (3) The National Union of Farmers and Ranchers/Stock Rearers (UNAG) (4) The Luisa Amanda Espinoza Associationof Nicaraguan Women (AMLAE) (5) The 19th July Sandinista Youth (JS 19) (Udry, 1985).

The Sandinista democracy rests in the first instance on these mass organisations. Their power is not subordinated to any other abstract concepts. Further, although the FSLN commands political hegemony on the working people, it has not brought the Nicaraguan society under one party straitjacket. Instead, at the larger level it has opted for political pluralism and has legally allowed all political parties, both bourgeois and working class to operate, however, within the framework of new realities. In November 1984 elections, the opposition got 30 per cent of votes. This shows that Nicaragua has opted for a different type of political structure by allowing all political ideas to contend for hegemony within the dictatorship of proletariat and has thus chosen to face up to a series of problem that are relatively new in the history of the transition to socialism.

This is why a worker and a farmer in Nicaragua is not only a worker or a farmer, but also an armed defender of revolution, a soldier, and some of them even health workers and/or leaders of their mass and class organisations. Thus, the people's participation in health care is *an integral part* of people's participation and control over all the socio-economic processes in the Nicaraguan society.

Health Care under Somoza

Nicaragua is one of the poorest countries in the region with a population of thirty lakhs. In addition to poverty, illiteracy and ill-health, it faces a severe problem of structural unemployment. This is illustrated by the fact that the entire work force in Nicaragua grew only 6 per cent from 1961 to 1971. While the population aged 15 to 64 years grew by 40 per cent in the same period. This led to massive urbanisation with a large proportion of the population living in shantytowns (slums) on the edge of major cities. Roughly one-third (ten lakhs) of the country's total population is concentrated in its capital, Managua. This is one of the reasons why Nicaragua has 55 per cent of urban population despite the central role played by agriculture in its economy (Garfield and Rodriguez, 1985); 35 per cent of urban and 95 per cent of rural population lacked access to potable water (Halperin and Garfield, 1982).

As in any underdeveloped capitalist country, the official health statistics of pre-1979 Nicaragua are highly unreliable. Halperin and Garfield (1982) point out that "the Somoza regime paid so little attention to health matters that even such basic data as birth and death certificates were collected for only about 25 per cent of the population". The official estimate of the Infant Mortality Rate (IMR) was given as 35 per 1000 live births and was reported so in one of the WHO documents of 1980. A survey conducted in a part of rural Nicaragua in 1977, however, showed that the IMR in the sample population corresponded to an IMR of the order of 150 per 1000 live births (Heiby, 1981). Life expectancy at brith was 52.9 years. Indeed, Nicaragua had the lowest life expectancy at birth and one of the highest levels of the IMR in the region.

Malaria was a major public health hazard. Upto 60 per cent of the Nicaragua population had malaria during the 1930s. From 1934 to 1948, 22.4 per cent of all registered deaths were due to malaria. Upto 70 per cent of hospital beds were occupied by malaria patients during epidemics (Garfield and Vermund, 1983). The national malaria control programme was started in 1947 and was converted into an eradication programme, keeping with the change effected internationally at the behest of international agencies. According to Halperin and Garfield (1982), one-third of the people contracted malaria at least once in their lives. One of the important reasons for this high incidence of malaria was the indiscriminate use of insecticides in cotton and rice farming, leading to the Anopheles mosquito vector exhibiting resistance to all insecticides in common use, including DDT (dicophane), diedrin, malathion, propoxur and chlorofoxin. As a result in 1978 approximately 4.4 persons per 1,000 contracted this disease. The revolutionary civil war paralysed the health services and the incidence of malaria rose to 7.3 per 1,000 in 1979 and 9.4 per 1,000 in 1980 (Halperin and Garfield, 1982). This forced the Nicaraguan government to opt for, as an emergency measure, mass anti-malarial drug administration in 1981.

Besides malaria, tuberculosis and parasitism were endemic. Among the top ten killers of children were diarrhoea, tetanus, measles, whooping cough and malaria. Some of the major causes of death in 1973 are shown in Table 1:

TABLE 1

Causes of Death.	Death Rate per 100,000 population (1973)
1. Infectious and parasitic diseases	141.8
2. Diarrhoeal diseases	97.0
3. Pneumonia and influenza	190.5
4. Avitaminosis and other nutritional diseases	2.1
5. Homicide and war	24.0
6. Poorly defined causes	151.8

Source: Garfield and Rodriguez, 1985.)

Some studies in malnutrition have estimated that between 46 and 83 per cent of Nicaraguan children were malnourished. The same studies have indicated that a high proportion of these children (25 to 45 per cent) had the more severe secondary and tertiary types of malnutrition (Halperin and Garfield, 1982).

Health Services: A decade before the revolution four separate agencies and independent health ministry offices in each province ran in Nicaraguan health system. All four agencies and provincial officies of the health ministry functioned independently without any coordination. The ministry of health had the main responsibility for rural health care.

For the salaried population, the Nicaraguan Social Security Institute (INSS) was established in 1957. Twenty years later it served only 16 per cent of the economically active population and only 8.4 per cent of the country's total population. (Garfield and Taboada, 1984). Several churches ran highly respected hospitals, but for the most part they treated only those who could pay cash. The National Guard had relatively good medical services, including most specialities, through a system of hospitals and clinics of its own.

Health Expenditure: Of all the expenditure in the health sector, the INSS commanded 50 per cent, the ministry of health only 16 per cent and other local agencies, charitable and private insurance groups the remaining 34 per cent. (Garfield and Taboda, 1984). This way, a great divide was created between a tiny minority of insured salaried workers (mainly white collar government employees) and the overwhelming majority of non-insured: Preventive care was neglected, save for some disorganised attempts in respect of malaria. All of the INSS and much of the ministry's budget was devoted to curative care. Of the approximately 13 dollars per capita spent in Nicaragua in 1972 by the health sector, only about 3.15 dollars went for preventive care (Garfield and Taboada, 1984).

Health Personnel: The Somoza dictatorship considered students, especially in the health professions, a potentially subversive group and tried to limit their number. Thus, Nicaragua had only one medical school with 73 students in a class. The total number of doctors was 1,300 and there were only 43 professional nurses per 100 doctors. Not surprisingly, 80 per cent of rural health manpower consisted of folk-healers. We do not have any information about their indigenous medical practices and what the revolutionary government is doing about it.

An official community health experiment was carried out in Nicaragua from 1976 to 1978. In this programme, 768 *parteras* (traditional birth attendants) were trained in six-day courses, to carry out in their community improved obstetrical care, treatment of diarrhoea in children using packets of oral rehydration salts, provision of contraceptives, provision of aspirin for fever and pain and so on. A trained *partera* was given a free health kit [illegible] was required threafter to purchase supplies through the local government clinics. At the end of the experiment in 1978, about 40 per cent of the *Parteras* had already dropped out (Heiby, 1981). The government was so disinterested in the programme that it did not make any serious effort to keep it going nor did it carry out any follow-up work.

Thus, what the revolution inherited was poverty ill-health, unemployment and rickety health services. In addition, it also had to (1) care for the families of the 50,000 dead in the civil war and the 100,000 wounded people and their families, and cope with (2) considerable destruction of industry. (Somoza bombed his own industries to thwart revolution); disorganisation of two agricultural cycles with repercussions on food supplies and exports (GDP per capita had declined to levels of 17 years before), a massive foreign debt, a near-total lack of foreign currencies and high inflation, (3) a poorly developed economy (much less developed than Cuba in 1959), (4) dependence on agro-exports for earning foreign exchange, and (5) the ever-present threat of economic sanctions and even of a blockade (Fourth International, 1985).

Post-revolutionary Reforms

Many persons mistakenly think that immediately after the proletarian revolution, the revolutionary regime brings under state ownership *all* the means of production and services. Actually, while the state takes upon itself the responsibility of providing adequate health care, it does not do so by any such overnight take-over of the services. The seizure of state power and the nationalisation of the core of the economy can be timed by the day of the insurrection, but the actual consolidation of the revolution takes place in course of time, by a process in which the continuing class struggle within the country and internationally plays a prominent role. Even decades after the revolution in these countries, small-scale private producers (artisans, private medical practitioners, small capitalists, etc) are not completely expropriated. They survive as a marginalised sector and under restrictions. Therefore, an attempt to characterise a revolution in its initial years only on the basis of the proportion of the state-owned economy and services could lead to wrong conclusions. What is decisive is the ideology and class nature of the revolution's leading organisation, the actual role played by the new state in the ongoing class struggle—does the state side with workers and farmers? Does it expropriate those propertied classes who go against the people's interest?—and the development and extension of the workers' and farmers' power and control over all aspects of the new social structure.

The continuing presence of private sector in the economy thus does not disprove the proletarian character of the revolution, although such a sector does have subversive potential. This makes it more imperative for the revolutionary state to deepen the class struggle. The state of reform of the health care system in Nicaragua is also at this stage only. Although the state has undertaken full responsibility for providing health care (see basic principles cited above), and it has achieved astounding success in improving health care, this has not been done by sweeping abolition of the private sector and private practice. The trend, however, is clear. The state is for people's health care. Those health personnel who want to continue in the old way of looting people, will not be allowed to do so. First restriction and then, if necessary, expropriation.

Health Structure: Immediately after the revolution, the previously separate health agencies were integrated within the Ministry of Health (MINSA) and a United National Health System was started.

Doctors' Response: Nicaragua had one medical school in Leon and a second one was opened in Managua in 1981. By 1983, 2,240 medical students were undergoing training in these schools, an increase by four times over the 1978 level (Braveman and Roemer, 1985). Unlike in the case of Cuba, only about 300 of the total 1,300 doctors left the country due to the revolution. This was largely because private practice was allowed. Before the revolution, about 65 per cent of the doctors were paid for some public service, but for most of them this constituted only a few hours a day and the rest of the time they were engaged in private practice. After revolution they were pressurised to fulfill their contracted time and increase their scheduled public practice to at least six hours a day. Their salaries were standardised (Garfield and Taboada, 1984).

After revolution, the doctors' official organisation Federacion de Sociedades Medicas de Nicaragua (FESOMENIC), which is a leader of the Federation of Professional Organisations (CONAPRO) and has the backing of the propertied strata, increased its political activities. In 1980 when the government started discussing a law to regulate professional activities, it opposed it tooth-and-nail. It organised a one-day walk-out and even threatened mass emigration to Miami. The government retreated by making the law less specific. Nevertheless, the government passed the law and for the first time made the doctors and other professionals accept the government's right to regulate their professions. This tussle at the same time divided the professionals into the progressive and the conservative camps and in July 1981 a formal split took place. The progressives could maintain official recognition and this ultimately forced the consertatives to rejoin the organisation (Garfield and Taboada, 1984).

Personnel and Training: International assistance has greatly helped Nicaragua to fill up deficiencies in the number of personnel. There are about 800 foreign health workers in Nicaragua, coming mainly from Cuba, Latin America and Western Europe. Cuba and the Pan American Health Organisation have also greatly assisted in teaching programmes.

A complete overhauling of the medical curriculum has been carried out since 1979. The new six-year course consists of clinical service, teaching, administration and research. For imparting such integrated medical training, 'work-study programmes' are instituted wherein the student is required to assist from the outset in supervised public education projects, in community surveys to asses health needs, door-to-door programmes to give immunisations, serve as an administrative assistant in local public health offices, etc. The student is also placed in work settings to learn about occupational health and in outpatient settings to learn about preventive maternal and child health services. On the other hand, the clinical rotations are almost always hospital-based, thus creating a discrepancy between the primary care goal and hospital based training practices. This discrepancy is increasingly being questioned by the teachers and students (Braveman and Roemer, 1985).

Nicaragua has six nursing schools with five times the pre-1979 enrolment. The educational qualification required for enrolment has been drastically lowered. For Auxiliary Nurses the person should only be literate and ten months' training is given. Technical Nurses require primary school education and are given two years' training. While professional Nurses require secondary school graduation and are given three years' training (Braveman and Roemer, 1985). At this rate it is certain that Nicaragua will correct the present adverse nurse-doctor ratio very rapidly.

One of the earliest programmes started by the MINSA was training paramedical health aides, called *brigadistas*, who were selected from the youth organisations. They received several months' training and were sent to isolated rural areas. They were to serve for at least two years after which they would be eligible for professional training. In fact many of them went on to become health educators and medical students. The doctors forcefully opposed this programme and so it was revised. The revised programme took up mobilisation of a large number of people in the immunisation, malaria prophylaxis and sanitation campaigns which were launched in 1981. The campaign included a short-term training course and public health education. It is estimated that upto 10 per cent of the country's population was mobilised as health volunteers in these campaigns. The class and mass organisations listed earlier in this article actively participated and provided volunteers. They also promoted the formation of local, regional and national community health councils which are now active throughout the country (Garfield and Taboada, 1984).

But a campaign means a programme that ends at one point of time. This is not allowed to happen by converting the activity into permanent work by providing extensive training to a section of the volunteers. There are now 25,000 of these permanent but volunteer *brigadistas* comprising about 1 per cent of the total population (Garfield and Taboada, 1984). This supports our earlier contention that many of the workers and peasants are armed defenders of the revolution and also health workers. People's participation is not a cosmetic exercise, but is elevated to self-activity by the people to decide the condition of their lives.

Achievements of the Campaigns: As mentioned earlier, during and after the civil war, the incidence of malaria increased so much that there was no alternative but to take

up mass campaigns to bring it under control. The government opted for Mass Drug Administration (MDA) in 1981. Three ambitious goals were set: (1) to prevent new cases, (2) to cure subclinical cases, and (3) to reduce the transmission. For this purpose, 70,000 voluntary workers, *brigadistas*, were trained. These volunteers recruited many helpers. A malaria census was carried out in which 87 per cent were covered. The drugs were given to an estimated 19,00,000 people. More than 80 lakh does of chloroque and primaquine were distributed in October 1981.

As a result, the total number of malaria cases fell considerably from November 1981 to February 1982. However, the incidence of P.Vivax cases returned to endemic level by March 1982, while that of P.falciparum stayed below endemic level for three more months. The net result was that if we take the average of the previous two years' incidence rates as the baseline, there were 9,200 fewer cases of malaria than expected during the four months of reduction in general incidence. It is clear from this that the objectives of prevention and cure of malaria infection were better realised than that of reducing transmission, as the MDA could not reduce transmission to a 'break point' below which malaria eradication could occur (Garfield and Vermund, 1983). This shows that even such a massive exercise could not realise the theoretically possible decisive break in the chain of infection.

Compared to this moderate success of the MDA campaign, the *immunisation campaign* was a resounding success. BCG vaccinationis given at birth, and the three-fold increase in coverage since 1980 reflects a huge expansion in maternal care. Diptheria-pertusis tetanus (DPT) immunisation is given at health centres and health posts as part of routine child growth and development services. The DPT coverage is increasing at an average rate of 30 per cent per year. However, this increase is not so spectacular. Measles vaccination reches 60 per cent of children in the first year of life and 85 per cent before their sixth birthday (Williams, 1985).

The key to this success in immunisation is a mass campaign through holding regular 'health days' all over the country. For health days, 20,000 volunteer *brigadistas* have been trained in vaccination, health education, etc. On health days vaccinations are done between 7 am to 6 pm with schools, community buildings and health facilities as assembly points finishing with a house-to-house sweep through the neighbourhood. The results are announced through mass media (Williams, 1985). Table 2 shows the immunisation coverage.

TABLE 2: ESTIMATED IMMUNISATION COVERAGE OF CHILDREN UNDER 12 MONTHS

Immunisation	Percentage Coverage in	
	1980	1984
BCG	33	97
DPT	15	33
Poliomyelitis	20	76
Measles	15	60

Source: Ministry of Health and UNICEF Office, Managua (as given in Williams, 1985).

Health Financing and Facilities: Government funds directly related to the provision of health care jumped from 200 million *cordobas* in 1981 and reached an estimated 1,593 million *cordobas* in 1983. In 1981, the government budget for health was 12 per cent of all public spending (Garfield and Taboada, 1984).

In the last months of the revolutionary war, Somoza's National Guard destroyed four hospitals, seriously damaged five others and looted four more. Post-revolutionary reconstruction has now provided 18 hospital beds per 10,000 population. There are 4,829 hospital beds in Nicaragua, but greater awareness and accessibility has increased their use. Five hospitals with 1,078 beds are under construction (Garfield and Halperin, 1983). To tackle problem of diarrhoea, especially in infants, the government initially planned 170 rehydration centres, but popular demand and people's action have brought 226 such centres into existence (Halperin and Garfield, 1982). The availability of health services has increased tremendously. It is estimated that more than 80 per cent of the population now has some regular access to medical care (Garfield and Taboada, 1984).

Health Condition: Finally, about some overall achievements. The IMR has got reduced to 80 per 1,000 live births. No case of polio has been reported since 1982 despite an epidemic in neighbouring Honduras in 1984. Only 3 cases of diptheria were reported in 1983. Neonatal tetanus, however, still remains a significant problem (Williams, 1985).

In short, the reforms in health care in Nicaragua show people's determination to collectively change society. The future of the revolution is, however, not fully secure and is threatened by internal and external dangers. This has happened to all such revolutions. The Soviet Union was invaded by several countries to destroy the Bolshevik Revolution; Cuba had its Bay of Pigs invasion; Vietnam had to fight for decades for survival; Grenada was overpowered; Nicaragua has been assaulted by the CIA sponsored contras and a partial blocade since 1981. The very fact that it has achieved so much under conditions of a threat to its very survival and continous war since 1981 shows the revolution's lasting power, the new state's mass base and the preparedness of the working masses to sacrifice to preserve the gains of the revolution, including the gains in health and health care. Nevertheless, the war has its impact, and such protracted aggression has consequences for people's health. Epidemiology of war is an emerging subject and the war on Nicaragua has made it much more relevant. Health professionals will have to understand it more and more for the world is likely witness more revolutionary upheavals, revolutionary crises, and imperialist aggressions.

Health Consequences of War in Nicaragua

The Central American countries are under the grip of violence, more so since 1980. Violent death is the most common cause of death in El Salvador, Guatemala and Nicaragua since 1980. At least 40,00 people have been killed by military and death squads in El Salvador (population 47 lakhs) and many more have been killed in bombing and other attacks. It is estimated that 20,000 Gautemalans (population 41 lakhs) most of them indigenous tribes, have been killed by the army in the last three years. The war takes a toll mainly

of young men. This is illustrated by the fact that although life expectancy at birth among Salvadoran women has risen steadily, reaching 67.7 years in 1980, it fell remarkably for Salvadoran men from 58.4 years in 1978 to 52 years in 1980. More than 1,20,000 Central Americans have died from war-related causes since 1978. This amounts to a 10 per cent rise in mortality above expected levels during this period. It is estimated that more than a million Central American live as refugees within the region and a million have fled to America (Garfield and Rodriguez, 1985). This is how imperialism is trying to crush the hopes and rebellion of people in Central America, who have been inspired by the Nicaragua revolution. The effects of imperialist aggression on Nicaragua are no less tragic.

More than 100,000 persons were wounded in the revolutionary war in Nicaragua and 50,000 lost their lives. After the revolution, the CIA-backed contra attacks have, between January 1980 and January 1986, killed 3,999 persons, wounded 4,542 persons and 3,791 persons have been kidnapped. In 1985 alone, 1,852 persons' were wounded, 1,463 were killed and 1,455 kidnapped, indicating the counter-revolutionaries who have been killed in the armed conflicts—they are also victims of US aggression—the number of casualties totals 23,822 persons including 13,930 dead (Ortega, 1986). The president of Nicaragua, Daniel Ortega, in his recent speech to the National Assembly said that the total number of people killed as a result of the US policy of terrorism against Nicaragua would be equivalent, as a proportion of the population, to some 1,03,000 dead for the US (Ortega, 1986).

Ortega also gave information about other losses:

1. In 1985, aggression increased Nicaragua's balance of payment deficit by 108 million US dollars, the trade deficit rose by $ 89 million and the capital deficit by $ 19 million.
2. A total of 120,324 people have been displaced from their lands by the war, of these, 33,000 have been relocated to 55 urban and rural settlements.
3. Health services to 250,000 people have been impaired due to the damages caused to 55 health units, including one hospital and four health centres.
4. 48 schools have been destroyed and 502 other education centres can no longer operate because they are located in war zones; as a result, a total of 60,240 elementary and 30,120 adult education students are no longer able to attend classes.
5. In the area of social services, the mercenaries have destroyed four rural child care centres, three nutrition centres for children and two offices of the Nicaraguan Social Security Institute. This has directly affected services to 2,222 children and elderly people.

