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Transition to a Primary Health Care System in Ghana

by

Orvill Adams, MA

A thesis submitted to

the Faculty of Graduate Studies and Research in partial
fulfilment of the requirements for the degree of

Master of Arts

Department of International Affairs

**Carleton University
Ottawa, Ontario
January 16, 1991**

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The undersigned hereby recommend to the Faculty of Graduate Studies and Research acceptance of this thesis, submitted by Orvill Adams, in partial fulfilment of the requirements for the degree of Master of Arts.

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Abstract

Ghana adopted Primary Health Care (PHC) to extend health services to its disadvantaged populations. Although various governments since Ghana's independence in 1957 have intended to expand health services, internal and external, economic and cultural factors are constraints.

Ineffective government action and opposition of elite urban groups have slowed the reallocation of resources to PHC programs. Difficulties in training and retaining health professionals and technicians necessary for PHC delivery have also contributed to the slow development of the system.

This study outlines approaches attempted in Ghana, examines challenges and suggests opportunities for continued expansion of their PHC program. It suggests an integrated PHC, based on a coordinated approach to health sector planning. The integrated strategy also recognizes the decentralized nature of PHC and it stresses the need to improve the planning capacity of Ghana's health agencies. Suggestions are also made for strengthening managerial training and use of local communities and traditional healers.

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Chapter I

Introduction

Every nation must confront the question of how much health care to provide to its population and how to provide it. Nations must also identify their health priorities in the context of development objectives. A particularly complex problem is the search for methods to achieve increased access to and a better, more equitable distribution of health care services.

To meet these objectives many developing countries have pursued a strategy of primary health care. Although supported by the World Health Organization (WHO) since 1975, it was not until the International Conference on Primary Health Care in Alma-Ata, USSR in 1978 that primary health care was recognized as a strategy. The Conference declared that:

Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and the community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process (Kleczkowski, et al, 1984: 6).

The organization and process of primary health care are based on common principles but differ substantially among countries, depending on the human and

material resources available to the country (Venediktov, 1981:332; Newell, 1978:14). Political and economic priorities of the government, the political and economic power of provider groups, demography and environmental conditions contribute to shaping primary health care systems.

Since the Alma-Ata Declaration of 1978, developed and developing countries have been searching for the appropriate strategy to realize primary health care for their respective populations. Primary health care (PHC) is understood to be different things in different jurisdictions. Newell suggests that primary health care is "related to a loose series of other terms, past and present, including Primary Medical Care which describes the actions of doctors at the periphery, and Basic Health Services which promotes an interlocking series of health actions to people outside hospitals" (Newell 1978:18). This heritage of primary health care has resulted in a range of different approaches. Chen finds that whichever PHC approach is adopted, there is a common underlying assumption "that the knowledge required to achieve a successful PHC already exists, that the challenge is to generate the political commitment to improve the management capacity for implementation; and to seek funds for health programmes" (Chen, 1986:1260).

In a discussion of political action for primary care, Kingsley Heendeniya argues that when politicians and administrators attribute their inability to implement primary care to a shortage of funds, skilled staff, equipment and buildings "they forget that it was precisely [for] these reasons that the strategy was adopted at Alma-Ata" (Heendeniya, 1987:518). He further argues that some politicians in countries that are predominantly agricultural with a rural political base will be afraid that rural populations may believe they will be getting a lower level of health care and not

support the concept or the government. This last observation may be of less importance given the relatively weak political positions in which most rural populations find themselves.

The resistance of the medical profession to a shift of resources from the institution-based and technology-based urban practice to a rural-based primary care system is also identified as an obstacle. Community health workers and traditional birth attendants are regarded as competitors by physicians (Mangelsdorf, et al, 1988).

Richard Smith identifies a number of common problems to achieving primary health care in less developed countries:

- A fragmented approach to health care development;
- The lack of a broad base of support for a national program;
- Obsolete organization structures for delivery of primary health care;
- Inadequate management support;
- Failure to develop a planning capability;
- A lack of overall manpower plan;
- Ineffective and inefficient training;
- Lack of on-the-job continuing education;
- Failure to involve local community in national and regional primary health care programs;
- Costs of training, equipment and supplies in periods of severe economic constraint.