The strength of the Nicaraguan revolution lies in people's power and in its accomplishments in the fields of health, education (the revolution's strategy of imparting education to all has been most successful), nutrition, employment, etc. The counter-revolutionary contra mercenaries know this. Hence health and educational centres and health functionaries are made special targets of attacks. At least 22 health workers (including two European volunter physicians), medical students, nurses, malaria control workers, health educators and vaccination campaign workers have been killed while delivering health care (Siegel *et al*, 1985). Garfield (1985) puts the number of health workers killed at 31. In terms of availability of health facilities, as the Nicaraguan Health Workers Union (FETSALUD) reported to visiting American physicians, the increase the in the number of civilians and soldiers wounded in the war has strained existing health facilities, leaving less resources for normal civilian needs (Siegel, 1985).

Further increase in the health budget has been suspended due to increase in military spending, the budget for which increased from 18 per cent in 1982 to 25 per cent in 1984. Not only that, 20-25 per cent of Managua's health workers are at the war front, actually fighting with arms and many of them are getting killed. This has necessitated training of new health personnel.

The economic embargo on Nicaragua by the US has devastating consequences for health care. Immediately after the revolution, there was a crisis in the availability of pharmaceuticals. The foreign drug companies wanted the debt incurred by the Somoza government to be settled before sending any more drugs. The Sandinista government had to accept responsibility for the debts in exchange for favourable terms of repayment (Halperin and Garfield, 1982). Another major problem is the lack of spare parts for medical equipment. Much of the machinery is made in the US, but shortage of US dollars as a result of the war makes acquisition of replacement parts difficult (Siegel, *et al*, 1985). Thus, when equipment breaks, it may remain out of commission or one piece of equipment must be cannibalised to fix another (Helperin and Garfield, 1982).

In 1983, agricultural losses directly related to the war totalled 10 million dollars. Since 1981, total destruction related to health has been valued at over 70 million dollars (Siegel, *et al*, 1985).

Effects on Diseases

The term 'epidemiology of aggression' was first used by a group of doctors connected with Regional Leishmaniasis Group in Nicaragua, to analyse health data ascribable to the US aggression in 1982. Before 1979 leishmaniasis was known to exist in Nicaragua but was not reported to the WHO. After the revolution reported cases increased and came to ocupy the fifth rank among all notified infectious diseases. When the Leishmaniasis Group started a study of this disease in 1982 in one region, the study was violently interrupted after 24 hours by a contra attack in which several people were killed, including Dr. Pierre Grosjean, one of the two European volunteer physicians (Morelli, *et al*, 1985).

One aspect of the epidemiology of war is *the impossibility of obtaining basic data*. Cases registered in this region progressively increased from 1980 (143 cases) to 1982 (2,107 cases); since 1982, with the intensified war activities, the number of notified cases fell to 1,054 in 1983 and 806 in 1984. This is not due to actual decrease in number of cases but due to destruction of facilities, less access to services and migration. Another aspect of this epidemiology is related to troop movements. Non-immune people have the clinical manifestations when they enter, in troop movements, the natural environment of leishmaniasis. This can be seen from age-sex distribution: the significantly high incidence usually seen in under 5s has shifted to appear in males aged 15-30 years. The third aspect is related to migration. People living

in endemic areas often resettle, because of the war, in non-endemic areas, resulting in the first appearance of the disease in those zones. Thus, as the Leishmaniaris Group puts it, in the war-affected northern regions of the country, aggression and leishmaniaris, indeed, coincide 'epidemiologically' (Morelli, 1985).

Before we conlude, a mention should be made of the psychological effects of war. The Americans, for instance still suffer from the psychological effects of the Vietnam war and a numbr of studies are still being carried out to assess the increased number of vehicular accidents and suicides amongst Americans who were drafted to fight for US imperialism in Vietnam. As reported by Dr. Felipe Sarti, the chief psychologist at a psychiatric day centre in a poor suburb of Managua, approximately 25 per cent of all patients show depressive illnesses connected with the war. This depression is particularly prevalent among parents and siblings of soldiers who have been killed or sent to the front (Seigel, *et al*, 1985).

The US sponsored aggression is still continuing and no end to it seems likely in the near future. Such a situation can jeopardise the revolution in the long-term. This annihilation of revolution must stop. The US administration knows that if it opts for direct intervention, it won't be any cakewalk. The working masses are armed and they will fight till the last person. And hence this new strategy of protracted aggression combined with economic harassment and internal sabotage through the still-unexpropriated big strata of the former ruling classes. The danger is real. If a massive counter revolutionary attack is mounted by all of them it will have a chilling effect on the revolutionary movement all over the world. Even if such an attack fails, there are bound to be major distortions in the revolution. Its democratic fermen. may get lost. A massive bureaucratic state apparatus may emerge and with the best class-conscious workers and peasants dead in the war, such an apparatus can get consolidated. International solidarity is a need of the hour.

Many health professionals have reacted with revolutionary zeal to this need. Today, over 900 internationalist health workers are helping the revolution. They are from Cuba, Latin America, Mexico and Europe. Many more can and should join. If we allow imperialism to roll back this revolution, as it did in Grenada, history will not forgive us: No matter how strong the justification for localist thinking and local-based activity, this international defeat will affect all of us sooner or later. We must say, "Imperialism—hands off Nicaragua".

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Medical Care and Health under State Socialism

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The transformation of the social relationships of welfare is central to socialist and communist social policy and may be thought through in relation to six key aspects of social policy: (1) the priority afforded social policy, (2) the form of control over welfare provision, (3) the agency of welfare provision, (4) the nature of the relationship between welfare provider and user, (5) the rationing system adopted by the welfare institutions concerned, and (6) the assumption embodied in the policy regarding the sexual division of labour. This article reviews medical care and health policy in three countries, the Soviet Union, Hungary and Poland from the standpoint of a perspective of ideal socialist and communist medical care and health policy derived from an analysis of Marxist and allied critiques of capitalist medical care policy and theoretical work on socialist social policy. The author concludes that medical care policy in all three countries exhibits very few characteristics of socialist medical care. It also examines the possibility (for the moment suppressed) provided by the Solidarity movement in Poland of a new development toward a more genuine socialist medical care and health policy.

The article has been slightly abridged from the International Journal of Health Services Volume 14, number 3, 1984 and excludes the detailed review of medical policy in Hungary.

Socialist Medical Care Policy

The aim of this article is both to explicate a socialist conception of ideal medical care policy and to review medical care policies in the Soviet Union, Hungary and Poland to see whether they provide concrete examples of socialist medical care.

It is clear from George and Manning's (1) review of the few specific statements on socialism and health made by Marx, Engels, and Lenin that their emphasis is on those *causes* of ill-health located in the nature of capitalist society. As an example take Lenin's view that "thousands and tens of thousands of men and women, who toil all their lives to create wealth for others, perish from starvation and constant malnutrition, die prematurely from disease caused by horrible working conditions by wretched housing and overwork" (2). A socialist health policy would therefore be concerned primarily to prevent avoidable disease. There is far less in their writings on the particular form of curative health service that should be provided to cope with unpreventable disease.

Few subsequent Marxist theorists, addressing the nature of socialism have had anything specific to say about medical care. Bahro (3) is an exception here. His discussion of the need to alter the division of labour radically under socialism is illustrated by the example of the organisation of work in a hospital: "We can just as well imagine the everyday situation in a hospital, to take an example from a different sphere, one still more strongly burdened with the prejudices of the traditional division of labour, in which the entire staff consisted of people with full medical training, or other pertinent qualification, who also took part in all nursing and ancillary work and in social and economic functions as well." This twin concern with both preventive medicine—the fact that it will become a high priority under socialism—and the altered form of curative medical care will recur as the conception of socialist medical care emerges in this article.

Lesley Doyal's (4) excellent analysis of the causes of, and ways of curing, ill-health under capitalism is structured around these twin concerns. Her brief postscript to *The Political Economy of Health*, where she considers the implications of this analysis for the struggle for a healthier society, discusses both aspects. On the question of prevention of ill-health under socialism, she is sensibly cautious:

> Naturally we would not argue that a transformation of the mode of production would abolish illness—people will always become sick and die. But what we can show are the ways in which potentially avoidable illness has become prevalent under capitalism . . . [It follows that] the demand for health is in *itself* a revolutionary demand.

This concern with preventing avoidable ill-health is a touchstone of socialist policy. It would reach into every corner of working and domestic life. Not only would each work process be evaluated from the standpoint of whether it made workers ill or not, but also such diverse aspects of life as food, housing, transportation, and personal relationships would be affected far more than under capitalism by considerations of their health-enhancing potential. Changes in life-style in relation to all of these things would be a matter of general public concern and action. Necessary economic and social changes that would enable people to live, eat, and relate differently would be a matter of medical policy.

On the form of curative medical care under socialism, Doyal (4) writes:

> The struggle must therefore go beyond the immediate demand for more state-organised medicine, towards a critical re-evaluation of the more qualitative aspects of the current organisation of medicine and a redefinition of our health needs. This is not, of course, to suggest that in a socialist society all existing medical knowledge and skills would simply be abandoned in favour of something called "proletarian medicine" . . . [But] no technology would be used uncritically and without some assessment of its value according to criteria which had been democratically decided upon . . . Hence a socialist health service would not only have to provide equal access to medical care but would also have to address itself seriously to such problems as how to demystify medical knowledge and how to break down barriers of authority and status both among health workers themselves and also between workers and consumers.

The theme of the necessity of changing *the social relationships embodied in medical practice* under socialism is taken up by other Marxist critics of the National Health Service (NHS) in Britain. After criticising existing left orthodoxy, which sees within the existing structures of the NHS a more-or-less socialist form of medical care requiring only an injection of formal democracy, Mick Carpenter (5) argues:

> A socialist health service . . . will be one where all barriers of hierarchy and mystification, between health workers and between them and the sick people they work with are torn down. It will be a health care provided neither because of the material necessity

of wage workers nor out of an imposed set of obligations which fall upon certain people, mainly daughters and wives.

Vicente Navarro (6) has pursued this theme of changing the social relations of medical practice, insisting that "Communist medicine is not bourgeois medicine better distributed but, rather, a qualitatively new form of medicine created by new relations of collaboration and cooperation in the process of the production and reproduction of health."

The forms of medical technology and science themselves are therefore likely to be transformed under communism. This is not to argue that all capitalist medical science and technology is false or wrong, merely that capitalist social relations of production are reflected in the present choice of research areas and in the forms of technology used. Different social relations, those of reciprocal cooperation, would be reflected in the technology of communist medicine. An attempt to specify the way medical technologies under capitalism reflect the social relations of capitalism has been made by the Radical Science Journal collective (7). For instance, Shelly Day (8) suggests that obstetric technology reflects both capitalist and male interests in the way it reinforces the passive role of women just at the point where (ideally) their active control of birth process is required. Postnatal depression, Day argues, may result from this highly contradictory experience.

Recently a number of authors and organisations have attempted to construct in a more concrete way the expectations we should have of a genuinely socialist medical care policy. Colin Thunhurst (9) has argued that the scope of health services should be increased to embrace an occupational health service controlled by workers. Alex Scott-Samuel (10) has suggested the need for a socialist epidemiology in which a community diagnosis focus would be central, where questions would be asked by those who live in a locality about who is ill and why and what could be done to create more healthy living and working conditions. It has also been argued (11) that the service should allow for alternative modes of treatment, and for the involvement of people in the provision of services in the way that is now prefigured by some Well Women clinics. There should be a "different relationship between health team and patient ... [providing] the patient with the opportunity to participate in a fully informed decision concerning the course of treatment."

The Politics of Health Group (11) has argued that we need to challenge the medical dominance and "hierarchy" in the health service; to give patients more say in their own health care; to capture more control over our health; to give "community care" real meaning; to achieve more and better routine healthcare for non-life threatening complaints; and to fight the *causes* of ill-health.

One organisation that has tried in its practice to prefigure these conceptions of a genuinely socialist medical care policy in the here and now is the Community Health Council in Brent, North London. Its publication *It's My Life Doctor* (12) designed for use by the local community, sets out seven common medical problems, how they might be prevented, how the National Health Service fails in relation to them, and what kind of preventive and curative health policy would be more appropriate to the needs of people suffering such problems.

The feminist critique of medical care practice under the NHS is also well advanced (13). A socialist health service that responded to the feminist critique would abolish the sexist content of medical practice. Thus, women's ailments and conditions (e g, menstruation, menopause, pelvic inflammatory disease) would be given proper attention. Gender stereotyping of women through the use of such labels as "hysterical" would be challenged. Women would take control over their bodies in matters of sexuality (abortion on demand) and childbirth (natural childbirth). The form of service would be altered so that women did not just perform the caring functions such as nursing while men performed a separate curing function. Nor would women be left to carry the burden of caring for the family. A socialist epidemiology would also incorporate a feminist epidemiology. Central to this would be the recognition that the disabling double burden of paid work and domestic work should be alleviated.

The conclusion so far that socialist medical care would embody a transformation in the social relations of medical practice reflects the general conclusions I have drawn elsewhere (14) that the transformation of the social relationships of welfare is central to socialist and communist social policy. I have argued that the conception of a transformation of social welfare relationships needed to be thought in relation to six key aspects of social policy: 1) the priority afforded social policy, 2) the form of control over welfare provision, 3) the agency of welfare provision, 4) the nature of the relationship between welfare provider and user, 5) the rationing systems adopted by the welfare institutions concerned, and 6) the assumptions embodied in the policy regarding the sexual division of labour. I also argued that a distinction should be drawn between socialist and communist social policy. The summary of our expectations of both socialist and communist medical care policy indicated in Table 1 is based on those general considerations relating to social policy as a whole and the specific considerations reviewed so far in this article relating to medical care in particular.

A few comments on Table 1 are necessary. First, it has been argued so far that a policy for health under socialism (and communism) would not just be a policy of providing a transformed medical care service. Issues of medical care would be redefined into issues of health, which in turn would become issues of working conditions, housing, and economic and social life in general. It has been argued (15) that a socialist conception of health can only be developed once medical care itself is removed from the centerpiece of analysis. The view taken here is that in assessing progress in any socialist society, we need to consider both the form that socialist medical care provision will take (to cure and care for those suffering from unavoidable disease) and the extent to which a socialist health strategy has been developed that places equal emphasis on changing social conditions to prevent avoidable ill-health. The table attempts to show both how the form of medical care would be different and how a socialist health strategy would be developed (though perhaps concentrating more on medical care policy than on health strategy). Measures of whether a socialist health strategy is being developed are provided by the criteria dealing with the priorities of medical care as between cure and prevention, and by the assessment of the outcome of medical care (health) policy in terms of morbidity and mortality.

Second, the priority given to medical care under socialism cannot simply be measured in terms of the resources put into the health sector of the economy, whether in terms of money, person power, or facilities. While we would expect health ex-

penditure to become a higher priority in the initial stages of socialist development, the infusion of resources is clearly no measure of socialist progress in medical care in societies already at the threshold of communism. As we have argued, greater benefit in terms of the health of the population is more likely to come from transformed working and living conditions that prevent avoidable ill-health. A measure of the output of the health service in terms of morbidity and mortality rate is a better indication of the priority afforded to a society's health than a measure of money spent on the health sector. A lower level of morbidity and mortality is also likely to reflect the importance attributed by a society to the preventive aspects of medicine, which are otherwise so difficult to quantify.

What people suffer and die from is another important measure of socialist progress. This applies both to underdeveloped and developed socialist societies. In the former, the eradication of the preventable infections and communicable diseases will be a crucial indicator; in the latter, a reduction in the incidence of the new illnesses of developed societies will be a measure. Socialist and feminist epidemiology has already made progress in identifying the social causation rooted in the capitalist mode of production of such conditons as cancer and cardiovascular diseases. A genuinely socialist health strategy would therefore be expected to have acted upon the conclusions of this new epidemiology and effected changes in the relevant social conditions which will show up in terms of reduced morbidity and mortality from these new "capitalist" diseases.

Third is the rationing of medical care. Elsewhere (14) we have concluded that services did not necessarily have to be free at the point of use to be allocated along socialist lines. As long as incomes were more-or-less equalised, and as long as the commercialism of the private market was no longer present, the attaching of a price to a service provided by the state (e g, housing) could permit the users of a service to ration their own use of the service (a smaller or bigger house?) according to their own set of priorities. Now there is the argument that charges for health services, even if incomes were equalised, should not be made because an individual use of the service has indirect impact on the health and welfare of others, and everyone's use must therefore be encouraged even if an individual would order her or his own priorities differently. Indeed, there is even the argument for

Table 1

Expectations of socialist and communist medical care policy

Aspect of social policy	Aspect of medical care policy	Socialism	Communism
Priority	1. Outcomes in terms of health	Less and more equal morbidity and infant mortality than capitalism; greater and more equal life expectancy	Less and equal morbidity and infant mortality; greater and equal life expectancy
	2. Resources in terms of money	Higher expenditure than capitalism	Need for higher expenditure may no longer exist
	3. Resources in terms of person-power/facilities	Higher level of resources than capitalism	Need for higher level of resources may no longer exist
	4. Priorities in terms of cure, care, prevention	Prevention and care prioritised	Prevention and care central
Control over welfare provision	5. Central control	Central direction with political cadre influences	Centre provides democratically resolved planning guidelines only
	6. Local control	Democratic worker and user involvement	Mass participation in policy resolution and implementation
	7. Control of medical technology industry	Nationalised and progress toward socialised relationships	Socialised working relationships within industry and between it and the health service
Agency	8. Agency of provision	State, workplace, family and market giving way to community provision	Community provision
Relationships between provider and users	9. Status of doctors	Lower than under capitalism	Equal status with all workers
	10. Division of labour in medicine	Reduction of vertical and horizontal divisions	Abolition of vertical divisions; movement between horizontal divisions
	11. Nature of medical technology	Progress toward new forms	New forms of medical technology reflecting communist social relations
	12. Status of patients	Higher, accompanying deprofessionalisation of doctors	Equal status with providers
Rationing systems	13. Region and class access, usage, and outcome	Progress toward equality	Equal access, usage and outcome
	14. Rationing procedures between individual patients	Free usage with access rationed by work and need according to democratically determined formulae	Free usage with access according to self-perceived need
Sexual divisions	15. Sexual division in medical care employment	Progress toward no division	No sexual division of medical labour
	16. Sexist content of medical practice	Progress toward no sexist content	No sexist content of medical practice

a practice of financial inducements to use a particular service for the beneficial impact that an individual's use of it might have on the health of others. This assumption of nil direct cost to the individual consumer of the service is built into the table as a measure of socialist progress (even though this may not be such a crucial aspect of a socialist health service as is usually assumed). It can be taken as one measure of a nation's collective commitment to the health of all its members.

There are a number of other problems associated with the criteria used to determine socialist and communist progress in medical care, including those of putting into operation the general measures indicated in the table. How exactly is the "lower" status of the medical profession to be determined? How is progress toward deprofessionalisation to be measured? What are the indicators of the abolition of the sexist content in medical practice? These problems of operationalisation are often compounded in practice by the non-availability of data. Despite these difficulties, however, I believe it is possible to draw some general conclusions about the socialist status of the medical care policies of the countries studied.

Soviet Medical Care Policy

There are many accounts of the Soviet health service by writers of various shades of socialist opinion. These vary from the openly enthusiastic (16) to the fundamentally critical (17). The summary survey provided here is distilled from these and a number of other secondary sources (18-20). For the discussion of the extent to which there are sexist aspects to the organisation and content of medical care, more general works on the position of women in Russia have been consulted (21-23). Detailed references are not generally provided to these frequently used sources.

George and Manning (1) state that, at the outset, Bolshevik medical care policy goals included: comprehensive qualified medical care; availability to everyone in the population; a single, unified service provided by the state; a free service; extensive preventive care, with the aim of creating a healthy population; and full worker's participation in the health service. While many of these goals continued to guide policy and many were achieved, the development of medical care policy also came to be shaped by other historical exigencies, especially in the periods of socialist retrenchment during the New Economic Policy (1921-1929) and of intense industrialisation and forced collectivisation of the 1930s. The way these factors influenced medical care policy and the final outcomes of policy will now be considered in detail, under the following headings: the priorities of medical care; the control of medical care; the agency of provision of services; the relationships embodied in medical care; the agency of provision of services; the relationships embodied in medical care; the rationing procedures adopted; and lastly, the extent of sexist organisation and content of medicine.

Priorities of Medical Care

Does Soviet medical care live up to the expectation we would have of it if it were socialist in terms of 1) providing more health care resources than comparable capitalist societies, 2) distributing health care resources and activities disproportionately in favour of prevention, and 3) providing for a healthier population than populations in equivalent capitalist societies?

The Soviet Union spends a far smaller proportion of its gross domestic product on health care than the Common Market countries. Michael Kaser (18) estimated that 2.8 per cent of GDP was spent on health care in the USSR in 1968, compared with 5.1 per cent of GNP for the United Kingdom, 8.0 per cent for Italy, and 5.0 per cent for Ireland. A more recent estimate (24) based on 1974 figures suggests this has dropped to 2.5 per cent. However, in terms of the number of doctors and hospital beds per head of population, the Soviet Union is far ahead of these same countries. There were, in 1977, 34.6 physicians per 10,000 people in Russia compared with 2? ? in the EEC as a whole. There were 121 hospital beds for the same population in 1977 compared with 95 for the EEC (24). These details are summarised in Table 2. The apparent paradox between low expenditure levels and high-level provision is resolved once it is understood that first, there has been far less capital expenditure on Soviet medical care compared with the EEC. In 1970, 5 per cent of health service outlays was devoted to capital expenditure in the USSR compared with 10 per cent in Britian in 1971-1972 (18). This explains the often reported poor quality and overcrowding of medical care institutions and the lack of surgical and pharmaceutical equipment that occurs from time to time.

As to the priorities within health service expenditures, it is clear that, despite the early creation of a preventive arm of the health service, the hospital sector of medicine dominates all the other sectors and consumes the largest proportion of resources. The Bolshevik government in the very early days established the important departments of sanitation and epidemiology, with responsibility for flying propaganda squadrons combating social sources of disease. This was seen in 1928 by one sympathetic commentator (25) as "offering a good example of the new attitude and principles of Soviet medicine." Even in 1925, however, expenditure on sanitary and hygienic education and on campaigns against contagious disease consumed only 2.6 per cent of the health service budget (25). The Council on Medical Education in 1925 aimed to produce doctors with not only a thorough scientific understanding of the connection between biological

Table 2

Medical Care Expenditures, Resources, and Outcomes in the Soviet Union, Eastern Europe, and Comparable Capitalist Countries[a]

Indicator	Soviet Union	Hungary	Poland	Nonsocialist comparison
Percentage of GDP spent on medical care	2.5[b]	3.3[b]	3.9[b]	5.1-6.7[c] (EEC states)[d]
Population/physician	289[e]	435[e]	606[e]	455[e] (West Europe)
Population/hospital bed	82[e]	114[e]	113[e]	105[e] (West Europe)
Infant mortality/ 1000 live births	27.8[f]	24.3	22.4[f]	11.4-17.6[e,f] (EEC excl. Portugal)
Life expectancy:				
Male	66.5[f]	66.1[f]	66.5[f]	70.2[e]
Female	74.3[f]	72.8[f]	74.9[f]	76.3[e] (Britain)

a Sources: references 18, 20, 24. b 1974. c 1971-72. d percentage of GNP. e 1977. f 1975.

processes and disease, but also with: 1) sufficient social science background to enable them to understand current social life and world events: 2) the materialist point of view, which is essential to a correct understanding of the mutual relationship between an organism and its milieu, 3) the social service point of view, which takes into account the working conditions and home life of the patient; and 4) the knowledge and ability not only to treat diseases, but to prevent them. However, an analysis of the curriculum of the Medical School of Moscow University of 1925-1926 suggests that even if we are to include such topics as "Historical Materialism and the History of Revolutionary Movement," only about 5 per cent of the content was directly related to these four points. The socialist idea of creating a new medical knowledge and practice derived from new social relations of production reflected in a new division of labour between doctor and patient, does not seem to be borne out by the existence of this disease- and clinically-oriented curriculum.

Turning to the present day, the proportion of doctors working in hospital care compared with ambulatory care is increasing. There is more rapid increase in the number of doctors specialising in tertiary medicine (e g, surgeons, neurologists, psychiatrists) (17). One estimate (19) of the proportion of health care resources devoted to "environmental health and physical education" is 4.8 per cent. There is evidence, though, that the quality of primary care is better than that of hospital care.

The outcomes of the Soviet health service, measured in terms of morbidity and mortality rates, cast considerable doubt on whether sustained socialist progress in health has been achieved. During the early years of the Revolution, progress was made in decreasing mortality and morbidity. By 1925, even though industrial output and grain harvest were below 1913 levels, infant mortality had fallen to half of the pre-Revolutionary level (20). This progress, when compared with that of the West, has now been lost, as can be seen from Table 2. Today, mortality rates for infants and adults compare very unfavourably. There were 27.8 infant deaths per 1000 live births in the whole of the USSR in 1975 and 19.2 per 1000 in the Ukraine Republic, compared with 15.7 in Britian in 1978. Infant mortality actually rose from 1971, when it was 22.9 per 1000, to 27.9 per 1000 in 1974 (20). Life expectancy was 66.5 years for males and 74.3 years for females for 1970-1975, compared with 70.2 and 76.3 for Britain in 1977. There is evidence that life expectancy for adult males began to decline in the mid 1960s. Age-adjusted death rates for adults rose from 861 per 100,000 in 1965-1966 to 955 per 100,000 in 1972-1973. The largest increase in mortality has been in the 40-59-year category (20). The absence of morbidity and mortality data analysed by social class does not permit any assessment as to whether there has been greater equalisation in longevity and mortality.

An analysis of the diseases Russians now suffer and die from also provides a disturbing commentary: "As the death rates from infectious disease have fallen in the Soviet Union, mortality from cardiovascular diseases and cancer has risen, both relatively and absolutely. The force of these modern epidemics has been sufficient to *raise* [the] age adjusted death rate by 18 per cent over the last decade" (20). Cooper and Schatzkin (20) comment that "social environment... typical of capitalist society... can be shown to be responsible for these mass diseases." The first Commissar of Health in the USSR said: "There is no interest in concealing the social character of these diseases... the social causes of diseases among working people are found out in order to remove them." But Cooper and Schatzkin (20) conclude: "The opposite [now] appears to be the case: disease is promoted, its social character is obscured and avoidable hazards are not removed."

Control of Medical Care

The early days of the socialist experience in Russia (1917-1921) provide perhaps some of the most potent examples of the possibilities of socialist medical care policy in terms of formal control over medical care policy and institutions. The direct confrontation in the 1920s between the medical profession's Pirogov Society and the Bolsheviks, which was won by the Bolsheviks with the aid of the health workers' union, should be noted. This struggle curtailed the special privileges of the profession and the control it had over medical care institutions at that time. This early period of Russian history provides us with the best practical examples of how the important issue of control of health service and other welfare institutions will be raised under socialism. The debate, which is also recalled by Navarro (17), between those who favoured control by the workers in health service institutions and those who favoured control by soviets or delegates of workers in a locality, is one which poses for us now the question of what form democratic control should take in any future socialist society. In this example, the form of administration chosen was one in which doctors, as state-salaried employees, had no special professional access to power, with the day-to-day management of health service institutions invested in a nominee of the local soviet, who would be advised by an elected committee of health service workers. Those who favoured control of each institution by a democratically elected committee of workers of that institution were criticised for not understanding the needs of overall planning and were defeated.

With the eventual erosion of any active life in the local soviets and as soviets became empty conduits for the rule of an increasingly centrally controlled and Stalinist Communist Party that determined even local policies through the national budget, any vestiges of active worker participation in—let alone control of—health service institutions disappeared. At the same time, the initial decline in the power of the medical profession was reversed. The Ministry of Health has relied heavily in more recent years on the advice of the increasingly institutionalised medical profession, and it has become the practice for all directors of health service institutions to be qualified doctors. The ratio of income between doctors and nurses is now as large as 10:1 (17). Indeed, George and Manning (1) conclude that, nowdays, "Soviet health care [is] centrally controlled to meet the requirements of industrialisation and the academic interests of medical scientists." However, despite this heavy reliance today on medical personnel to run the health service centrally and locally, a large proportion of these administrators are Communist Party cadres and are, of course, in the last analysis, responsible to the Central Committee of the Party (17). The socialist notion of political control of policy through the active involvement of party cadres at all levels of administration is theoretically maintained; however, from the point of view of an ideal socialist medical care policy, the ideas and

practice of these cadres leave much to be desired. They no longer appear to favour—if they ever did—the genuine mass involvement in health matters which should be the hallmark of communist medicine.

Agency of Provision of Services

The main agency of provision of health care in Russia is the state. Hospitals polyclinics, feldsher outposts, and so forth are all run on behalf of the state by local councils, but there is scant evidence of mass participation in, or democratic election to, the local bodies which run these institutions. The workplace features quite significantly in the system of provision. Under the Stalinist industrialisation policy, a large number of health centres were established in industrial enterprises. There ranged from 100-bed hospitals to the provision of a nurse. They were organisationally separate from the Soviet-run health services and were part of a policy of giving priority to preventing loss of industrial production. The demands of industrialisation and the needs of workers coincide to some extent here, but it is not easy to determine how far these services give priority to the latter over the former when it comes to a direct conflict between them. The scarcity of Russian data on disease and death analysed by social group, and the nonpublication of accident data, is perhaps indicative of which priority is uppermost. There is further evidence of the priority given to workers in Russia by the development of separate health service institutions run by and for railway workers and the wide provision of rest cure and convalescent homes and holiday villas by trade unions for their members.

The private market is an important provider of medical care services in the Soviet Union, although there is some legal and some illegal private practice. Abortion constitutes on example. Additionally there are autonomously financed medical institutions, or "paying polyclinics" (*platnaya poliklinika*), in Moscow and other big cities where patients pay a small sum for prearranged appointments with specialists. Like the nonpaying polyclinics, these are run by the local authority and are not really examples of the operation of a competitive market in medicine. They provide, however, a commentary on medical care rationing procedures used. If you can pay, you get better treatment. Although it is discouraged, payment for treatment is also made on a regular basis to doctors and nurses in ordinary state hospitals. In the 1960s the table of customary payments ranged from 5-25 roubles for attention in hospital to 500 roubles for a course of treatment for venereal disease by a senior specialist (18). Women in the family still provide a large amount of medical care in terms of nursing the sick and elderly. This is institutionalised in the provision made for women (not men) to receive state grants for time off work to look after sick children.

Relationships Involved in Medical Care

Turning now to the various aspects of the relationships involved in medical care, we must remember that the status of the medical profession in the Soviet Union is lower than in the West. The division of medical labour is similar, however. The only exception is the feldsher system of partly trained nurses-midwives-practitioners who practise in rural areas. This is a socialist innovation, but one inherited from pre-Revolutionary days. Indeed, early Bolshevik policy, later abandoned, was to get rid of these "second-class doctors."

Whether or not Bolshevik policy initially understood that socialist medicine must redefine the practice of medicine, in such a way that a change in the division of labour takes place in both the vertical and horizontal senses, there is no evidence that this policy was pursued in later years. Indeed, the absence of a family doctor system brings specialisation and mechanistic medicine even into the diagnostic stage of the polyclinics. George and Manning (1) write:

> For example, the Ministry of Health recently stated that "it is impossible to conceive th[e] only a single doctor with a broad background co[uld] guarantee highly qualified care for patients suffering from a variety of illnesses which are frequently complicated to diagnose and treat." Such a view in contrast to the major incidence of relatively simple and self-limiting illnesses brought to primary-level physicans, clearly indicates the interest and perception of medicine oriented towards academic specialisation rather than patient needs.

There is also the practice of tipping doctors, which reflects the esteem in which doctors are held by patients. There are no adequate independent complaint procedures against doctors. There is no free choice of doctors by the patient. These points contribute to the conclusion that there has been no sustained challenge to the relationships involved in the capitalist practice of medicine in the Soviet Union. Navarro (17) is convinced that the Soviet system of health care is dominated, as in the West, by what he terms technologicalisation, depoliticisation, hospitalisation, and urbanisation.

Rationing Procedures

Does Russian medical care embody socialist aspirations in its system of distribution and rationing? There is evidence (1) of a sustained attempt to provide for a reasonable degree of territorial justice between different regions of the USSR in terms of doctors and hospitals, although the quality of service probably varies geographically more than the quantity. The emphasis on central planning has enabled this achievement to be registered. Within each region of the country, however, resources are concentrated in the urban areas. For example, Moscow in 1972 had 76 physicians per 10,000 inhabitants compared with 28.3 for the country as a whole (17). There does not appear to be a larger number of feldshers to compensate for this in the underprovided-for rural areas.

It is more difficult to be precise about the allocation of services between social classes and groups. The urban concentration of resources, taken together with the development of workplace-based health services, reflects a concentration of provision in favour of the urban working class as opposed to the peasantry. There is, however, no hard evidence about health service usage by social class, or even, as we saw earlier, health outcomes by social class. Nor is the impact of any differential usage on health known.

The fact that polyclinics are, for example, open on Sundays for all services is a reflection of an overt policy to make services available in a way that fits the needs of working people. Against this, however, has to be set the existence of closed-access clinics and hospitals such as the colloquially termed *Kremlouka* for senior state and party officials. There is also a special polyclinic for scientists with a doctorate. Furthermore, the people who have privileged access to these facilities are the ones who are likely to be able to purchase pharmaceutical preparations, not otherwise readily available, in closed-access shops (*Zakryfie raspredileti*) (18).

The medical care services are for the most part free, with the exception of the paying polyclinics described earlier. Price is generally as a rationing device only in relation to drugs, dentures, spectacles, and surgical appliances, and there are the exemptions for the young and the disabled. About 30 per cent of the cost of drugs in 1970 was recoverable by charges, which compared with 50 per cent in Britian (18). How services that are free are actually rationed informally between competing consumers is again not known. Waiting lists and queues clearly operate, but there is no discussion of the impact of these informal *ad hoc* rationing devices on usage by class, age, or sex in the literature reviewed.

Sexual Divisions

There are two aspects to the impact of the Russian health service on women: first, the extent of and nature of female involvement in health service employment; and second, the degree to which the practice of medicine is sexist in its content. There is no doubt that women have been recruited to all ranks of the medical and nursing professions and to ancillary employment in the health services in far larger proportions than in equivalent Western health services. Ninety per cent of primary care physicians, 70 per cent of nonprofessional workers, and 50 per cent of managers and administrators are women. Eight-five per cent of the total health labour force is female (17). (It must be remembered that the status of even senior professional health service employees is lower in Russia than in the West.) Women moreover occupy a small proportion of the more senior posts. Only 20 per cent of medical professors are women. There is also some evidence that, as the status of doctors increases, the employment of women in this sphere is declining. Only 54 per cent of those now embarking on medical training are women, and men are admitted into medical studies with lower grades than women (21).

Evidence to allow any firm conclusions to be drawn about health care as it affects female consumers is far more patchy. The right to abortion has sometimes existed in Russia and at other times, especially from 1936 until the 1960s, has been expressly removed (26-28). The demographic needs of the country have, in later years, played the most important part in influencing this policy. Childbirth nearly always takes place in hospitals. In so far as medical care and allied child-care facilities have been developed with the extra express "needs" of women in mind (e g, their right to paid time off to nurse a sick child in hospital), it has been argued that they have been predicated on the twin requirements of women as workers and as mothers. The emphasis on the role of women in Russia as mothers, despite their role as workers, is well-known and, some would argue (29), was even present in the work of Alexandra Kollontai in the 1920s. Indeed, it would appear that there is resistance among some Russian women to the demands of this double burden, so that genetic and psychological counselling is now a service being provided in Moscow to encourage childbirth and happy marriage (21). Lapidus (23) concludes:

> Soviet sociological analyses show no sensitivity to the distinction between reproduction—a biological fact—and child rearing or housekeeping—socially learned roles whose relationship to biology is not given but requires explanation. The equation of femininity, maternity and domesticity is virtually universal, and the recognition that roles might be socially assigned rather than endowed by nature is largely absent.

Although Lapidus does point later to emerging Russian examples of critical literature that attempt to challenge this idea (literature that goes so far as to present the case for reduced working hours for men to overcome the sexual division of labour), it is more than likely that medical care texts, education, and practice in this area are predicated on conservative and antifeminist assumptions. A feminist analysis of Russian medical textbooks and medical practice is awaited.

It is possible now to go some way toward determining whether any or all of the 16 expectations of socialist or com-

Table 3

Extent to which Socialist and Communist Medical Care Expectations have been Realised in Existing Socialist Societies

Aspect of medical care policy[a]	Soviet Union	Russia, 1917-21	Hungary	Poland	(Solidarity's proposals)
1. Outcomes in terms of health	No[b]	No	No	No	(Soc)
2. Resources in terms of money	No	No	No	No	(Soc)
3. Resources in terms of person-power/facilities	Soc[b]	Soc	½ Soc	No	(Soc)
4. Priorities in terms of cure, care, prevention	No	Soc	No	No	(Soc/Com)[b]
5. Central control	Soc	Soc	Soc	Soc	(Soc/Com)
6. Local control	No	Soc	No	No	(Soc/Com)
7. Control of medical technology industry	½ Soc	½ Soc	½ Soc	½ Soc	(Soc/Com)
8. Agency of provision	Soc	Soc	Soc	Soc	(Soc/Com)
9. Status of doctors	Soc	Soc	Soc	Soc	(N.A.)[b]
10. Division of labour in medicine	No	No	No	No	(N.A.)
11. Nature of medical technology	No	No	No	No	(N.A.)
12. Status of patients	No	No	No	No	(Soc)
13. Region and class access	No	No	No	No	(Soc)
14. Rationing procedures	½ Soc	½ Soc	½ Soc	No	(Soc)
15. Sexual division in employment	Soc	Soc	Soc	Soc	(Soc)
16. Sexist content of medical practice	N.A.	N.A.	N.A.	N.A.	(N.A.)
Number of socialist expectations realised	6	8	5½	4½	(12)
Number of communist expectations realised	0	0	0	0	(5)

Notes: a See Table 1 for an explanation of criteria used in this table.

b Abbreviations: N.A., inadequate information available to enable judgement to the made; No, the socialist or communist expectation has not been realised; Soc, the socialist expectation has been realised; Soc/Com, the aspect of the service could be attributed to the realisation of either socialist or communist expectaion; ½ Soc, in some respects but not all, socialist expectation has been realised.

munist medical care delineated in Table 1 have been realised in the Soviet Union. The results are tabulated, along with those for the other countries to be reviewed in this article, in Table 2. For only five of these indicators is it felt appropriate to claim unqualified socialist achievement in contemporary Russia, with some indication of this in a further two. The five relate to the level of service provided (more doctors and beds), the nature of the central control of the health services (political), the agency of provision of medical care (state and workplace), the status of physicians (lower), and the position of women as employees of the service (large percentage). Even some of these have to be qualified, however, and, importantly, there is evidence of recent reversal. The status of doctors appears to be rising, the position of women in the profession declining, and the influence of medical expertise on central policy increasing.

It is, of course, possible to interpret even these five indicators of socialist medical care policy in a different light. It could be argued that these aspects of the service are compatible with, and necessary to, the needs of an exploitative state capitalist or state bureaucratic ruling class. Their apparently socialist character may conceal other reasons for their existence. A society in which the accumulation needs of the ruling group took precedence over the consumption needs of the working class would quite likely adopt tight central control over health planning, develop a workplace-based system of health care to ensure productivity, limit the independent influence of doctors (and be more successful at this than a capitalist ruling class operating in conditions of parliamentary democracy), and pull all women into the labour force. Indeed, such a state capitalist or state bureaucratic class, while adopting these measures, would equally not adopt many of those measures which we have associated with socialist medical care but which Russia does not exhibit. Such a class would not spend much on health, would not allow a democratic form of control over its institutions, would not encourage preventive measures which clashed with accumulation needs, and so on.

There is certainly no evidence of communist achievement in Russian medicine. Paradoxically, however, in the early days of Revolution there was some such evidence in, for example, the democratisation of the service at a local level. This development has long since been reversed. There was also an important stress earlier, at least in official pronouncements, on preventive medicine. Russian medical care, then provides us with very few concrete examples of our conception of ideal socialist medical care, and none of communist medical care.