Kenneth Lee argues that it might be best to analyze and define PHC in regard to what it offers rather than how it is structured. Definitions based in structure tend to identify PHC as the lower level of care based principally in "a health clinic,

dispensary, or health centre close to where people live and work" (Lee, 1985:93). Lee offers five criteria distinguishing elements of PHC: equitable distribution, community involvement, focus on prevention, appropriate technology and multisectoral approach (Lee, 1985:94). These criteria are indicative of what PHC offers -- an approach that involves local people in the promotion of their own health employing both western and traditional medicine techniques. Primary health care approaches endeavour to provide wide coverage at relatively low cost.

Identified as a key element of primary health care is the use of community or village health workers (CHWs). These workers have "limited training that enables them to provide front-line services while recognizing the need to refer more advanced cases. They are usually involved in maternal and child care, midwifery, family planning, immunization and nutrition, basic sanitation and clean water programs" (World Bank, 1980:57). The World Bank Report stresses the importance of a well-coordinated approach to PHC which recognizes the need for appropriate training, thorough supervision, appropriate referral and adequate but controlled access to drugs and other supplies.

With particular reference to primary health care, Mangelsdorf and colleagues state "only by maintaining primary health care as an important part of the development strategy can the needs of both rural and urban populations be met (Mangelsdorf, et al, 1988:513).

Ghana, like many other countries struggling to improve their level of development, is faced with complex economic and social factors. These factors make it difficult to design a health care system that will address the needs of their population.

From the latter half of the 1960s until about 1986, the Ghanaian economy suffered prolonged stagnation. Over this period, per capita income fell substantially. The average annual growth rate of the gross national product (GNP) per capita for the period 1965-87 was 1.6% (World Bank, 1989:164). Real gross domestic product (GDP) per capita fell 36% between 1970 and 1983 (Loxley, 1988:2). Loxley reports that real GDP per capita has increased by 11% from 1983 to 1987 (from an index of 73 in 1983 [1975 = 100] to 81.4 in 1987) (Loxley, 1988:22). Production of cocoa, the main export crop, tumbled, resulting in deteriorating trade and reduced import capacity. Compounding the problems, domestic food production was insufficient to serve the increasing population.

In the health sector, real expenditures per capita declined from approximately \$10 (US) in 1974 to \$4 (US) in 1984. Trained health manpower, especially doctors, left the country and during this period there was an acute shortage of pharmaceuticals. Infant mortality, a commonly cited measure of health status, rose from approximately 80 per 1,000 births in the mid-1970s to about 103 per 1,000 by 1984. Maternal mortality rates in 1982 ranged between 10 and 15 deaths per 1,000 live births (OIC, 1988:14). Difficulties associated with the data collection and statistics system in Ghana are highlighted by *Primary Health Care Review -- Ghana 1984* which reports the maternal mortality rate as 5 to 15 deaths per 1,000 live births (Adjei, et al, 1984:62).

There were also severe inequalities of access to health care services. Urban facilities received more than 80% of the total health care budget. Further, Ghana's Secretary for Health stated that "coverage of the health services is estimated at about 40 per cent;" that is only about 40% of the Ghanaian population have some level of health care services available to them (Government of Ghana, 1985).

In 1978 the Ghanaian government formulated a primary health care (PHC) policy and strategy within the context of the WHO Alma-Ata Declaration. The goal was to provide PHC services to 80% of the population by 1990 and to focus on common health problems that account for 80% of avoidable mortality and morbidity. PHC was intended to shift the emphasis from a curative approach to a preventive, promotive and curative one. By making use of indigenous healers it was expected that health coverage would be extended to groups previously disadvantaged by the urban domination of resources for curative medicine.