One final cautionary note. It was stated earlier that in one particular way the table of expectations of socialist and communist medical care (Table 1) underemphasised the fundamental break with capitalist medicine that communist medicine entails. Communist medicine would involve itself with all aspects of social and productive life (working conditions, living conditions, eating habits, relationships) in so far as they affect health. This review of Soviet medical care has only noted such wider aspects in small ways, and then negatively, e g, in relation to the pattern of disease, which is similar to a capitalist one. It is most unlikely that all aspects of social life in the Soviet Union are evaluated in terms of their impact on health. The conclusions drawn therefore probably overemphasise the socialist nature of Soviet medical care policy.

Hungarian Medical Care Policy

I do not intend to provide as exhaustive a review of medical care services in Hungary or Poland. Both countries occupy similar positions as members of Comecon and are, as we shall see, modelled in many ways on the Soviet experience, with the important difference that they had this experience imposed on them after the Second World War.

There is a limited secondary literature available on the Hungarian health service. The main sources used here are Kaser (18), Ferge (30), and World Health Organisation (WHO) publications (31), which are supplemented by personal observation and by discussions with the small group of social analysts working within the Institute of Sociology in Budapest.

Health care is universally available in Hungary and largely free at the point of consumption; however, this universality was finally achieved only in 1975. The insurance basis of the scheme excluded about 15 per cent of country dwellers, in 1960, but this was reduced to about 1 per cent by 1972 as a result of the collectivisation of agriculture that took place between 1958 and 1962. Those excluded were helped on a means-tested basis with medical fees by the social aid committees of local councils. Before the Communist Party came to power after the war, a large proportion of the population was excluded from coverage—except for the 133 days of Hungarian Soviet Republic of Bela Kun in 1919, a genuinely Hungarian-born revolutionary workers' council type of government, under which medical care was in principle provided free to all. (This regime was crushed and replaced by an authoritarian right-wing regime.) The system of health care in Hungary is remarkably similar to that in Soviet Union in a large number of aspects, although there is less factory medicine, more private medicine, and no use of feldshers.

The overall conclusions about Hungarian medical care are summarised in Table 3. They are remarkably similar to those for the Soviet Union, except that whereas the socialist nature of aspects of Soviet health care was in some doubt because of non-availability of data, the availability of such data for Hungary defines these aspects more clearly as nonsocialist. This is particularly the cause in the matter of inequality of morbidity and mortality by social class. Hungary differs from the Soviet Union only in not ever having experienced the brief democratisation of the health services that Russia did in the early years of the Revolution.

Polish Medical Care Policy

The purpose of including Poland in the survey is to examine whether the working-class uprising led by Solidarity in 1980 and 1981 might have made medical care policy more genuinely socialist had it not been suppressed. In the discussion of Soviet and Hungarian medical care polices, little mention was made of the existence of any social forces struggling against the current form of provision. This was mainly because there are none at present having much impact. Poland, by contrast, provides us with a modern laboratory in which to test out the theory that working-class struggle against the existing form of socialism contains within it the seeds of a struggle for a more genuine type of democratic socialism. Clearly Solidarity drew into its wake all manner of ideas, themes, and groupings whose aims may not have been the better development of socialism; however, these counter-revolutionary tendencies were insignificant (32).

More interesting is whether the end result of the struggle for socialism by Solidarity might have led to a pluralistic conception of socialism in which self-managed enterprises became increasingly subject to market forces to the possible detriment of the overall socialist objective. For our purposes here, we focus on the demands and the forms of struggle that arose in the course of the life of Solidarity as far as medical care is concerned.

In almost all respects, Polish medical care policy is like that of the Soviet Union and Hungary. Data on health expenditure and medical care outcomes are included in Table 2. The number of doctors and hospital beds per head of population is small compared with both the other Eastern European countries studied and Western Europe. A full account of medical care policy in Poland can be found in Millard (33, 34) and Kaser (18). Millard (34) summarises his findings as follows:

> The health service has remained in a state of crisis, currently worsening as a result of mounting economic dislocation and political tension. Inadequate access to treatment, lack of continuity of care, poor quality of care, profound shortages of drugs and supplies, and the absence of preventive medicine are some of the manifestations of this crisis. Its main causes lie in the political weakness of the Ministry of Health, with consequent underfunding and the non-fulfilment of its plans. This situation is exacerbated by continuing organisational fragmentation, the neglect of primary care, existence of conflicting aims in health policy, and the dominance of an ideology of clinical specialism.

Rather than reviewing the Polish health service systematically in terms of the six questions and 16 criteria applied to the Soviet Union and Hungary, I shall concentrate on three aspects of policy which, taken together, indicate just how far the Polish health service had reached a state of crisis even worse than in other Eastern European countries surveyed. As we shall see later, it was precisely to these aspects of medical care policy that Solidarity paid most attention in its proposals for fundamental change in Polish society. The three aspects are the failure of the central planning system, the inequalities of access and corruption involved in access to decent health services, and the neglect of preventive medicine. The summary Table 3 does, however, evaluate the Polish medical care service in terms of all the criteria established earlier.

Crisis of Planning

Central planning of medical care and the implementation of the plan at the local level are in the hands of people placed in position through the system of *nomenklatura*. This party control of key positions extends as far as directors of important medical establishments (32). It was described in the critical report prepared by members of the Experience and Future Discussion Group (DiP) (35) in Warsaw in 1980 as "the personal merry-go-round," which enables a person listed to be appointed to a post conferring equivalent or even higher status after having bungled a previous job. The tendency in this situation is for particular aspects of plan fulfilment to be nominally achieved even by cheating or misrepresenting data, and for plans to be politically constructed to accommodate the interests of those engaged in their nominal fulfilment. Those whose jobs rest on paper fulfilments have no interest (unless pushed from below) in real fulfilment of plans, especially if, as we shall see later, their particular material interests are separately catered to. Only the democratic association of actual producers has a genuine interest in real plan fulfilment. These tendencies found expression in the Polish health services in terms of, for example, extending the stay of certain patients in hospital who no longer needed treatment to bring down the average cost of treatment of patients registered in that hospital to the norm in terms of cost per patient per day. Another example is that certain units did not provide access to diagnostic equipment for other units since they did not want to bear the cost. A further example is where construction enterprises concentrated on fulfilling easier components of their building programme than those represented by hospital construction. In so far as problems arising from these practices were identified by the Polish government, the solution was always seen in terms of improved administration rather than a political challenge to the structural aspects of the system that led to these practices (34).

Inequality of Access

The other side of this coin of bad management is that the managers can afford to be protected from its worst aspects by virtue of their privileged access to special clinics, or their ability to bribe their way past the access barriers of the state service. The following account drawn up by the Experience and Future Discussion Group (35) portrays this graphically:

> The state of the municipal and general hospitals is catastrophic: hospital wards are overcrowded, and cases of death among patients left in hospital corridors are not uncommon. Conditions created by chronic under-investment in health services fully warrant the assertion that access to treatment, hospitals, good doctors and medical equipment has become very difficult to obtain for the majority of the public. At the same time, the privileged few have special enclaves of luxury closed to people who do not belong to that group. A glaring example is the Ministry of Health clinic at Anin.
>
> Free health care for the vast majority of the population was once considered an achievement of People's Poland. But unfortunately, today the situation is completely different. Irregularities and deficiencies in health care have meant that medical treatment now requires money, quite a bit of money, as well as connections and pull. They have led to a distressing situation—if one does not bribe the nursing staff, one does not get decent attention, and if one does not bribe the doctor his care will be marginal. One now pays to get a bed in a hospital or an operation, to say nothing of medicine. Gradually the public is being divided into two categories: those who can afford proper medical care and those who cannot. If the situation does not improve substantially, the latter group will get even larger. If we are to compare incomes to the real costs of obtaining treatment by a specialist, we would probably find that at least half the public could not afford it today. This situation is alarming in the extreme.

It has been estimated (36) that the money allocated recently to create 120 places for the privileged elite at the Anin Clinic could have added 1,100 places for ordinary patients. This privileged access to special hospitals is not restricted to the managerial and bureaucratic elite, but is available also to paid officials of the Trade Union Central Committee. The TUCC has its own polytechnic "which has the advantage of referral for inpatient treatment to the Hospital of the Ministry of Internal Affairs" (18). No doubt this was one of the reasons for the rapid desertion from the official trade-union movement to Solidarity once it was formed.

Neglect of Preventive Medical Care

The lack of attention to preventive medicine in Poland involves the continuation of dangerous working processes, the

pollution of the atmosphere and rivers, and the production of carcinogenic foods. On the first point, a Solidarity spokesman (32) stated:

> Health and safety has been one of our greatest problems for many years. The health and safety representatives of the old unions were too close to management. The health and safety councils were worthless. Production had to be kept up at all costs.

Something of the consequences of this situation can be judged by an analysis of work days lost in Poland. In 1974, accidents, poisoning, occupational and nonoccupational injuries were reported to be the cause of 20 per cent of all days lost from work (18). On the question of atmospheric pollution, the Experience and Future Discussion Group (35) commented:

> Industrial enterprises emitted 3,439 million tons of gases [in 1977] into the atmosphere but trapped only 667,000 tons. If one adds to this that the majority of stack filters are almost always shut down because of the energy shortage, it must be concluded that Poland is one of the few countries in the world in which emission of industrial gases and particles into the air is not subject to control.

On the question of harmful foods, the same report (35) asserts that "25 per cent of the food products on sale have characteristics that are to some degree harmful to health, to say nothing of the many food products that are commonly adulterated by producers." Added to this must be the chronic alcoholism in Poland.

Table 3 summarises the position as far as the socialist status of its health services is concerned. Even allowing for the corrupt system of party *nomenklatura* to be classed as socialist cadre control, Poland scores still worse than its socialist neighbours. The second column indicates the extent to which the demands of and forms of struggle adopted by the Solidarity movement during its brief life, if implemented or adopted permanently, would have led to the health service becoming more genuinely socialist or even communist.

Solidarity and Medical Care Policy

Clearly a number of different political currents were present within the Solidarity movement. Those who propounded an explicit commitment to a Marxist analysis were probably in a minority, and argued with others who held a perspective of a pluralist socialism in which decentralised self-management enterprises operated to meet needs in the context of market demand. Nonetheless, it was impossible to perceive a fairly consistent line emerging from Solidarity on the question of health policy. This policy can be deduced from the reports of the Experience and Future Discussion Group (35), the text of the charter of Workers' Rights published in September 1979 (32), from the Gdansk agreement itself in August 1980 (37), and from *ad hoc* reports that emerged from Poland before the imposition of martial law in December 1981. These reports indicated that more resources should be found for health care and greater priority should be given to preventive medicine. This was usually expressed in the more limited terms of occupational safety, but a general concern for "the pillage and devastation of the natural environment" was present. In common with all other parts of the economy, the centralised planning system should be replaced by a system of workers' self-management. Medicine should be free (at least, and this reflects a certain sectionalism in the union's demands; to health service workers). Privileged access to medical care should be abolished and a fairer democratic rationing procedure for allocation to, for example, holiday homes, should be worked out. Early retirement (age 50 for women and 55 for men, or after 30 and 35 years' work, respectively) was a further health-related demand. Missing from the analysis of issues and list of demands was any real confrontation with the existing horizontal technical division of labour in medicine or with the form of technology and curative procedures used, although, in general transformed social relationships were at the heart of the methods and goals of Solidarity. The statements on the status of the medical profession were equivocal on this point. Also absent was any concern for the sexist content of medical practice. Indeed, spokespeople involved with the [illegible]n movement often expressed quite conservative views on the issues of central concern to Western socialist feminists. The Experience and Future Discussion Group (35), for example, concluded: "Family policy ought to be as solicitious of the material well being of the family as of its moral status, which requires better preparation for family life, safeguarding the stability of the family, and the efforts to control the mass spread of abortion." The October 1981 Solidarity conference resolved, in a section dealing with family policy, to urge the creation of decent living conditions for unmarried mothers in order to discourage abortions. However, by November 1981, one month before the demise of Solidarity, the *Guardian* (38) could report the existence of a Women's Forum in Warsaw which listed among its areas of concern the need to dispel stereotyped images and harmful myths about women in society, to ensure teaching about and improvement of birth control techniques, and to overcome the situation where arguments about abortion are "distinctly naive."

While a number of such general goals of medical care policy were emerging during the life of Solidarity, sectional demands were also being put forward of interest only, for example, to the workers in the health service. The demand that salaries of all health service workers be increased, and that additional payments be made for handling patients with infectious diseases, are two of these. The latter embodies the idea of hazard pay, which could be criticised from a socialist perspective.

Solidarity, in the form that gave rise to these demands, is now repressed. This, itself, is a commentary upon the nature of Polish socialism. However, even in its short life, and before it had time to work out a strategy for the successful implementation of workers' democracy in Poland, it accomplished some achievements in the health field. These included: the change of use of administrative buildings to health use, the sacking of certain incompetent and corrupt health officials, the closure of an aluminium plant in Silesia because of the effect it was having on the local environment, and the direct control by workers of the distribution of medical equipment in short supply.

Thus, while Millard (33), writing even before the demise of Solidarity, was partly correct in his interpretation that "there is no cause for optimism as the Poles struggle with the problems of years of under-funding, a cumbersome and inadequate planning system, a weak ministry, and a hierarchy of organisation and status which favour clinical specialism to the detriment of a widely conceived primary care sector unifying curative and preventive medicine", he was also partly wrong in not seeing the potential, albeit not realised, for the socialist transformation of the health service that was surely there in the ideas and programme of Solidarity.

Conclusions

This survey of medical care policy in existing socialist societies has led to one inescapable conclusion: In the economically advanced socialist societies of the Soviet Union and Eastern Europe there is very little evidence of socialist, let alone communist, forms of medical care policy. Mortality data from these countries, which are a measure of health policy as distinct from medical care policy, also compare unfavourably with data from equivalent capitalist countries.

It has been argued that the few characteristics of Eastern European medical care policy that have been described as socialist (e g, the state's role as major provider, the lower status of doctors, the employment of women in the health sector) may be attributed, for example, to the fact that these societies are dominated by a state bureaucratic or a state capitalist ruling class. Such a class is able to exercise more effective control over employment policies and levels of pay unhindered by the independent health trade unions and professions that are a factor in the West.

The accounts have not revealed a static picture of policy. There was evidence in the early days of the Russian Revolution of radical experiments in medical care policy. These seem to have given way over the years to a more orthodox capitalist-like view of what constitutes good medical care. Hungary and Poland never experienced such radical experiments. The possibility, once again for the moment repressed, of a new leap forward toward a more genuine socialist and even communist medical care and health policy in Poland has been described.

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Obstetrician on Trial

AFTER a 10-month suspension from all clinical and lecturing duties, obstetrician Wendy Savage is in the midst of a month-long inquiry into the management of five women during childbirth at the London Hospital. She is accused of professional incompetence, a charge usually reserved for alcoholic, drug dependent or similarly incompetent doctors.

The barrister representing the local health authority which brought the charges said the case was being presented as if it were a contest between the male establishment and the women's movement, and between the impersonal imposition of technology and a woman's freedom to decide how she gives brith. While he does not see the case in this light, the women's health movement in Britain is convinced it is precisely that.

Wendy Savage is the only obstetrician at the hospital who does home visiting for ante-natal care, and she involves women fully in decisions as to how they give birth. She is at odds with other doctors in the hospital over the politics of obstetric practice, and has fought to keep the abortion unit open when others would like to close it. There has been evidence during the inquiry that the head of obstetrics intended to try and oust her from the time he took over his job. The previous head of the department, who had set the principles and standards which Ms Savage also follows, also faced a great deal of hostility until he left.

What the local health authority probably did not expect was for the case to get such wide public attention. The inquiry has been held in public at Ms Savage's request, accompanied by constant media coverage and public discussion. Whatever the outcome, the practice of obstetrics is bound to be affected, as so many women have heard the arguments for women's choice in childbirth.

—Women Global Network on Reproductive Rights

Population Policy and Situation in China

A Note

malini karkal

Chinese population policy has had two major programmes to control births: the later-longer-fewer campaign launched in the early 1970s and the one-child family campaign introduced in 1979. The immediate demographic results of these campaigns have been undoubtedly impressive, surpassing the achievements of even Japan in terms of fertility reduction.

Even so, it is unlikely that the goal of limiting the country's population to 1.2 billion in the year 2000 set by the Chinese govrnment will be achieved. Opposition to the one-child family programme has been widespread, especially since the introduction of the 'responsibility system' changing the unit of economic management from the production team to the family. The one-child family norm has also been found to clash with traditional Chinese social and cultural beliefs and practices.

The author concludes by asking whether, by seeking to drastically restrict child-bearing, the Chinese government may not be undermining its ability to foster the kind of development that it now believes to be crucial for achieving the four modernisations.

THE Chinese population was estimated to be 410 million in 1840. By 1949, when the People's Republic of China was founded, the population had grown to 540 million, showing an annual net increase of 1.19 million, or an average annual growth rate of only 0.25 per cent. High birth rate accompanied by high death rate accounted for the low growth rate of population during this pre-liberation period.

After the establishment of the People's Republic, the country' population situation showed a dramatic change. The death rate which was well above 20 per thousand (28 per thousand in 1936) dropped to 10-18 per thousand in the 1950s and then came down further to a little over 7 per thousand by 1970. This change was brought about by improvement in sanitation, public health, medical care and consequent elimination of several infectious diseases.

An even more marked change was noticed in infant mortality. The infant mortality rate (IMR), which was well over 200 per 1,000 births during the pre-liberation period, came down to 70.9 by 1957. In 1970 the urban IMR was 11 to 13 and in the rural areas it was around 30.

The birth rate continued to be high and till 1970 it was above 33 per thousand. This high birth rate coupled with the low death rate resulted in rapidly growing population. In the six years between 1966 and 1971, the population of China increased by 120 million, a figure close to that of the growth during 1840 to 1949, a period of 109 years.

During the early years of the People's Republic from 1949 to 1952, a period considered to be one of economic restoration, the rise in the natural growth of popultion was regarded as an indication of prosperity and improvement in the standard of life of the people under socialism. During this period neither abortion nor sterilisation was permitted.

Unchecked population growth and its effects on planned economic development attracted the attention of leaders and scholars and that influenced the change in Chinese population policy. In August 1953 the Government Administration Council approved "regulation of contraception and induced abortion". However, at this time neither was any definite family planning programme formulated, nor was there any education of the people for planning and limitation of births.

Family Planning Policy

A specific family planning policy was formulated in the early 1960s. In 1962 the Central Committee of the Communist Party of China and the State Council stipulated the Instructions on Conscientious Advocacy of Family Planning. These advocated controlling of births. Family planning projects were undertake in cities. Production and distribution of contraceptives was systematically planned. The urban brith rate showed a definite decline as a result. However, preoccupation with the Cultural Revolution in 1966 halted all other work, including that of family planning, thus resulting in the earlier mentioned rapid growth in population during 1966-71.

In the early 1970s a vigorous family planning movement ws launched which had the motto "later, longer and fewer". The programme advocated later marriage, longer spacing between births and fewer children. The age at marriage was meant to be 25 for men and 23 for women in rural areas and 26 for men and 24 for women in urban areas—a five-year postponment from the 20 for men and 18 for women stipulated under the Marriage Law of the early 1950s. A spacing of at least four years between births was expected. And finally the expected number of children per couple was two.

In 1978 family planning work in China entered a new stage and in 1979 the "one couple, one child" policy was put forth. The new Constitution stipulated "the control of population quantity, the improvement of population quality, and the mutual adaptation of population and socio-economic development". In keeping with this objective it was officially announced that "the State promotes family planning so that popultion growth may adapt to the plans for economic and social development . . . Both husband and wife are obliged to practice family planning . . . Late marriage, and late childbirth should be encouraged". Simultaneously, close kin and persons with congenital and genetic diseases were prohibited from marriage.

China now has a goal of keeping the average rate of populaton growth to 1.2 million per annum till 2000 AD. It has a policy that advocates one child per couple, strict control of second births and resolute prevention of third birth. Strict action is expected against families not following this policy.

Impressive Results

Demographers point out that the achievements of the family planning programme of China are incomparable.

Upto 1970 Chinese women bore an average six children; by 1980 this number had dropped to 2.2. In 1981 and 1982 Chinese fertility showed a minor increase, but in 1984 the number of births per woman was 2. It is expected that Chinese fertility will show a further decline in the future. The previous world record holder in fertility decline, Japan, had shown a reduction of 'only' 56 per cent during a comparable period and the number of births per woman in Japan had come down from 4.5 in 1947 to 2 in 1957.

From the discussion so far it is seen that the Chinese population policy has had two large-scale programmes to control births, the later-longer-fewer campaign introduced in the early 1970s and the one-child campaign introduced in 1979. Obstacles to the implementation of the one-child family programme include the agricultural responsibility system which strengthened the motivation for large families by shifting responsibility for production from the collective to the household. Chinese culture also advocated "more sons, more blessings" and the Marriage Law of 1980 in effect lowered the age at marriage. Facing public resistance, in early 1984 the Party Central Committee reviewed its stand on fertility control and on 13th April issued a Central Document.

The Central Document reaffirmed the critical importance of family planning and re-emphasised the need to promote the one-child family in order to achieve the four modernisations, quadruple industrial and agricultural output, raise per capita income to $ 800, and hold the population at 1.2 billion by end of the century.

The immediate demographic results of the later-longer-fewer and the one-child campaigns are most readily measured by the recent rapid reduction in fertility. Bongaarts and Greenhalgh have analysed the effects of the two policies on the Chinese population. They state that as a result of the socio-economic development during the post-revolution period, the fertility of the Chinese population would have undoubtedly declined, though at a much lower rate than the observed one. These authors observed that replacement fertility (family size of two children) would have been achieved at the beginning of 21st century, instead of in the early 1980s as actually observed because of government efforts to reduce fertility.

Bongaarts and Greenhalgh estimated that without the later-longer-fewer campaign of the 1970s, the Chinese population would have growth from 0.818 billion in 1970 to 1.58 billion in 2000 and 2.41 billion in 2050. In contrast, the later-longer-fewer policy, by itself, would bring about a popultion size of 1.28 billion in 2000 and 1.81 billion in the year 2050.

Thus the implementation of the later-longer-fewer policy still leaves an eventual population size well in excess of 1.2 billion in the year 2000—the goal stipulated by the Chinese leadership. The one-child campaign is expected to solve this problem. A completely successful implementation of this policy would virtually stop growth of population. The population would reach 1.04 billion in 2000, 1.06 billion in 2025, and then fall to 917 million in 2050.

Opposition to One-Child Family Norm

Experience for the five-year period from 1980 to 1984, the period after launching of the one-child family policy, shows that in reality the population size is higher than expected. It was observed that the average number of children per woman was 2.3 and not 1. This difference was in part an effect of a change in the timing of first births that resulted from the enactment of the new Marriage Law of 1980. Though the law had raised the legal age of marriage as fixed by the Marriage Law of the early 1950s, from 18 to 20 for girls and from 20 to 22 for boys, in effect the new legal age of marriage was lower than that stipulated under the later-longer-fewer campaign. Thus the passing of the law has lowered the age of marriage in reality.

Another problem in implementation of the policy of the one-child family has been the decentralisation of the administrative responsibility for enforcing it. Individual localities are responsible for propagating and implementing the regulations. Top-down pressures for stricter enforcement combined with bottom-up demands for more children have resulted in several lacunae in the implementation of the policy. Another problem in the implementation of the policy is related to the economic incentives, such as wage supplements and priority in housing, schooling, medical care, etc. These costs are expected to be borne by the local authorities. Where the local authorities are rich, many couples sign up and as a result eat into the local funds.

Another difficulty has been that local cadres have many incentives to manipulate figures to match the officially prescribed quota whereas the higher level cadres have few incentives to uncover these errors. As a result, the data deficiencies created at the bottom of the administrative hierarchy are passed upwards, multiplying as they go up.

Also, official policies pronounced over time have had conflicting effects. The responsibility system introduced in 1980-82 shifted the unit of management and accounting from the production team (a unit of 20 to 30 households) to the family. This system also reduced the common funds of teams and increased the private wealth of families. The economic value of children has been increased and there is a strong motivation for larger families. Encouragement to small-scale enterprises and sideline activities has also motivated larger families. In the light of improved prosperity, the incentives for the one-child family have become ineffective.

In the light of the experience so far, UN estimates suggest that on an average the Chinese family is more likely to have 1.9 children by 1990-95 instead of the officially prescribed 1. The Chinese population, according to UN projections, is therefore estimated to be 1.23 billion by 2000 and 1.43 billion by 2025. These figures are higher than the target of 1.2 billion for 2000. Further, the Chinese population is expected to continue to grow after 2025, against the government's goal of a decline to 917 million by 2050.

Social and Cultural Consequences

Sociologists predict many detrimental effects of the one-child policy in terms of its effects on intra-familial relations, gender inequality and the psychological characteristics of only children. They also opine that by fundamentally altering the basic social and economic unit, the one-child policy may tear the fabric of Chinese society in a way that uproots people's sense of their place in the world and the family's ability to take care of the old. These problems have already begun to emerge and are likely to grow more severe if the one-child policy is successfully implemented.

In the accepted system the unit of family is concerned with short-term tasks of production and consumption and the line

is concerned with long-term matters of inheritance, succession and inter-generational countinuity. An individual's place in the descent line gives him a sense of immortality and meaning to his existence. Among the basic duties of an individual to his family is to produce a son for the continuance of the family line. Since the sex-ratio at birth is around 105 boys to 100 girls, the one-child family policy will leave almost half the couples without a son and prevent the men from performing their duties to their ancestores, thereby uprooting their sense of the continuity and purpose of life. The resistance of the Chinese population to the one-child family is noticeable everywhere. Cases of famale infanticide and physical abuse of mothers who give birth to daughters have also been widely reported.

The Chinese Constitution makes its obligatory for daughters to support their parents. Acceptance of this change at the cultural level is obviously not easy. Even in families with sons, the benefits for only-children are provided by the State or the collective work unit, rather than the parents. Thus the work units supplant parents as providers and the earlier prevalent system of the mutual obligations of generations is disturbed. This change is bound to affect the old-age support which, under the traditional system, is provided by the family.

Since late 1978 China has moved to expand the role of the private sector, not only in agriculture but also in commerce, services and industry. Since the family has proved to be the most effective production unit in such a set-up, the one-child family policy will work against the success of the role of the private sector. A family with one son is too small to be efficient and that with one daughter will face restrictions on vertical extension.

In short, by drastically restricting child-bearing, China may be limiting its productive capacity and undermining its ability to foster the kind of development that it now believes is crucial for achieving the four modernisations.

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Health Care in Mozambique

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Independent Mozambique, despite constant threats to its very existence and three severe droughts in ten years has succeeded in evolving a framework for providing rational health care. This article examines developments in health care within the revolutionary context of the government's avowed programme for constructing a socialist society.

MOZAMBIQUE is a country of five million on the south eastern coast of Africa. It became independent in 1975 after a prolonged ten-year armed struggle against the five centuries old colonial rule of Portugal. Spearheading the liberation movement was the Frente de Libertacao de Mocambique (FRELIMO), the vanguard party of the alliance between the workers and peasants. The armed struggle can be said to have begun in September 1964 with 48 guerilla fighters in four provinces of northern Mozambique. Portuguese troops numbered 70,000, half of them European. In the 10-year war, over 2,000 FRELIMO guerillas were killed.

The constitution of the Republic of Mozambique and the government programme envisage the construction of a socialist society. Within this revolutionary context and as a part of the programme of reconstruction, Mozambique has made radical changes in its health care structure which has meant a reprioritisation of health care, the introduction of new types of health personnel; more appropriate methods of education; and a fundamental restructuring of the pharmaceuticals sector. It is the last, Mozambique's drug policy which was elicited much interest and attention by its success in bringing down the prices of drugs and making them available to the largest numbers. However, none of these have been isolated programmes—they have been proposed and implemented as an integral part of a comprehensive programme of nation-building derived from a larger political perspective of a socialist society. Also, it seems obvious that these programmes, especially relating to health care, have evolved out of the years of struggles and that experience of FRELIMO in the liberated zones has informed social policy after independence.

Before examining the health care programme in independent Mozambique, it is useful to take brief note of the political and economic developments in the country and the external pressures and internal constraints which have influenced the course of development.

In September 1975, the first FRELIMO-controlled parliament, albeit appointed by the Portuguese, was installed as the transitional government. However, even as it began to find its feet, in December it had to focus its energies on putting down an attempt by a section of the army to bring down the government. In the aftermath, President Samora Machel warned against the tendency of confusing "popular victory with permission to satisfy egotistical desires and considering luxury and depravity as a right by dint of. . . participation in the struggle."

In July 1976, the Mozambique Council of Ministers met for the first time and outlined the country's development policy and its main priorities. These were directed not at "reforming the country's old structures but at replacing them with a "new society for the benefit of the masses". The statement said: ". . . radical change (was envisaged) to place the state at the service of the masses of workers and peasants." Priority was to be given to rural areas—and national defence was to be closely linked to nation-building and resources were to be mobilised for setting up "communal villages". As regards religion, the masses would be protected against any pressure to practise religion. "The Catholic church is a reactionary organisation giving rise to counter revolutionary activities in people's democracies." Efforts were instituted to transform the FRELIMO forces into a regular army and to reorganise the police force.

One of the major features of the development policy was a series of nationalisation measures—the takeover of private schools and colleges, hospitals, clinics and all private doctors' and lawyers' practices. The export of cashew nuts—45 per cent of world output—was placed under government control. All buildings and land were taken over. "Certain individuals" were to work for three years without payment. Everyone had to pay one day's salary each month into a "solidarity bank" to be used to help "oppressed people of the world", particularly Nambia, Rhodesia and South Africa. With the announcement of nationalisation measures however, relations with Portugal deteriorated and agreements of co-operation between the two countries remained suspended.

While 60,000 Mozambique refugees who had fled to Tanzania were invited to return, new citizenship legislation denied residence to any foreigner who had satyed outside the country for more than 90 days. Thousands of Portugese who had fled the country after racial clashes in 1974 lost the right to return.

The liberation of Mozambique "radically altered the balance of forces in favour of African nationalists." There was an intensification of guerilla warfare against the White minority regime in Rhodesia by African nationals based in Mozambique. The border between the two countries was closed and Mozambique, following UN imposed sanctions including the confiscation of Rhodesian property in Mozambique. This resulted in a closure of Rhodesia's rail links with the ports Beira and Maputo. It also cut Rhodesia's food supplies to Mozambique. Mozambique appealed to the UN Security Council for an aid of $ 1,000,000 a year to meet the financial consequences of the decision to apply sanctions against Rhodesia. Sweden increased its aid to Mozambique by 40 per cent. UK supported the decision; Uganda and Zambia saw Mozambique's decision as an "act of courage and commitment to the cause of peace and justice for all mankind" and urged support for Mozambique until victory was won by Zimbabwe. Mozambique's losses in customs and port dues were estimated at £ 17,000,000 a year and about 86,000 Mozambians, it was feared, might be prevented from repatriating their earnings from Rhodesia.

By 1983 Mozambique was reeling under the worst ever drought in 50 years. Moreover, the tactics of the Mozambique National Resistance supported and funded by South Africa, of attacking crucial economic targets, of kidnapping foreign technicians and attacking health centres were aimed at under-

mining Mozambique's effort at creating badly-needed development facilities. Harvests were disrupted and in one district all the seven communal villages, three agricultural co-operatives and state farms were destroyed. Black marketing in food and other consumer essential were rampant and there was a rise in crime rates. Death penalty which had been abolished in 1979 was reinstated as was public flogging for robbers, rapists and black marketers, whereas the previous emphasis was on clemency. In early 1983, chloera killed 250 people and afflicted 7,000 in drought affected regions.

In April 1983 the Fourth Congress of the FRELIMO party set out some immediate goals which necessitated a change in priorities in certain areas. The Congress recognised that combating hunger was the immediate priority. It outlined agrarian reforms—small family farms, which had thus far received little help were to be supported. The development of large farms, and of agriculture co-operatives was seen as a medium-term objective. State farms were to be reorganised and consolidated instead of expanded in the following five years. Existing machinery was to be put to better use. Resources were to be diverted from large projects in industry and agriculture to small projects which would yield immediate returns. In the party politburo the emphasis shifted from military personnel to peasants and those who had been active in the liberation struggle. President Machel acknowledged that Mozambique had "erraneously developed a hostile attitude to private enterprise". A new investment code was drawn up in 1984 permitting transfer of profits and tax exemptions, etc, in certain sectors, but not in sectors such as petroleum. No private unit has been allowed to be set up in the pharmaceutical sector either.

By 1984 over 5,000,000 people had been affected by drought. Agricultural production was cut by 80 per cent in the country's 10 provinces. Lakhs of tonnes of cereals and cassava, a staple food, were lost. According to an FAO report, 100,000 died of starvation. Mozambique signed an agreement with South Africa—in return for South Africa withdrawing support to the guerilla forces of the Mozambique National Resistance, Mozambique would expel ANC activists. However, MNR continues to receive aid and clandestine support from wealthy Portugese in South Africa who number over 600,000. The MNR is now said to be operating in all the country's provinces. Only the northern most province, the cradle and stronghold of FRELIMO is free from such activity. The RNM is said to have 8,000 to 17,000 men.

Food aid has come in from East European countries as well as from USSR, Zimbabwe etc. However, Mozambique has never been self-sufficient in food. The country's annual cereal requirement is around 515,000 tonnes; local production is only 180,000 tonnes. It is against a background of these developments of the last ten years that we must view changes in health status and health care.

State of Health Care in Mozambique before Independence

Health service before independence had the characteristic features of health care under colonialism. There was economic, racial and geographic diserimination. Health facilities were predominantly urban and in White settler areas—over ⅓rds of the doctors in 1974 were in Maputo. Auxiliary diagnostic facilities were available only in three cities. Private health care was available only to a privileged urban bourgeoisie. Even within the public health care system fees were charged for services as the basis of race. Social discrimination was practised in all hospitals and services were separate to Blacks and Whites. With the emphasis on lucrative private practice, curative medicine developed to the detriment of promotive and preventive health care. Major public health programmes were taken up only sporadically or under pressure from the international community.

Typically, as elsewhere, the country was purposely kept underdeveloped—people had little access to educational or other facilities. Mozambicans were a source of cheap labour, especially in mines in other countries. Police and military authorities were used to repress progressive ideas and movements.

Medical Training

The first medical school was set up in 1963 and the first doctors graduated in 1969—the students being drawn mostly from the elite. Of 122 graduates before independence only two ever joined public service. The training which was for seven years was archaic and outmoded even by existing European standards with "excessive theorisation" and lack of practical training. What little there was of "practical" training comprised thoeretical demonstrations in the presence of patients. Basic laboratory methods were not taught, but diagnosis according to the trainers, depended upon sophisticated laboratory methods.

Pharmaceutical Industry

Mozambique had no pharmaceutical industry of its own—all drugs were imported. The six supplying countries were Portugal, Switzerland, West Germany, South Africa, France and UK. Over-invoicing, monopolies for supply of certain drugs, etc, were typically rampant. Most TNC subsidiaries showed large deficits. The government drug budget was $ US 1 milion in 1974 for a population of 9 million—average of US $ 0.11 per capita. Any drug regulation was virtually non-existent. Almost the only drug ever banned from being imported was thalidomide. Most drugs were available over the counter irrespective of their potential hazard.

Health Care in the 'Liberated Zones'

Even at the outset when the armed struggle for liberation began in 1964, the health of the fighting people was a major concern. First aid assistants and rural medical aides were trained and supported by one doctor and a few nurses. As the struggle developed into a 'popular democratic revolutionary' movement the colonial administration collapsed in many places. Invariably, the destruction of health services accompanied the withdrawing of colonial authority.

In these 'liberated zones' FRELIMO took over the responsibility of administration and building new structures to govern the areas. One of the first such services the FRELIMO was compelled to set up were health care facilities. In the beginning the liberated zones were divided into smaller administrative units. In each geographical administrative unit were built health centres and hospitals using locally available materials. A hierarchical network of health units was created. These health facilities became particular targets of attack. These units had to be built in the forests and even there they

were constantly under threat of air attacks which included napalm bombing. Education and health facilities became priority areas of concern. Ambulatory services were also provided in remote villages and also so as to protect the health structures from being detected by the colonial army—which would have been likely if obviously ill people had had to move over distances to come to hospitals.

However, the lack of adequate personnel for providing health care led to innovations and the training of local people. Political and military training of course preceded health training. Neither the militants nor any other category of worker received salaries at this stage.

Attached to these larger health units was a farm where land was worked and food produced collectively by everyone. These hospital farms played a very important role in defining a more realistic concept of health—health was associated not just with the curative process but with production and proper distribution of the right kinds of food.

Once the liberation movement gained strength and the colonial structures began to break down rapidly, constraints regarding resources and personnel became more acute. It was at this point that it was acknowledged that the preventive measures would considerably ease the pressure on curative facilities which was becoming acute due to lack of resources. Military personnel began to be trained as 'sanitary agents' and health educators. Over a million people—almost the entire population of the liberated zones—are claimed to have been immunised against small pox and cholera in this period.

Post Independence Development

The experience gained during these years was attempted to be generalised even during the phase of the transitional government. In the health sphere this was a period of confrontation in many ways between the health workers trained in the liberated zones and the university trained medical personnel. The concentration of sophisticated equipment and the razzled dazzle of medical technology often undermined the confidence of the 'new' health personnel. The attitude of the university trained doctors was both openly challenging and subversive. This group, both nationals and foreigners with its technical expertise and its class background played a significanrly detrimental role.

The decision to nationalise health services was therefore an urgent necessity, especially if access to health services were to be open to all without class and race distinction. Secondly, these measures were necessary to stop "misfortune and diseases" from being "motives for exploitation". And thirdly, it was only with this decision that it became possible to "ensure the reprioritisation within health care" and ensure that the curative component of health did not mask the relevance of the socio-economic roots of ill-health of disease. Most importantly, the role played by doctors and the medical establishment was becoming a threat to the liberation movement. In nationalising the services, president Machel aptly described doctors as "social parasites" and "traitors" who dispensed medicines "like beer from a bar".

An immediate consequence of this nationalisation was an exodus of doctors from Mozambique. Only 60 doctors remained in the country by October 1975 together with about a 100 medical students and teams from North Korea, China and Bulgaria. Two years before there had been 300 doctors, almost all White. Of the teaching staff of 96 in 1973 only 14 remained—of these only five opted for Mozambican citizenship.

In 1977 a new National Health Service (NHS) was set up and a new health policy defined and evolved certain priorities:

Preventive medicine and environmental sanitation and primary health care:

Extending health coverage, the top priority being given to "communal villages" which were being constructed incorporating agricultural co-operatives, medical care, family planning, occupational health and school health programmes.

Strategies for controlling major epidemics—TB, leprosy, schistosomiasis, sleeping sickness, blindness, intestinal parasitosis with the diagnostic and prophylactic measures defined.

Evolving a health team approach with new categories of personnel.

And most importantly, ensuring and encouraging community participation.

In 1977, to provide a basis for changes in the health structure and the redefining of personnel a pedagogical seminar was held with doctors who had been exposed to health problems in the liberated zones. It was decided that the doctors of the future were to be able to organise, lead and train a health team and act as a 'health agents' to transmit health concepts to people. A new curricula was designed to suit the purpose. A community orientation in even those subjects which had hitherto had a clinical approach was attempted. However, the leader of the health team, it was proposed, would be a 'graduate in health services' and not a 'doctor'. Specialisation would be after 2-5 years in primary health care work at the community level under supervision. He/she would then be called 'doctor in health sciences'. This concept of the 'doctor' as the leader of the health team has undergone some change. By 1981 attempts were being made to 'democratise' the decision as to who should lead the team. Also, there was provision now for horizontal mobility. But these changes aimed at diluting the rigidity of the hierarchies in the health system were being opposed vigorously by doctors.

There were other problems in bringing about such radical changes in the concepts of medical education. There was only one training school for doctors and this could not be closed. Secondly, any change in the medical education curriculum had to be such that the final qualifications would be recognised by the world medical community, as well as sceptical elements within the country.

Drugs for All

By 1978 a new pharmaceutical policy had also been adopted which has been resoundingly successful. It was directed at reinforcing national economic independence; a new pharmaceutical regulatory system was established to check the flow of drugs into the country; the NHS was to develop adequate structures for the management of drugs.