PHC has been supported tentatively by Ghanaian governments between 1978 and 1982. In 1982, the Provisional National Defence Council (PNDC) announced strong commitment to and endorsement of a more extensive PHC program. It was announced that government "Economic Recovery Programs" would include the expansion of PHC programs and a rehabilitation of existing structures as a part of the overall social objectives.

Ghana has been faced with trying to make the transition from the predominantly urban-elite based curative health care system to one that allows disadvantaged urban and rural populations to have access to a broader range of needed health services. Many internal and external economic, cultural and social factors mitigate against the transition. Many studies and reviews have been conducted on behalf of the government of Ghana or aid donor agencies and/or countries. These studies attempt to identify Ghana's failures and successes and provide explanations.

1.1 STUDY DESIGN

Research Questions

The stated health policy of the Ghanaian government is to extend health care services to 80% of the population and to make significant progress in preventing and treating disease. The strategy adopted to realize these goals is "Primary Health Care".

This research investigates the ability of Ghana to make the transition from an urban-concentrated, biomedical health system to PHC. The research examines the foundations of Ghana's health care delivery system to determine if there are existing conditions that can contribute to a successful transition. The stated health and economic plans of Ghana in the mid and late 1980s are examined to identify the goals and policy directions and to assess the importance placed on health sector reforms. The following questions are asked:

- How is the health sector currently organized?
- What has been the performance of the system over the past two decades, with reference to major periods of change?
- What are some of the barriers and opportunities to the development of a primary health care system in Ghana?

This essay examines the role of the government and the private sector to determine their respective influence in shaping the direction of the system. Consideration is also given to the role of health care financing from domestic and foreign sources. The research also looks at the experience of other countries that have succeeded and at some that have failed to make like transitions. After a review of the findings, the author offers insights and a proposal for reform with options.

This study uses data and qualitative information relying on health, economic and development theory to guide the investigation of the role of financing, the private sector, health policy development and management. Ghanaian representatives in Canada have been interviewed, including Ministry of Health personnel studying in Canada. In addition, the insights of consultants recently working in Ghana have been sought.

Relevant information has been obtained from current reports and plans procured from advisors working with the government of Ghana. The author also uses government of Ghana official reports and reports from United Nations agencies such as the United Nations Development Program (UNDP) and the United Nations Children's Fund (UNICEF) and WHO. In addition, World Bank country and sector reports and economic data have been obtained. Information and reports from the Canadian International Development Agency (CIDA) and the International Development Research Centre (IDRC) also contribute to the discussion. Recently completed reports on Ghana's health manpower, health policy and health financing -- the Ghana Living Standards Survey (1988) and Health Statistics of Ghana (1989) -- provide valuable data and information.

The study is organized into seven chapters. Chapter I, "The Introduction," discussed the concept of Primary Health Care (PHC), provides a statement of the problem, presents the study design and gives an outline of the organization of the report.

Chapter II, "The Evolution of the Post Independence Health Care Delivery System," gives a brief country profile of the physical, demographic and economic characteristics of Ghana. The changing organization and management of the health care delivery system is reviewed.

Chapter III, "Health Care in the Economic Recovery," places health care programs within the context of other national policies and programs. It presents a chronology of major government policy directions for the health care sector with an outline of the major policy issues and program constraints. Health manpower, health care financing, privatization and cost recovery are cited as the four major policy issues.

Chapter IV, "The Development of a Primary Health Care System in Ghana," examines the elements of a good primary health care system and sets out the policies directed towards PHC in Ghana. The importance of human resource development and health is also discussed in relation to PHC.

Chapter V, "Primary Health Care in a Cross-Section of Developing Countries," provides a survey of international experiences that can be used as a guide for the Ghanaian system. Measures of primary health care development are examined and the selected countries are compared.

Chapter VI, "PHC Performance in Ghana," describes Ghana's experience to date with PHC. The distribution of services, manpower and the management of the PHC system is examined. A number of the factors that affect the distribution and migration of health care personnel are presented and analyzed with reference to primary health care.