A new Pharmaceutical Service was created in 1975 under the ministry of health. A Theraputics Expert Committee (CTTE) was established as well as a central agency for medicines and medical supplies. A new law was passed compelling drug agencies to re-register their products, and firms were told that the government wished to see as few products as possible in the market. However, their compliance was entirely voluntary. In the months that followed the 'request', the number of products in the market fell from 13,000 to

2,600. It also earned the government US $ 70,000 through registration fees.

By December 1976 the CTTE had produced a new national formulary 10 months after the WHO's first report on Essential Drugs. It listed 640 items comprising 430 therapeutic substances, 20 diagnostic agents and 14 dressings. A second revision of the formulary was published in 1980 which contains only 502 items.

Prescription rules were also established, one of these being that all prescriptions were to use generic names. In 1981 a study of 4,000 prescriptions showed that 33 per cent were in accordance with the National Formulary rules. Compliance was lowest in the casualty department of the reputed Central Hospital in Maputo where there are health personnel from various countries who are not familiar with generic names.

A state corporation MEDIMOC has also been established for drug procurement by the merging of five private import companies which had been abandoned by their foreign owners. By 1981 60 per cent of the drug procurement for NHS was being handled by MEDIMOC. The new drug tender system had also accounted for a 41 per cent savings on drug purchases. In 1977 a state corporation for the retail sales of drug was also formed to ensure availability of quality drugs.

The creation of a national pharmaceutical industry is one of the objectives decided upon at the Third congress of FRELIMO in 1977. Preparatory studies are under way and a small ORS plant has been set up. The government pharmaceutical budget has gone up from US $ one million in 1974 to $ 12.5 million in 1982 accounting for 20.1 per cent of health budget from 8.1 per cent in 1974.

Conclusion

Given the fundamental conviction that everyone has a right to health, the actual realisation of the political nature of the skewed distribution of health facilities came about through FRELIMO's experience in liberated zones. Not only were health facilities the targets of the colonial army, the medical establishment's support to the government acted to strengthen anti-people measures. The denial of health care to people on the basis of class, race or sex was not a matter of chance but a deliberate measure by the colonial rulers to suppress and undermine the development of the revolutionary potential of the masses. Nationalisation of health services was an important act not only because it would ensure that health care would be more accessible to people but because the measure effectively nullified the subversive nature of a discriminatory health system and deflated the potential influence the medical establishment could wield over the masses.

However, implementing changes that strike at the social status of doctors has not been easy. Although there does not appear to be any reporting on this aspect, there is reason to believe that dissatisfaction among doctors regarding their remuneration and social status has been rising. The idea that a doctor may be just one of a health team and not its leader will take a long time to be accepted. Another feature of the health system which is not much discussed appears to be the notion of community participation. While the 'health agent' is selected by the 'community', it is not clear as to what is the extent of their participation. Mozambique's 12 million people speak 12 languages and 21 dialects and also belong to numerous different tribal groups. In such a situation only a determined effort at decentralisation can ensure that community participation will be a fact rather than a notion. Moreover, the persistent activities of the MNR have made this even more difficult to achieve.

There is also some indication that the emphasis on primary health care and the balancing of resources between it and more sophisticated hospital oriented services may be under some strain. For instance, the incidence of heart diseases which often necessitates hospital care and even surgical measures, may be rather high. In a health census of six villages the incidence of hypertension was 33 per cent in the coastal villages and 25 per cent inland. The 1,800-bed hospital in Maputo has highly sophisticated cardiac service with one of the three theatres being reserved exclusively for it. Whether this is a genuine response to health needs or a matter of 'prestige', especially considering the close association of some of these surgeons with the famous South African heart surgeons is not clear.

Another area about which little is said is the status and use of local/tribal health practices. Although some of the local doctors have been retrained as health agents, this does not mean that local practices, if they have survived at all, have been integrated. In fact, this is very unlikely. The emphasis has been on using modern preventive and promotive measures—immunisation, nutritional inputs (which has hardly got off the ground) popularising the use of latrines, use of 'clean' water, etc.

It is Mozambique's drug policy which is an unqualified success. Prices of drugs have fallen since 1977; they are being made available to an increasing proportion of the population and there has been a drastic curtailment of unnecessary and toxic drugs. The policy is under periodic review and revision. But the development of an indigenous pharmaceutical industry will bring other problems—of imports of machinery, raw materials, of wages and ultimately, of cost of drugs. These are, however, not insurmountable problems.

Even ten years after independence Mozambique has to cope with constant threats to its very existence as a state necessitating heavy military expenditure it can ill afford. It is dependent on imports of grain to feed its drought-struck population. Despite all this, it has so far succeeded in establishing a framework for the provision of rational health care to its population.

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Homoeopathy

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Homeopathy, the author contends, goes well with the holistic health movement and holds the promise of making necessary medicines available to all.

HOMOEOPATHY is today's medicine because it offers a way out from the situation the people in need of medicine face: One of these problems is the cost. Treatment has become terribly costly, forcing an overwhelming majority of people to suffer helplessly or succumb to diseases. Homoeopathic treatment is much cheaper. The manufacture of these drugs does not involve the kind of technology which would lead to monopoly and consequently to cost escalation. Besides, the action of homoeopathic drugs does not depend on the quantity of drugs administered but on potency and higher the potency, the less there is of the medicinal matter in it. And one of its basic principles is to keep the dose of the medicine to the minimum.

Homoeopaths prescribe drugs on totality of symptoms. This saves the ordeal of going through surgical operations in most cases. Its principles for treating a group of symptoms have been tried and tested in the last 175 years and its structure is such that new information can continually be incorporated into the existing body of knowledge. And the logic behind these principles is such that it avoids logical contradictions of other systems of treatment by elevating the concepts of health, disease and cure to a level where these contradictions do not operate.

In all societies and in all ages, human beings face concrete problems and is oppressed by them. Consequently, they endeavour to solve them and to understand them. The understanding of the problem is crucially dependant on the tools that they possess including the power of abstraction. Both these tools and power of abstraction crucially depend on the state of development of the society. Within this limitation, there is yet another limitation: that of the class nature of the problems and following from it the class nature of the solution advanced. If the problem of study stems from the class needs of the ruling class and the solution to it does not question the beliefs and ideas justifying the existence and the privileges of the ruling class, the individual studying these problems and advancing solutions get support, recognition and glory from the ruling class. If these bases are questioned, such individuals incur the wrath of the ruling classes and are dealt with accordingly. If the questions studied and the answers advanced are such as do not interest the ruling classes, howsoever beneficial they may be to the advancement of the society as a whole, those are simply ignored till a class comes to recognise their usefulness, either as the ruling class of the day or as a class in struggle against the ruling class for supremacy and power. It goes without saying that societies whose ruling class in certain periods of time either suppresses such studies and solutions of the problems or ignores them is condemned to stagnate and degenerate. Historically, we see two types of development that take place in societies condemned in this way, depending upon the level of development of the society in question. If because of the development, such a class has emerged in the society which could withstand persecution, the task of developing society drives many individuals to take up such study notwithstanding the persecutions. The ruling class is then replaced by another ruling class which enables the society to develop further. If, again because of the level of development of the society, such a class has not emerged which could withstand persecution, it leads to various kinds of distortions in the existing body of knowledge of the society and to an ever increasing difficulty in procuring the means of life from surroundings, to maintain its existence and that of the ruling class. If the natural surrounding of such a society is bountiful, it manages to keep itself alive despite its stagnation and consequent distortions in its consciousness; if not, such societies must perish leaving the marks of their existence on history.

An individual's response to the problems faced has elements of both universality and particularity. Universality, because the basic problem sought to be solved and the tools of enquiry at a specific stage of development are universal. Particularly, because the answers to these problems are in terms of what is available either from nature or from what is inherited from previous generations. Hence the element of particularity is to a minimum level in primitive societies. It is for this reason that different societies existing at different points of time and space and drawing the necessary means of life in a similar method and ways tend to enquire into the problems they face in similar ways and arrive at similar answers. At a certain point of time and space, if there is a change in a society's methods and ways of procuring the necessary means of life, its ideas about the problem it faces, its tools of enquiry and the answers it advances for its solution too change, in the main. But societies where this change has not taken place continue to live in the old ways with their old ideas.

Health and freedom from illness is one of the most basic human needs. Primitive response to this need is universally magical. It could not but be so. For it was a long time before human societies could even pose the problem properly and did not possess even the elementary tools to enquire into the problem. Later, as experience accumulated abstractions of experience as beliefs and theories were put forward. Hence we see the sprouting of different systems of treatment in different societies. Some of these systems have survived to this day although they could not remain unaffected by the development of science and logic either in their own society or in other societies they came in contact with.

Besides, the human endeavour to fulfill health needs and discover cures for illness directs enquiries into various aspects of the problem including the human body, cause of disease, effects of drugs, hygiene, etc. The answers to all these questions must be limited by the tools available and must at the same time reflect current beliefs including taboos. Besides, the less developed the tools, the greater the grip of beliefs and taboos. On the other hand, the greater the stakes behind these beliefs and taboos, the greater the force with which they are defended. Hence any of the systems of treatment needs to be evaluated for its objectivity, not on the basis of its own 'theories' and beliefs, not on particulars, but on the basis

of science, on the basis of what is abstracted from the particulars, the universal.

If we look into the systems of treatment practised in ancient civilisations like the one in India (Ayurveda), China and Greece we find that each identifies the cause of disease differently. While Ayurveda identifies *vayu, pitta,* and *kapha* as three doshas, a disordered state of which afflicts the body with diseases of various kinds, the Chinese system identifies the balance two opposing principles—the *yang* and the *ying*—and an imbalance, therefore, meant diseases. Similarly the Greeks believed that when the four humours—blood, phlegm, yellow bile and black bile—were in balance, there was a state of health; when not, diseases resulted. Rome, after conquering Greece, based its system on Greek system but Roman physicians developed the system immensely.

Even a cursory glance at their history reveals that the inner vitality of these systems which propelled them to acquire new experience and propound theories is subsequently plagued. The loss of vitality of these systems reflects the loss of vitality of the civilisation and societies which gave rise to these systems. A period of stagnation followed. The reason is simple: the then ruling class in all these societies had become parasitical in course of time and therefore its relation with scientific enquiry had became antagonistic. Consequently, scientific enquiry was discouraged and scientists were persecuted. This is brilliantly underlined by D. P. Chattopadhyaya in his works (Chattopadhyaya, 1976, 1977).

European historiography describes the period 600–1400 A.D. as the Dark Ages of medicine. Dissection of the human body was prohibited. "The history of Europe in those days is the history of typhus and plague, of rats, lice and men... The lack of scientific knowledge promoted superstition in medicine. Saints were invoked for the curing of disease—St. Clare for sore eyes, St. Sebastian for plague, St. Appolonia for toothache, etc (Nelson, 1927).

Science having been tabooed elsewhere, Arabia came forward to take science and medicine to new heights. They preserved Greco-Roman wisdom, further developed it and enriched it with new drugs. Their contribution in the field of pharmacology is great. The system of medicine they gave rise to is known popularly as Unani system. But later, their civilisation and along with it their medicine fell into a period of stagnation much as in other societies and for mostly the same reasons.

Thanks to the maturing of merchant and manufacturing capital in some societies, not only the persecution of scientists came to an end but they began to receive state encouragement. Individuals came forward in many fields of activities including science, logic, medicine and so on, who could be compared with Columbus in their fields. Beginning with Fractorius and Paracelsus, a galaxy of physicians shed new light on various aspects of the human body and diseases. Newton and Bacon widened the horizon of human thought to an unprecedented level. Further development of knowledge came to depend crucially on the development of a logic and based on it the classification of the existing knowledge. In the field of zoology, it was taken up by Cuvier and in the field of pathology by his contemporary, Hahnemann, the founder of homoeopathic system of treatment. But Hahnemann did much more than attempt to classify diseases—he developed a logic which put forward different concepts in relation to diseases, cause of the diseases, medicines and the way medicines act and advanced several hypotheses which were later substantiated by different branches of science.

In Hahnemann's days therapeutic practice was appaling. Stuart Close says:

> Ideas which now seem absurd were then matters of the most serious moment, and in their practical working out often became tragical. Blood letting, the outgrowth of one of these false theories affords a good example. The celebrated Bouvard, physician to Louis XIII, ordered his royal patient forty seven bleedings, two hundred and fifteen emptics or purgatives and three hundred and twelve clysters during the period of one year ... the death of our own George Washington was undoubtedly caused by the repeated blood-letting to which he was subjected. He was almost completely exsanguinated (Close, 1979, pp 28-29).

Nature of Scientific Enquiry

Science studies nature in general and within this universality, the different aspects of nature, the particularities. All scientific enquiry reflects nature more deeply, truly and completely. But what exists in nature is matter in motion. Hence what science studies is different forms of matter in motion, scientific judgements and concepts relate to it and therefore are needed to be placed at different levels.

To illustrate the point: The simplest form of motion is change of place—mechanical motion. But there is no such thing as motion of a single body although motion towards a centre common to many bodies can be treated as such. But as soon as a single body moves in a direction other than towards the centre, the laws of falling to which it was subject, undergo modifications:-

a. As laws of trajectories and lead to reciprocal motion of several bodies, planetary motion, equilibrium in motion itself. But the real result of this kind of motion is ultimately the contact of moving bodies—they fall into one another.

b. As laws of bodies in contact—ordinary mechanics, livers, inclined plane, etc. But the effect of the contact is not exhausted by these. Contact is manifested directly in two forms: friction and impact. Both have the property that at certain degree of intensity and under certain conditions, they produce new effects like heat, sound, electricity... no longer mechanical effects.

c. As science of these forms of motion—physics. It establishes the fact that under certain conditions, they pass into one another and at certain degree of intensity which varies according to the different bodies set in motion produce effects which transcend physics, changing the internal structure of the bodies—chemical effects.

d. As science of chemical nature and internal structure of bodies. Its task becomes to prepare these substances artificially and it subsequently prepares the ground for dialectical transition to the organic sciences... (Marx and Engels, 1953, pp 342-43).

We thus see that all these branches of science study the particularity of contradiction and are differentiated on this very basis. These contradictions are rooted in the objective world and are independent of human will. And human thinking is a subjective reflection of the objective world. But human thought may or may not reflect the objective world correctly. The contradiction between a correct and an incorrect reflection of the same thing in nature gives rise to another type of contradiction—logical contradiction. Appearance of a logical contradiction in human thinking means that the thought is not correct and development of thinking depends

upon its solution. But for this, it must be separated from dialectical contradictions—the contradictions existing independently in nature. But given the nature of human knowledge and the way it has advanced, logical contradictions too are mistakenly treated as dialectical contradictions and pose difficulties for separating the two. Besides, it can be separated only on the basis of practice. But the word practice has to be understood clearly—it is different from what can be termed as 'naive practicality'. For practice to be correct, it has to be guided by theory and the latter must correspond to the level at which the contradiction operates.

Consider an example. Euclidean geometry grew out of practical activities spanning centuries. Its axioms and theorems are still found correct and serve our needs. It served Newton's needs as well when he was formulating his laws of gravitation. Newton's laws of gravitation are one of the greatest triumphs of science. But he could only describe gravitation, he could not explain it; limited as he was by the level of science of his day. Explaining it would require on the one hand, such fundamental advances as the development of the concept of fields, the creation of electrodynamics and the theory of relativity. It would also require, on the other hand, a deeper approach to natural science, its methods and problems. But when one begins to explain gravitation, one simultaneously begins to see the contradiction inherent in both Euclidean geometry and Newtonian mechanics. This of course, does not mean that Euclidean geometry or Newtonian mechanics are wrong; they are very much correct within their own limits. The confusion arises only when their limits are violated.

Hahnemann's Contributions

Hahnemann lived in an age in which he could ask questions and provide answers only in the hypothetical form; he could not back up his hypothesis with exact experiments, nor could he express himself in the exact language and terms of science. The problem was compounded for him as he enquired into complex subjects like health, disease, cure, action of drugs, etc. He could bank only on his power of observation and abstraction and could draw but little from his predecessors. The competence with which he founded his therapy is amazing. And in so doing, he gave a new interpretation of these concepts, applied some of the known principles in a different way and developed his system of cure.

It was Hahnemann who gave the name allopathy to the system which was practised in his time. In his time, quite like the present, treatment generally proceeded on the principle that a disease or a symptom of disease is cured by using a medicine that opposes the symptom, either by direct suppression or by inducing a reaction leading to its suppression. Even the descriptive terms for drugs with prefix "anti" indicate the principle on which they are prescribed. He opposed this principle and called his system homoeopathy. The basic principle of homoeopathy is stated in a phrase: "Similia similibus curentur" or "Like shall be treated by like".

Hahnemann was not the first to propound this idea. It had been expressed by thinkers and scientists from ancient times. He acknowledged his debt to Hippocrates, in whose writing the principle of "like cures like" appears. In ancient Indian philosophy we find a similar reasoning advanced by Uddalak Aruni in Chandogya Upanishad, "The essential nature of the cause is to be inferred by the essential nature of the effect" (Chattopadhyaya, 1976, p 477). But this principle in itself could not have taken Hahnemann beyond Hippocrates. As it constituted a part of the complex whole he was reasoning, it propelled him to go further and devise suitable means for its application.

Allopathy and other systems of medicine believe that the cause of the disease must be diagnosed before to determine proper treatment. But knowledge of the cause of the disease depends on the level of theory and the available tools of investigation. A further deepening of knowledge must therefore invalidate old therapeutic practice which is only logical and sound. But the cause of the disease is too complex. Disease, like health, is influenced by a number of factors in complex combinations. This constitutes a logical contradiction and leads to unsound therapeutic practice. James Krauss says:

> It is impossible to know all the antecedents causative of disease consequents. ... How then shall we remove or palliate these effects by medical substances? Here, Hahnemann steps in to say, 'remove the effects and you remove the disease'. We must apply medicinal substances on the basis of knowledge of their actual effects which we have ascertained and know. Disease effects are removed by the application of medicines having corresponding medicinal effects. Scientific comparison of disease effects and medicinal effects for application leads to the diagnostic inferences of scientific medicine, makes scientific medicine possible (Krauss, 1979, p 9).

Besides, Hahnemann had observed the opposite action of large and small doses of medicine. Ipecac in large doses caused nausea and vomiting and in small doses, under certain condition, cured it. This held good for a number of drugs then in use. This observation led him on the one hand to anticipate what was later discovered and formulated by the Arndt-Schulz law, an allopathic rule formulated towards the end of the nineteenth century. On the other hand it led him to propound the theory of potentisation or dynamisation.

Potentisation is a process of dilution and vigorous succession at each stage of dilution. If the original medicinal substance is soluble in ethyl alcohol, the starting point is a concentrated solution called mother tincture (O). If it is not, then it is triturated with 99 parts (in centisimal and decimal scales of dilution respectively) of milk sugar. After this initial trituration, one part of this is again triturated with 99 or 9 parts of milk sugar depending upon the scale. After third trituration, he observed, the medicinal substance becomes soluble in alcohol. [Triturations therefore anticipate the development of colloid chemistry.] It is then treated like soluble substances and further diluted to reach higher potencies.

Dalton's atomic theory and Avagadro's hypothesis were known in Hahnemann's days. The atom was not considered to be divisible by the former and according to the latter, one gram molecular weight of any compound or element contained approximately 6×10^{23} molecules. Therefore, if one gram molecular weight of any substance, say for example 48.46 gram, of sodium chloride (natrum muriaticum) is dissolved in 99 parts of water then the solution will contain 6×10^{23} molecules. If one part of this solution is diluted in 99 parts of water then the solution would contain 6×10^{21} molecules assuming that the solution is thoroughly mixed. Second dilution will leave 6×10^{19} molecules. If we go on then a stage will be reached when the number of molecules present in the solution will be 6×10^{1}. At this point if we take a hundredth part of the solution then the number of molecules will be 6×10^{-1} or 0.6. It means that beyond 12th.

centesimal or 24th decimal potentisation, not even a single molecule of the original substance is there in the medicine. But the more commonly used medicines are 30th and beyond.

Hahnemann was aware of this paradox. He advanced the reasoning that the process of dilution and succession released a "spirit like power". Stuart Close adds, ". . : homoeopathic potentiation (potentisation) is nothing more or less than a physical process at which the dynamic energy, latent in crude substances, is liberated, developed and modified for use as medicines" (Close, 1979, p 219).

Hahnemann by arguing that removal of symptoms itself meant cure from the disease and by treating the question of health, disease, and power of medicine to cure at a dynamic plane, elevates them to a plane where the contradiction inherent in other systems of treatment does not operate. This in itself is a great advance in science and the applied science of medicine.

Homoeopathy and Its Detractors

Homoeopaths and homoeopathic treatment are more widespread than is normally estimated. England is an important centre for homoeopathic teaching and practice and homoeopathic doctors are part of the National Health Service. According to an official estimate in 1972, there were more than 72,000 registered homoeopaths in India. Other commonwealth countries like Australia, New Zealand and Canada have quite a significant number of homoeopaths. It is also taught and practised in the USA, France, Germany, Switzerland and Holland. This in itself should be sufficient to silence those who ridicule the homoeopathic system of treatment by saying that there is no medicinal substance in the drugs.

They can convince themselves by the reasoning advanced by Bernard and Stephenson. In an article written in 1967 they proposed that through the process of dilution and succession, the active substance acts as a template, communicating a field to the solvent through the formation of polymer chains (gaint molecular aggregates) in the solvent. The three dimensional structure of such polymers would be specific to each individual solute. Once the structural informational content of the solute has been transmitted to the solvent through the formation of the polymer chains, the solute need no longer be present for the solvent to communicate that information to the human organism (Bernard and Stephenson, 1967, pp 277-86).

Mathew Hubbard pointed out in an article in 1977 that when Avagadro formulated his law, matter was not believed to be visible beyond the level of the atom. Now, of course, we have identified subatomic particles, and one contemporary model defines atoms as ordered waves of energy. Thus when we study the phenomena associated with apparently material substances, we are no longer restricted to the realm of matter; matter and energy are interchangeable and are constantly being transformed from one form to the other (according to the first law of thermodynamics, as electrons jump from one orbit to another around the nucleus of the atom, radiation is released, which can be measured on a spectroscope). Each chemical element has its own spectroscopic "fingerprint", which is produced by this characteristic pattern of radiation. He proposed that the energy released from such molecules of matter must permeate an entire solution; thus, even if there is not a single atom of the original substance present in a highly diluted solution, the energy associated with this subatomic activity should be present in the solvent (Hubbard, 1977, pp 433-36).

The above two tentative approaches to the explanation of the activity of high potencies have some implications that can be tested in the laboratory. In a series experiments in the 1950s, A Gay and J Boiron demonstrated measurable differences between the capacitances (dielectric constants) of distilled water and of sodium chloride dissolved in distilled water and carried through stages of dilution upto 10^{-605}. Also, in 1931, Paterson and Boyd showed that the Schick test, conventionally used to determine the presence or absence of immunity to diphtheria, can be altered through the administration of high potencies of either alum precipitated toxoid—used by the allopaths in material doses to induce immunity—or of Diphtherinum, a nosode prepared from a diphtheritic membrane. There are many more studies of experiments to prove the effect of high potency drugs. Weiner and Goss cite a few examples in their book (Weiner and Goss, 1982, pp 129-30).

Another group of detractors allege that since homoeopathy is solely concerned with symptoms, it ignores even such cause(s) of the disease that modern science so powerfully establishes, like bacteria. Some go further and argue that even after the symptoms are removed as a result of homoeopathic treatment, the cause remains and therefore the symptoms again reappear. Yet another criticisms is that since it treats individual patients and prescribes different drugs to different persons suffering from similar symptoms; it is not suitable in epidemic conditions. A surprising thing about such criticism is that they are levelled not by uninformed persons but by highly informed ones, by 'experts'.

Such criticisms spring from a profound ignorance of Hahnemann's teachings and subsequent developments in other fields of knowledge and science. In section 31 of *Organon*, Hahnemann says: "The inimical forces, partly psychial, partly physical to which our terrestrial existence is exposed, which are termed morbific noxious agents, do not possess the power of morbidly deranging the health of man unconditionally, but we are made ill by them only when our organism is sufficiently deposed and susceptible to the attack of the morbific cause. . .".

We thus see that Hahnemann not only identifies "morbific noxious agents" but also explains the reason because of which not every one succumbs to bacteria though all may be equally exposed to them. It would be interesting to note that he recognised the presence of bacteria and attributed to these animal forms, too minute for the eyes to see, many forms of epidemic and acute illnesses. He announced his deductions in 1818, more than 60 years before Koch isolated the tubercle bacillus (Roberts, 1979, pp 180-81).

Stuart Close says:

> The real cause (of the disease) is the whole of these antecedents, and we have no right, philosophically speaking, to give the name of the cause to one of them, exclusively of the others.

Also,

> Brilliant and successful as have been the attainments of bacteriologists in creating a new science of sanitary engineering, they have failed and must continue to fail, to establish bacteriology as the basis of a therapeutics.

Further,

> In cholera, for example, admitting the existence and presence of the bacilli as one causative factor, we still have to reckon with sanitary, atmospheric and telluric conditions; with economic and

social conditions and habits of life, with means and modes of transportation and intercommunication between individuals and communities; with individual physical, mental and emotional states, etc., all of which are essential factors, in some combination, in determining and modifying the susceptibility of individuals to the bacilli; for without some combination of these factors, the bacilli is impotent and the disease would never occur (Close, 1979, pp 268-69).

We thus see that homoeopathy is closer to the modern concept of health care and preventive medicine than other systems of treatment including allopathy.

Homoeopathic treatment has been successful in epidemics even during the lifetime of Hahnemann. Weiner and Goss give a detailed report of a survey conducted in England to determine the effectiveness of a homoeopathic nosode, Influenzinum. This holds good for the diseases caused by the virus also. Weiner and Goss add a speculative note:

> There is a widespread concern about the dangers of the research in bacteriological warfare; scientists and the lay people alike portray the possible disastrous consequences of the escape of virulent organisms that have been specifically bred to resist chemotherapy. Mysterious illnesses, such as 'legionnaire's disease' have also aroused public interest. The allopathic response to legionnaire's disease was to search for an etiologic agent in order to determine the proper medicine to eradicate the hypothesised 'bacteria' responsible. In theory, homoeopathic treatment could yield impressive result in such instances for two reasons: (1) both situations have the characteristics of epidemics, hence a single remedy or a group of remedies could be determined for each particular epidemic as the proper treatment in the majority of cases; and (2) since homoeopathy selects the remedy on the basis of symptom alone, identification of the organism involved would not be necessary, nor it would be necessary to develop a chemotherapeutic agent that had the specific effect of eradicating that organism.

Underlying the specific precepts of homoeopathy there is a vitalistic principle that is clearly spelt out in *Organon* (sections 9 to 14). Section 15 visualises the "affection of the morbidly deranged spirit-like dynamis (vital force)" and "the totality of the outwardly cognizable symptoms produced by it in the organism and representing the existing malady, constitute a whole." This vitalistic principle at the heart of the homoeopathic doctrine and dialectical method of its application distinguishes it from allopathy and other systems of treatment.

Hahnemann believed that diseases entered the body in the form of miasms— subtle, imperceptible substances as "imperceptible as the vital force itself". He divided all diseases into two broad categories: (1) Acute disease or actue miasm: These are rapid in development and have a definite course consisting of three phases: (a) a prodromal period of onset; (b) a period of progress and (c) a period of decline. The vital force is generally able of curing itself in such cases provided the attack on the organism is not so violent as to cause death. (2) Chronic diseases or chronic miasm: There is again a prodromal period and a period of progress of the disease but there is no period of decline. The vital force is not able of curing itself. Under certain circumstances the chronic disease may quieten down and may become virtually devoid of symptoms, but each time it is aroused by adverse conditions and becomes worse than it was during the previous exacerbation.

Chronic miasms are further classified into three categories: psora, syphillis and sycosis to facilitate better choice of remedies.

What would tomorrow's system of treatment and health care be like? It can never allow humans to suffer for the profit of doctors or drug manufacturers; nor it can allow us to live passively unmindful of the questions that shape our existence and unstirred by the need to better our social life. It will have to identify the social, economic and political aspects of the whole termed as health problem; propose concrete ways of solving them and mobilise people to solve these problems. Hence those who are oppressed in such a system of treatment and health care will have to struggle for developing tomorrow's system of treatment and health care. And in this struggle, homoeopathy can became a tool, as it frees us from our dependence on those who are the targets of this struggle.

But before homoeopathy becomes a tool in this great struggle, it must rid itself of all that is unscientific in it, and must not shy away doing so. The most important among them is its secretarianism that the believers and practitioners of homoeopathy so strongly display. One of the reasons for its secretarianism is due to attacks on it and its inability to meet these attacks on the grounds of science. This has been so right from the days of Hahnemann. So vicious has been this attack that even a man of his nature had to limit himself to: "The physician's high and only mission is to restore the sick to health, to cure, as it is termed" (Hahnemann, 1977, p 92). He also added a footnote to it saying, "his mission is not, however, to construct so called systems by interweaving empty speculations and hypotheses concerning the internal essential nature of the vital processes and the mode in which diseases originate in the invisible interior of the organism (whereon so many physicians have hitherto ambitiously wasted their talents and their time)..." But now the times have changed, homoeopathy can meet this attack fully. Besides, history has put a different task before society, especially in poor and exploited countries. If more and more persons are embracing homoeopathy and are even struggling for its transformation, then it only underlines the historical task. And given the social need and the historical task, necessary forces will come forward to help in this great transformation.

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Exploding Myths

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When the Search Began by Ulhas Jajoo, M G Institute of Medical Sciences, Sevagram, Wardha 442 102; November 1984, pp 50, Rs 5.

MANY health projects especially in the non-government or so-called 'voluntary' sector tend to report exaggerated success stories about what they have achieved, when in reality, things are quite different. Such reports or claims create myths about what health projects can and have achieved. There are a very few exceptions to this myth-making. "When the Search Began" is one such notable exception. It is an unusually frank and critical reporting of the healthwork done in the villages near Wardha by Dr Ulhas Jajoo, his collegues and students from the Mahatma Gandhi Institute of Medical Science, Sevgram, near Wardha, Maharashtra. Instead of continuing the usual arm-chair discussions, this group went into the field, analysed their experiences in a critical and open-minded fashion. They found that many of their initial assumptions, widely prevalent ideas related to healthwork, were wrong. The "search" has been for a socially, economically, politically appropriate strategy for rational healthwork. This story of their search is very useful to any newcomer who honestly wants to do any worthwhile work. It is, however, questionable whether the structure of delivery of healthservices they have formed is radically different from the usual prescriptions (with their blindspots). Secondly healthwork has been equated in effect with delivery of healthservices, with no mention of socio-political aspects of healthwork. Let us understand their work, and their perspective as given in this short report.

Novel Health Insurance

The group decided to go into field-work and describes how, during the rains, their first visit to Punjai, a way-off village, turned out to be so difficult. It frankly admits that they chose a nearer village—Nagapur, because they realised after the first visit to Pujai, that regular work there would be too difficult. In Nagapur, they started with a weekly clinic and a drug-bank with contribution of Rs 4 per family. The drug-bank soon went bankrupt and they realised that this contribution was too meagre to run a drug bank. The initial enthusiasm of the villagers soon waned. The group came to the conclusion that because people were so engrossed in their attempts to somehow get two meals a day, health was not at all a priority, that health-education, immunisation, etc, did not elicit much response since it was not their felt-need. When they touched the villagers' felt-need (e g, getting bank loans) the response was quite different. The report however, does not elaborate how and to what extent the group continued this economic activity. It shifts to a new idea—of collecting grain at the time of harvesting, in proportion to land-holdings. This grain is to act as a kind of collective insurance for free treatment for all acute illnesses for all members of the scheme and also free treatment for acute and emergency cases at Wardha in the Sevagram medical college hospital. The medical college thus supported, subsidised this new insurance scheme in a substantial way. The grain collections had its own problems. The people with larger holding had to contribute more without getting any privileges. They were, therefore, not enthusiastic and half of them dropped out of the scheme after the first year. The drop-out rate was less among other groups. Among landless labourers, the participation increased over years. It is not clear from their account as to why the response to this scheme was better than to the earlier one. No economic or political activity has been reported. Perhaps the support of the medical college including the doctor's monthly visit made the difference.

Honest Reporting

Over a period, the group's activity acquired a certain structure and some credibility. In the course of the work they encountered many dilemmas, learnt some lessons and these have been honestly reported. For example only acute cases could be provided free or subsidised treatment, whereas people expected free treatment for all types of illness once they gave their contribution at harvest time. If a fee is charged for service the poorest, who are the ones most in need, would not get these services. The contributions from villagers could pay only for the payment of the VHWs and their drug-kits, the ANM and the diesel for the vehicle used to transport them to and from Wardha. The author correctly points out that it is a myth to believe that such healthwork can financially become self-sufficient. But the group has insisted right from the beginning that some contribution must come from the villagers. About 35 per cent of the collection from the villagers was kept aside for the payment of VHWs. This was to ensure that VHWs are responsible to the community and not acting merely as an agents of the health-authorities.

The bewildering experiences about their health-educational efforts has been sincerely reported. For example, textbooks had taught them the importance of latrines in controlling diseases. But the villagers had their own problems and hence did not accept the idea of building latrines. They did not have extra money to build even a cheap latrine for each household. Community latrines would be nobody's baby and hence would be left uncared for. The use of sanitary latrines meant fetching additional quantities of water, which was extra burden, mainly borne by the women. The villagers had their own logic for using the road-side (of the approach road to the village) for open-air defacation. It was, they pointed out, the cleanest place during the rains, and was much safer at night due to the street lights! About the small family-norm, the medical team had no counter-argument to the villager's argument that they need two sons so that at least one of them would survive to support them in old age. The medical team realised that unless infant mortality is brought down, old-age security provided, family planning propaganda would not take roots. It is worthwhile to quote their forthright conclusions drawn from their initial experience.

(1) Our medical education in the hospital is inadequate to equip us with the skills required in the rural setting. (2) Socio-economic factors (poverty) and political frame-work of the existing society are major obstacles in the development of appropriate medical care, a field about which we are kept ignorant during our medical education. (3) Medical problems are not the priority need of the people. (4) The awkward-looking behaviour of most of the people is the natural reaction in their environment. Inability to understand their environment is chiefly responsible for the big communication gap between them and we, the educated. (5) In a poor socio-economic setting, idea of self-reliance in health care activities is a myth. The poor community has to depend on someone from outside, may be a voluntary agency or the state. (6) Community participation in health care is more preached than practised. Those who claim it, either do not understand what community participation means or are telling a blatant lie mostly for collecting funds on which they so heavily depend. Collecting people to dole out a gift, which they have never dreamt of, cannot be called community participation (pp 8-9).

Cost Analysis

Their medical insurance scheme however, was a kind of a success. The data that has been quoted (p 14) about two out of the twelve villages in which the work spread, shows that "percentage of coverage for health-insurance" increased from 46.5 per cent in the first year to 71.5 per cent in the 3rd year. (This however does not tally with the earlier claim of collecting contribution from 90 per cent of the villagers in the first year (p 7)). The corresponding figures for labourers and marginal farmers went up from 36 per cent to 78 per cent. In the section "Evaluation and Cost-analysis" they have arrived at a figure of Rs 2 per head per year as the cost of the healthservices (excluding the cost of hospital admission) provided by them. The government of India's per capita public health expenditure of Rs 28 (1981-82) has been quoted to provide a camparison and it has been claimed that "much improved health-services, which have the benefit of involving villagers as contributory participants, can be provided within existing resources, if a new medical strategy is planned and implemented" (p 15). One cannot justifiably draw any such conclusions whatsoever from the cost-analysis of their work. One has to compare the health-facilities provided and the costs incurred and find out whether the costs are less or more. Such a cost-analysis of their work and of the government's work and then comparing them would tell us as to the extent to which the government's work is costly. No such analysis has even been attempted and hence no such conslusions can be drawn from their cost-analysis.

Conventional Barrier

Are there any positive achievements of this work apart from the lessons that the medical team learnt? A collective health insurance scheme (with all its limitations) in rural area, running for five years with increasing participation by the poorer sections of the community is definitely an achievement. Anybody conversant with the field would realise how difficult it is to achieve what appears on paper as small objectives. One may point out that the support from the Kasturba Hospital was quite crucial in the evolution and viability of this scheme.

The achievements in the healthfield are however, quite limited. Using "cluster approach" (collecting, immunising all the eligible children in a cluster, in one day) 95 per cent of eligible children in a few "villages around Sevagram" were immunised. This is a notable achievement. This "cluster approach" is demanding in terms of mobilisation of the people and very few healthprojects have adopted it. Using the same approach, for polio vaccination, in six visits, 81 per cent of the children received three doses and 55 per cent received five doses—this also is by no means a small achievement. Rational selection and use of drugs, preparation of cheaper formulations like a cough-mixture and a few ointments have been reported. But for the rest, a familiar picture emerges—Village Health Workers working for a paltry "honorarium" of fifty rupees per month, a full-time trained Assistant Nurse Midwife supported by a hospital facility nearby. There are many problems in this approach; some of which have been mentioned by this report. The ability of the VHW to diagnose and treat is very limited; much more limited is the likelihood of people having sufficient faith in them about these functions. A monthly visit by doctors is too insufficient; emergencies cannot be dealt with at all; health-education is never taken seriously unless imaginative and special efforts are attempted. A paltry drug kit of a very limited amount (a mere Rs 30 in this case) with the VHW is too inadequate to meet even a fraction of the drug-needs for minor illnesses; unecessary domination of doctors is hardly challenged.

To assess the "morbidity load" (amount and type of illnesses) in the community, and to determine on the basis, the type of health-activities to be conducted, the type and amount of human-power and drugs required, (and not any arbitrary amount) to organise these services through a democratically working team, etc, etc are tasks which have not been satisfactorily resolved. The content and form of health-education which is appropriate and which really makes sense is also something which needs a lot more work . . . there are so many problems and blindspots. This report does not even attempt to throw any light on any of these. Their work has created a learning process. This itself is an important achievement and hence one hopes that this work would not become stagnant, with whatever has been achieved so far, but would take up some of the challenging aspects in the field of delivery of health-care to the people. With all their efforts, the search has only begun and there is a long way to go.

The challenge in healthwork is not only of organising a cost effective, appropriate, rational, democratic mode of health-intervention from the point of view of community medicine. It is at least equally important to expose in practice the socio-political dimension of the established medical practice, to conscientise people about the exploitative, oppressive, mystifying misuse of medical science and to forge an alternative in practice. Such health-conscientisation has to be a part of broader socio-political work. People may not be interested in vaccines to begin with, or in unrealistic health advice. But they do get interested in knowing how the existing medical system exploits them and how to get out of its clutches. If aspects of non-exploitative, liberating healthwork are forged, in practice, such healthwork can contribute a lot. Most health projects have no such perspective of health conscientisation; they are aimed solely at delivering health services. This does not challenge the existing system in a direct manner; Similarly most health projects have no link, have no perspective of forging a link with broader socio-political work.

It is not clear from "When the Search . ." as to how this

work is different from other so-called successful projects in this respect. Most health projects unless they are willing to take large funds from donor agencies, or be supported by big institutions, cannot do any worthwhile work in the field of delivery of health services. (Chattisgarh Mines Shramik Sangh's health work in Rajhara is an exception which hopefully, would duplicate elsewhere.) Health education/conscientisation as a part of broader political work is a low-cost but challenging and important work which has so far not been attempted. This is in contrast to the numerous funded projects in the field of delivery of health care. It must be pointed out that the report under review does not cross this conventional barrier.

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A Bird's Eye View of Psychology

Psychology In A Third World Country—The Indian Experience by Durganand Sinha, 1986, Sage Publications.

THE term 'psychology' is a concept borrowed from the West. Thus initial studies were naturally based on Western concepts. This of course does not mean that psychology has not evolved any roots of its own in India. But it is undeniable that Western psychologists and ideas have permeated every aspect of our life and behaviour. Sinha repeatedly brings out this truism in this book covering the psychology scene in India. The purpose of this monograph, done at the instance of UNESCO, was broadly to examine the impact and role of psychology in a Third World country like India.

It is but natural that psychologists in India are very much influenced by the West in the kind of reserach work done. The offspring is bound to imitate its parent till such time that it can form its own ideas and opinions and finally enter its own creative phase. Psychology today in India could be said to have arrived. We are not only able to evolve our own theories and concepts but are also in a position to influence the world at large.