Chapter VII, "Elements of a Rational Approach to Health Sector Planning in Ghana," concludes the paper with a proposal for a systematic approach to policy, planning and budgeting that will reinforce the link between primary health care and economic development.

Chapter II

The Evolution of the Post-Independence Health Care Delivery System

The Republic of Ghana is situated on the southern coast of the bulge of western Africa, on the Gulf of Guinea (Fig. 1). It lies 4°45' north of the equator, extending 850 km north to latitude 11°11', and stretches between longitudes 3°07' west and 1°14' east. Ghana is bounded on the north, east and west by the republics of Burkina Faso, Togo and the Ivory Coast, respectively. In the south it borders the Atlantic Ocean for 560 km. The country is divided into ten regions (Table I). The Greater Accra region is the most densely populated, with 84% of its population living in urban areas. Accra is the national and regional capital. The Brong-Ahafo, Volta, Northern and Upper regions are the least developed and the most rural.

The country covers 238,537 sq. km (92,100 sq. miles). The majority of the country is plateaux of varying elevations. The rest of the country is covered by the Volta River Basin. United Nations reports (UNICEF, 1984) list five physiographic regions, namely:

- coastal plains -- usually not more than 75 m above sea level;
- the forest-bisected plateau -- lying north and west of the coastal plain, with elevations between 250 m and 300 m;

- the Volta basin -- covering 118,000 sq. km, with elevations between 0 m and 150 m;
- the savannah high plains -- lying north and west of the Volta basin and having elevations between 150 m and 300 m; and,
- the escarpments and ridges bordering the Volta basin, ranging from 450 m to 900 m above sea level.

Table I -- Ghana, rural population by region, (projected 1988)

Region	Population		Persons/ sq. km	Rural pop. as % of total
	Number	% of total		
Western	1,237,699	9.2	52	77
Central	1,274,337	9.5	130	73
Greater Accra	1,616,999	12.1	498	16
Volta	1,284,875	9.5	62	79
Eastern	1,846,610	13.8	96	73
Ashanti	2,306,618	17.2	95	68
Brong Ahafo	1,332,595	9.9	34	73
Northern	1,162,645	8.7	19	75
Upper West	480,979	3.6	26	89
Upper East	851,648	6.4	96	91
Total	13,395,041	99.9	57	72

Source: Ghana Health Study, vol. 4, Ontario International Corporation, September, 1988, page 59

The northern part of Ghana experiences two seasons: a dry, windy, dusty season, called harmattan, from November to March, and a wet season for the remaining seven months. August and September produce the highest rainfalls. The southern half of Ghana has four seasons. The major rainy season runs through May and June, followed by a dry season in July, August and September. The minor rainy season is in October and November, and the main dry season appears in December, January

and February. The average annual temperature ranges between 26°C and 29°C. Ghana's weather patterns in the early 1980s have been extreme, with heavy rainfalls in some seasons in 1980/81 and less than average rainfalls in 1982 and 1983. These climatic conditions have affected food production for both domestic use and exports. Hydro-electric production was also affected.

Ghana is endowed with reserves of gold, bauxite, manganese, diamonds, limestone and iron ore. Offshore oil reserves are currently under exploration. The country also produces electricity from hydroelectric dams at Akosombo and Kpong on the Volta River.

Agriculture is the main economic activity in the country, yet of Ghana's 22.7 million hectares of land, only 2.6 million hectares (11%) are under cultivation. Agriculture "accounts for more than 40 per cent of the gross domestic product, and provides employment for 60 per cent of the labour force and accounts annually for some 70 per cent of total export earnings" (UNICEF, 1984). The staple foods are maize, rice, millet, yam, cassava and plantain. A 1985 World Bank report (1985) concludes that because of prolonged drought, inadequate support services, poor transport facilities, and the lack of fertilizers and other inputs, food production declined 61 per cent between 1975 and 1983.

Cocoa is the major export earner for Ghana. Ghana is the world's third largest producer but has been experiencing declines since 1965 when the peak production was 540,000 tons. In 1979 this figure had fallen to 250,000 tons (World Bank, 1983). Data from the Central Bureau of Statistics indicate that cocoa production had fallen to 203,000 tons by fiscal year 1982/83 (UNICEF, 1984). Mining, primarily for gold, is

Ghana's second largest foreign exchange earner, contributing 20 per cent of the total. Timber is also considered an important export (World Bank, 1985).

A 1987 World Bank report suggests that throughout the 1970s Ghana's economy was poorly managed. "Large budget deficits, driven by the need to support a sprawling, inefficient public sector, fuelled money supply expansion and fed inflation. Between 1970 and 1982, the real exchange rate appreciated by 625 per cent resulting in a deterioration in export performance". The same report indicates that foreign aid fell during the period. The country's problems were aggravated in 1983 when it agreed to a repatriation of more than a million Ghanaians expelled by Nigeria. As real wages fell, skilled manpower left the country, spurring further declines. Ghana has experienced economic crisis for much of two decades during which the stunted economic growth resulted in falling per capita income.

In April of 1983 the government announced a major Economic Recovery Program (ERP), aimed at macroeconomic management. The ERPs are discussed in greater detail later in this essay. The ERP was developed to meet conditions set out for the continuance of loans from the International Monetary Fund and the World Bank. The central policy direction involved shifting the economy from state-directed enterprises to a more market-oriented system.

ERP is credited with improving the performance of the economy. "As a result, living standards have begun to show significant improvements. Thus GDP growth has averaged 3.3 per cent for 1983-85 and 6.5 per cent for 1984-85" (Government of Ghana, 1985). Inflation also fell from an average of 75 per cent in 1980/81 and 1982/83 to approximately 40 per cent in 1984.

The population of Ghana was approximately 8.6 million in 1970, growing to 10.7 million in 1980 and 13.6 million in 1987. Projections estimate the population in 1990 at 15.0 million. The average annual growth rate in the decade 1970 to 1980 was 2.3% and is expected to average as much as 3.2% per year through the period 1980-90 (Health Statistics of Ghana 1989). This high average rate of growth in the latter period is partly due to the acceptance of as many as 1,000,000 Ghanaians expelled by the Nigerian Government (Loxley, 1988:5).

Data for 1987 indicate that Ghana has a relatively young population, with 52.9% of the population between the ages of 1 and 19. Only 2.9% of the population is 65 years of age and older. This composition reflects the low life expectancy at birth, which, in 1987, was only 54 years for the population.

Life expectancy at birth in Ghana in 1987 was 56 years of age for females and 52 for males. The total fertility rate is high, averaging 6.5 births per woman, with 22% of women being of childbearing age (15-49 years in OIC's definition). Contraception rates are reported to be about 16% in 1988 (OIC, 1988, vol. 4:11).

Although the data are not recent, it is interesting to note that the National Demographic Sample Survey of 1968 indicated that for both men and women there was a 13-year difference in life expectancy between urban and rural populations -- 54.1 years for urban males and 57.7 years for urban females, 40.4 years for rural males and 44.7 years for rural females. Data from the same survey also indicate that infant mortality was substantially lower in the urban regions than in the rural areas. Infant mortality for both sexes was 106 deaths per 1,000 live births in Accra Capital District and 208 deaths per 1,000 live births in the Upper Region. World Bank statistics for

1986 put the Ghanaian infant mortality rate at 89 deaths per 1,000 live births (World Bank, 1988).

UNICEF reports that in 1985 64% of males and 43% of females were literate. The Ghanaian population, however, is very poor, with 59% of the urban population and 37% of rural dwellers below the absolute poverty level (Health Statistics of Ghana, Table 01). Although data are lacking, there is good indication that the urban poor suffered drastically during the stagnation of the early 1980s. Data presented in a 1986 UNICEF report put the 1983 real minimum wage at 32% of the 1977 level. The same report categorizes many Ghanaian urban low-income areas as "deprived in their combination of poverty, overcrowding, malnutrition, squalor, lack of access to basic services and gross environmental pollution." For the years 1983-86 UNICEF data indicate that 50% of the total population had access to drinking water. The urban population had the greater access -- 72% compared to 47% for the rural population (Health Statistics of Ghana, 1989).