Sinha traces the growth of 'psychology' in India in four phases pre-Independence, post-Independence phase of expansion, phase of problem-oriented research and finally the phase of indigenisation. This can be looked at another way in developmental terms. The infant stage of being shackled to the West; the childhood period where aping went on; the adolescent phase when Indian psychologists tried to break away from the bonds of the West, attempted to coin their own terms and asked questions of their parents and their motives, changed and adapted values and attitudes to suit their environment; and the adult phase where indigenous research is being done and a certain amount of influence being wielded on others, especially in the Third World countries.

The author seems to have taken an unduly critical attitude particularly in his reivew of the post-Independence period—like a harsh parent! Fortunately, as the review proceeds a more objective account is seen.

The bulk of the presentation is in terms of enumerating the research work done in India covering different areas and branches of psychology. But in the area of testing, there do seem to be some gaps. Several tests have been adapted and are apt to our conditions do not figure, e g, Bhatia's tests and child development tests.

Psychology has made quantum jumps in the 60s and 70s but what has not been done is to dispel the wrong notion that psychology means something to do with abnormal people—being the layman's understanding. All the reserach done is commendable, but what has this resulted in terms of follow-up actions and policies? The author himself puts the impact of psychology in these words, "Psychology in India has made significant contributions to the individual and unlimited spheres of our life like in industry, educational and clinical fields because they share many characterstics of similar institutions in western societies where this discipline has developed. But on a macro level and on larger social issues such poverty, inequality, social justice and social change, psychology has yet to make a significant impact." The author's message to practising psychologists and scholars to be 'indigenous' and 'Indian' in their pursuits is very apt for psychology to enlarge its role in our national life.

The book would have added to its stature if the author, with his vast knowledge and experience, had given more emphasis to the future trends and directions that Indian psychology should take—to make it more meaningful and relevant to our society and solving its problems.

The overall merit of the book lies in its broad canvas giving a bird's eye-view of the psychology scene in India. It could be a good reference source for scholars and educationists alike to be aware of what is happening around the country. Its bibliography is in itself a mine of valuable information. Altogether, the book is a commendable effort.

Purnima Rao

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Contradictions Where There Are None

Thomas George

ANANT PHADKE's article "Organising Doctors: Towards What End?" is full of ambiguities and sweeping generalisations. At the very outset Phadke says that doctors belong to a social layer called "the new middle class—a peculiar product of developed capitalist society". One can question the understanding that Indian society is a developed capitalist society; he has given no indication as to how he arrived at this concept. To mechanically transfer concepts developed for Western societies is neither scientific nor helpful.

Phadke has gone on to enumerate four contradictions that doctors in government services face due to what he sees as their 'contradictory class location' betwen the capitalist class and the working class. The first of these is that they are wage earners as well as officers. He feels that since they are officers they will stand apart from their subordinates in wage struggles. It is difficult to understand how this constitutes a contradiction. Is Phadke implying that doctors will seek to crush the wage-demands of the subordinate staff? If so, this is an unreasonable understanding. Wage demands of subordinate staff in no way hurt the doctors, even if they belong to Phadke's "new middle class", since it is not they who pay the wages. So the mere fact that at this stage of social evolution in India the doctors may not *actively* support the wage struggles of their subordinate staff in no way constitutes a contradiction.

The second contradiction that Phadke sees is the one between the need of the government-employed doctor to amass wealth and his limitations as a wage-earner expected to follow the ethics of a noble profession. Here again Phadke seems to have fallen into a widespread misconception. Just because doctors have a relatively secure economic position, one cannot call it wealth. It is true that the government forces doctors to do private practice by deliberately paying low wages. It is also true that very often this private practice is unscientific. But this constitutes a point on which to organise doctors. Most doctors would like to do scientific practice. They would also like to earn a good living. If it can be demonstrated to them that these two things are not fundamentally incompatible, but only appear to be so because of the existing organisation of society, surely they would work to change this organisation. We must understand that the present rulers of India will only provide a level of health care sufficient to keep the people quiet. The quality of health care is not determined by the doctor, it is determined by the government. The government is not interested in spending the amount necessary to provide adequate scientific health care. It will spend only enough to prevent uncontrollable unrest and no more. It will pay the doctors as little as it can thereby forcing them to supplement their income by private practice. The fundamental conflict therefore is not between doctors and the people but between the doctors and the government.

According to Phadke the third contradiction is between the "technocratic scienticism" of doctors (that is, their way of looking at health and disease as primarily a question of interplay of germs and chemicals amenable to drug therapy) and the real need for community medicine. I think that this is vanity pure and simple. Many activists feel that they have discovered the Keys of the Kingdom, the root cause of India's poor health status, and that this is the lack of a "community approach" by doctors. The fact is that every doctor is well aware of the social aspects of disease though he may not have a clear analysis of the Indian social structure, or what to do about it. But is the solution to this problem the "community orientation" of doctors? The government certainly thinks so and the doctors' "lack of community orientation" is favourite excuse for poor health services! But neither the government nor Phadke has cared to explain how doctors are to put into practice this fabled "community orientation" in the *existing* scheme of organisation of society and health care.

Phadke's fourth contradiction escapes me entirely. I don't understand how the fact that "medicine transcends narrow barriers and exposes medicos to universal concepts" and the fact that (according to Phadke) the majority of doctors are from an upper-caste urban background, constitutes a contradiction.

The sad part is that Phadke's analysis leads him to a fundamentally elitist position. He wants to organise only "a small section" for a comprehensive revolutionary change in the medical system because he feels that only a small section will respond to his analysis. History tells us that revolutions are not brought about by small sections of society. So when an analysis leads one to such conclusions, it is a clear indication that one should analyse again and look for and correct the errors in understanding. Only such a scientific process can clarify the debate.

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UPDATE

news and notes

Health in Seventh Plan: Boost to Private Sector

IF recommendations of the Bhore Committee (1946) are to be considered as some kind of a bench mark for health planning, then one has to admit that all the plans for the health sector, including the latest one, have failed to live upto it. For instance, the Bhore Committee has suggested that for a population between 10,000 and 20,000 there should be a 75 bedded Primary Health Centre (PHC) which would provide coordinated preventive and curative services through doctors, public health nurses and health assistants. However, 40 years later even the 6th Five Year Plan (1980-85) target of one PHC with only seven or eight beds for a 30,000 population is far from realisation.

Implementation of health sector plans have never been taken seriously because:

a. The health sector is not considered a priority area of development by the government. Since the power base resides with the kulaks upon whom the vast rural landless and marginal and small farmers are dependent for their livelihood state resources are mainly used to strengthen the surplus appropriation capabilities of the kulaks and the bourgeosie.

b. The private health sector and the system of private practice of medicine has prevented the government from appropriating the medical and health functions by providing sops such as 'charitable hospitals' and 'voluntary hospitals' that provide 'concessional' care.

c. Government planning and programming has never taken into account what the actual requirements of the people are—people have always been 'given' what the government thinks the people want, and even that does not reach the people; and

d. The Government's obsession, under the influence of imperialist agencies, in planning and implementing health programmes, has always been with family planning.

The Seventh Five Year Plan (1985-90) in the above sense is no different from the earlier plans. It provides an even more vigorous support to the private and 'voluntary' sectors and the entire focus is on improving the management of the various programmes under the health sector. And the historical trend of a reduced proportional allocation to the health sector is continued.

In the first five year plan the health sector constituted 3.82 per cent of the total plan outlay but began to decline in each subsequent plans—3.01 per cent, 2.63 per cent, 2.12 per cent, 1.92 per cent, 1.86 per cent and 1.88 per cent. That this decline in health sector allocation is due to greater investment in population control activities is obvious from the fact that allocations to the family planning (FP) sector have increased from 0.005 per cent of total plan outlay in the first plan to 1.80 per cent in the Seventh Five Year Plan. Even the ratio proportion of allocation between FP and Health Sector has increased from 0.002 to an astounding 0.96 per cent between the First and Seventh Plans. A correlation between the percentage allocations to health and FP over the Seventh Plan periods shows a high negative correlation (Pearson's r) of -0.88. Along with the narrowing ratio gap between health and FP, this r value is a clear indication that the growth of the public health sector has been sacrificed in favour of family planning activities.

Reviewing the performance of health programmes the Seventh Plan document states that, "Most of the concerned (disease) control programmes suffer from poor management and monitoring... Health management support and supervision is an area that needs considerable strengthening."

Further, the Seventh Plan emphasises the need to provide greater support to the voluntary sector in both health and family planning. This is in keeping with the promise given in the National Health Policy of 1982, 'The policy envisages a very constructive and supportive relationship between the public and the private sectors in the area of health by providing a corrective to re-establish the position of the private sector' (India, 1985).

That the focus of the health sector will continue to be family planning activities is made clear by the following statement in the Seventh Plan document *intersectoral co-ordination and co-operation and the involvement of voluntary agencies in the programme (of the government) will be necessary in this (FP) programme to an even greater extent than in health.* Add to this the large allocation to the family planning sector of Rs 3,256.26 crore which as a proportion to the health sector allocation of Rs 3392.89 crore is the highest ever (proportion = 0.96).

Another important feature of the health sector in the Seventh Plan is its recognition of non-communicable diseases as an important area for development; "Development of specialities and superspecialities will need to be pursued, with proper attention to regional distribution". Whereas with regard to the highly prevalent communicable diseases, they mainly affect the deprived masses, the Seventh Plan document stops at saying that the programmes have failed in achieving their targets and therefore only better management is the answer.

Related to the focus of diseases of the priviledged few the plan recommends a special priority to new medical technology, especially biotechnology and electronics. The special attention that AIDS, cancer and coronary heart diseases are receiving and the current boom of the diagnostic industry is a clear indication

where the health sector priorities lie.

Finally, it is interesting to note that the health sector plan does not comment on the drug industry on which the national disease control programmes are greately dependent. Drugs and pharmaceuticals are left to the Industries sector where no mention of essential drugs is made. Even with the major communicable diseases being national programmes, (leprosy, tuberculosis, malaria, blindness, filariasis, goitre and guinea worm infestation) there is no concern in the plan document about shortages of these essential drugs which are imported in bulk inspite of a sophisticated pharmaceutical industry in India.

Ravi Duggal

Local Health Traditions and Primary Health Care

LOCAL health traditions are primarily based in the use of local flora, fauna and minerals. A very significant aspect of the local health traditions and its practitioners is their self-reliant nature. These traditions are of an entirely autonomous character rooted in a community's social traditions of knowledge and supported from within the community. No government or any other agency has ever been required to offer any direct support to these traditions of health-care. A seven-day meeting was held in November 1985 at Karjat, Maharashtra, to discuss ways for strengthening local health traditions related to primary health care. People from 30 rural organisations interested and active in the community health field from Kerala, Tamilnadu, Andhra, Karnataka, UP, Bihar, MP and Maharashtra attended the meeting.

Most of the groups previously carried the prejudiced impression that local health cultures were based on blind belief or purely an empirical experience because this is the false propaganda that western science had spread about indigenous knowledge. In fact, to date not a single serious evaluation exists of the strengths and weaknesses of any local health culture in any part of India, despite the fact that millions of Indians still subscribe to traditional health practices. There is evidence to establish that Ayurveda is the scientific mainstream behind all the local folk and tribal health traditions in India. There appears to be a symbiotic relationship between the two. The mainstream drawing strength from the particular experiences of numerous local streams and the local streams in turn being enriched through interaction with the mainstream.

The meeting observed that a sort of cultural genocide (which began about 200 years ago) on the local health culture of thousands of village communities is yet taking place in independent India. This is inspired by the Western ethno-centric outlook of the Indian scientific establishment. Ironically although local health traditions are in fact more comprehensive in scope and cover all and more than the usual elements that are expected from the 'primary health care' programmes of the government, these local traditions are being totally ignored and suppressed.

When one talks about the scientific temper in India, we usually impose an essentially European 'mainstream' cultural tradition (Europe also had non-mainstream scientific traditions, e.g., based on writings of Goethe) on the Indian people. There is in fact also an indigenous scientific temper that still persists amongst millions of our rural folks and amongst the tribals. This indigenous scientific temper is indeed very different in content and form from the European one and it is only cultural arrogance and intolerance that may make us blind to its value.

Strengths and Weakness of Local Health Traditions

In the Karjat tribal block over the last 5 years a detailed documentation of the local health tradition is being undertaken. Similar work is being conducted in other parts of Maharashtra (Nanded district, Gadchiroli and Poona district), as also in Warangal in AP, Ranchi in Bihar and Coimbatore district in Tamil Nadu.

Although the local traditions are comprehensive in their 'scope' they undoubtedly reveal several weaknesses in treatment procedures and diagnosis when subjected to critical evaluation by the science of Ayurveda. Although with regard to the use of local herbs the local tradition has an amazing knowledge of local flora its ecology, identification, types, etc, knowledge about properties of plants is incomplete. There are perhaps several reasons which may explain how and why these weaknesses have set in—in the first place the local traditions are 'oral' traditions of knowledge and in the natural course of things oral traditions the world over have been found to decay over 'time'. They need to be revitalised from time to time in order to regain 'vigour'. An external reason for the current decay of local traditions is the derision, neglect and oppression they have suffered due to the intolerant attitude of the western scientific tradition towards these practices. A third reason is the break of active links during the last few centuries with mainstream science of ayurveda. This has resulted in mutual losses. These weaknesses however do not detract from the comprehensiveness of the local traditions, nor reduce their potential for making the community self-reliant in its primary health care needs.

Workshop Report

Documentation of Local Flora: On the first day participants accompanied by the botanists from 'Maharashtra Association for Cultivation of Science' and AVR Educational Trust, Coimbatore, visited the local forest and collected 25 illustrative specimens of locally used medicinal plants. There were detailed discussions on the basic botanical notes that should be taken about each plant and what parts of a plant are essential to collect for purposes of identification and how plants can be pressed and dried and put into herbarium sheets.

On the same day, in the evening there was an introductory talk on Dravya-Guna Shastra which is

about the theory and methods by which Ayurveda establishes the properties of plants and predicts their effects on the human body.

The next two days of the workshop were spent in observing and participating in the preparation of medicines by processing plants in various ways. Nine different basic techniques of processing of plants were demonstrated *viz*, kadha, swaras, tel, ark, ghanwati, shar, satv, malam and choorna.

Documenting Local Health Care Practices: Two days were spent on understanding some of the strengths and weaknesses of the local traditions regarding (1) mother and child care (2) home remedies and (3) the treatment of common ailments and first aid. The ADS presented participants with a copy of the type of questionnaire they had used to study the local traditions which could be used as general model for similar studies elsewhere—but the detailed format may vary from region to region.

Food and Nutrition: The sixth day was spent in discussion on two subjects, *viz*. the basic natural principles of ayurveda and the ayurvedic theory of nutrition. As a result of this western ethnocentric view, today under the banner of spreading science to villages, very many sound nutritional practices of villagers are being destroyed and undermined because of lack of understanding of the Indian nutritional science.

On the seventh day there was discussion around the historical analysis of the colonisation of the Indian mind by the mainstream west—a process which began 200 years ago and continues even today under a political leadership which wants India to 'catch up with the west' in the 21st century. A view was put forward that perhaps it was at a historieal moment of weakness that the Indian civilisation accepted the cultural and inellectual traditions of their colonisers and that this acceptance was not based on any critical process of evaluation of the western traditions.

It was unanimously resolved to form an informal national committee, the Lok Swasthya Parampara Samvardhan Samiti for strengthening local health cultures. The AVR ayurvedic trust, Coimbatore, agreed to act as the secretary of the committee.

For further information please contact Dr. G.G. Gangadharan, Lok Swasthya Parampara Samvardhan Samiti, Pathanjalipuri P.O., Thadagam, Coimbatore – 641 108.

Drug Multinationals and WHO

THE unofficial, information links between multinational corporations and some UN agencies have long been debated. The ICP (Industry Co-operative Programme) within the FAO was a prime example, and had to be dismantled once the links were discovered by action groups. On the other hand, the WHO prescription for a rational drug policy is well known, has been recommended for *all* countries, developed and underdeveloped and is often adduced as proof of the WHO's neutrality. Its prime principal contribution has been the selection of a list of essential drugs numbering 250, and which the WHO has suggested is more than adequate for a population's basic health programmes, a list, of course, that has not enamoured the WHO to the drug multinationals.

The new drug policy has reversed many of the offensive features of the drug scene available in most third world countries including India, where the production of a large number of inessential and harmful drugs has led to a decline in the production of basic and essential drugs. Despite what critics of the Bangladesh drug policy, instigated by drug MNCs have claimed, the new policy has led to an increase in the production of essential drugs, has reduced prices and improved drug investment by the very same companies who have tried to criticise the policy in the past.

Concerned about these positive developments and their possible impact on other third world countries, the drug MNC have now recruited a Sri Lankan lawyer to write a book attacking the policy. The book is entitled, *The Public Health and Economic Dimensions of the New Drug Policy of Bangladesh,* is written by D C Jayasuriya, and sponsored by the apex organisation of drug multinationals worldwide: The International Federation of Pharmaceutical Manufacturer's Association.

Jayasuriya uses his former WHO consultancy status to give his 'evaluation' of the Bangladesh drug policy some measure of legitimacy, which it, being a sponsored study, readily lacks. The document is being passed about as a 'WHO document on the Bangladesh Drug Policy'.

More interesting is the fact that the document has been sent to the personal addresses of Drug Controllers, Health Ministers and other influential administrators in all Third World countries. This has not however been done in Bangladesh, where a whisper campaign instead has been let loose to say that the "WHO has published a document against the drug policy." The WHO is obviously aware of these developments and has yet not distanced itself officially from the Jayasuriya 'evaluation'.

The requisition of a Third World individual to attack a socially useful policy from another Third World country, at the obvious behest of drug MNCs is deeply disturbing. No action has been taken against Jayasuriya despite the fact that these developments have been brought to the attention of the Director General of the WHO, Dr Halfdan Mahler himself.

We believe that part of the reasons for the incapacity or unwillingness of the WHO to act firmly is rooted in the financial indebtedness of the WHO to countries like the USA. For example, it took a full two years before Dr Halfdan Mahler himself publicly approved the Bangladesh drug policy. There is need for more unambiguous approach. If necessary, the WHO should seriously consider alternative sources of funds to act more forcefully in the interests of all drug consumers.

Even now it is ironic that the WHO is unwilling to act when it sees an attack on a drug policy that is based on the recommendations of the organisation itself.

Third World Network

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This periodical is a collective effort of many individuals active or interested in the field of health or interested in health issues. The chief aim of the journal is to provide a forum for exchange of ideas and for generating a debate on practical and theoretical issues in health from a **radical or Marxist** perspective. We believe that only through such interaction can a coherent radical and marxist critique of health and health care be evolved.

Each issue of the journal highlights one theme, but it also publishes (i) Discussions on articles published in earlier issues (ii) Commentaries, reports, shorter contributions outside the main theme.

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THE EARTH IS A SATELLITE OF THE MOON

The apollo 2 cost more than the apollo 1
the apollo 1 cost enough.

The apollo 3 cost more than the apollo 2
the apollo 2 cost more than the apollo 1
the apollo 1 cost enough.

The apollo 4 cost more than the apollo 3
the apollo 3 cost more than the apollo 2
the apollo 2 cost more than the apollo 1
the apollo 1 cost enough.

The apollo 8 cost a whole lot but you didn't feel it
because the astronauts were protestants
they read the bible from the moon,
bringing glad tidings to all christians
and Pope Paul VI blessed them when they returned.

The apollo 9 cost more than all the rest together
including the apollo 1 which cost enough.

The great-grandparents of the people of Acahualinca
were less hungry than the grandparents.
The great-grandparents died of hunger.

The grandparents of the people of Acahualinca were
less hungry than the parents.
The grandparents died of hunger.

The parents of the people of Acahualinca were less
hungry than the people who live there now.
The parents died of hunger.

The people of Acahualinca are less hungry than
their children.
The children of the people of Acahualinca are
born dead from hunger,
and they're hungry at birth, to die of hunger.

The people of Acahualinca die of hunger.
Blessed be the poor, for they shall inherit the moon.

LEONEL RUGAMA
(NICARAGUA)

Leonel Rugama was a member of the Sandino National Liberation Front. He and another comrade were trapped in a house in the city of Managua in January, 1970. The house was surrounded by troops and war materiel. The two men put up a courageous fight which lasted several hours. When their ammunition ran out, the army finished them off. Rugama was 20 years old.