The Gold Coast gained full independence from Great Britain in 1957 and changed its name to Ghana. It was the first black African country to obtain full self-government. Producing 40% of the world's cocoa, with a profitable mining sector including gold, diamonds and manganese, and having foreign reserves of a half billion dollars, Ghana had one of the healthiest economies in West Africa in 1957 (Benimadhu, et al, 1988:70). Under the leadership of Kwame Nkrumah the country enjoyed economic growth and social development in the first years of independence.

By the early 1960s, however, deficit financing and large external borrowing led to economic downturns and political unrest. Progressive repression culminated in the banning of the opposition parties by Nkrumah in 1964. In 1966 the military overthrew

Nkrumah, but between 1966 and 1981 the country suffered through two civilian governments and four military coups d'états.

In December 1981 Flight-Lt. J.J. Rawlings took power, announcing the establishment of the Provisional National Defence Council (PNDC) to administer the government. The proclamation and PNDC Law 42 established the Basic Law of the State. The first of the Directive Principles of State Policy is that "a basis of social justice and equality of opportunities is to be established, particular attention to be paid to the community, and to the reconstruction of the society in a revolutionary process directed against previous structures of injustice and exploitation" (UNICEF, 1984).

The present central administrative structure consists of:

- The Provincial National Defence Council, under the chairmanship of Flight-Lt. Rawlings, and comprised of six other members, including two women;
- The Committee of PNDC Secretaries under the chairmanship of a Coordinating Secretary; and
- PNDC-appointed Secretaries and Deputy Secretaries in charge of some twenty ministries and national commissions.

The Regions are administered by ten PNDC Secretaries who are the political heads of the Regions. These Secretaries are also responsible for the 65 districts of the country. The District Secretaries are responsible to the Regional Secretaries for the administration of government business.

II.1 The Pre-Independence Health Sector

After the British established their rule in the Gold Coast (later called Ghana) in 1844, they created a health service intended to minister to civil servants, officials of mining companies, merchants and other Europeans. Few Africans enjoyed benefits from this service. The oldest recorded medical report in the Gold Coast, written in 1867 by Thomas Jones, a colonial surgeon, mentioned the diseases of guinea worm, dysentery and malaria fever. As a result of the report, it is said, the first hospital was built in 1868 in the Cape Coast area (Adjei, 1984).

Health laws passed during that era included *The Towns, Police and Public Health Ordinance* of 1878, and *The Dispensary and Sale of Drugs Ordinance* in 1891.

A few hospitals and clinics were established in the emerging urban and administrative centres, port towns and mining centres. Missionaries also established health posts for their converts in some rural areas. By 1910 "there were 31 government hospitals including 10 communicable diseases hospitals. Public health services also expanded" (Adjei, 1984:10).

As in virtually all colonial regimes in Africa, the "first and foremost concern of the colonial administration was the preservation of the health of the European population. And since the European population was mainly urban-based, modern health facilities were also urban-based" (Aidoo, 1982:648). Aidoo further suggests that during the colonial period only 0.02 per cent of the population of the Gold Coast had access to hospital facilities.

The health system underwent formal attempts at health planning in the 1920s during the governorship of Sir Gordon Guggisberg. The Accra Mental Hospital, Korle

Bu Hospital, Kumasi Central Hospital and Sunyani Hospital were established by 1927 (Anyinam, 1987:100). However, African doctors with the same degrees as white doctors were denied appointments because the governor contended they were incompetent.

Anyinam reports that in 1943 the colonial government proposed a Health Centre Plan to develop many rural health centres, each of which was to be staffed by a sanitary inspector, a nurse, a dispenser and, where possible, a midwife. Ten years later only two health centres were in operation. Aidoo and Anyinam both support the thesis that where the curative health system, based in hospitals and clinics, was allowed to benefit the indigent population, it was only because the natives were needed as productive labour for the colonials (Aidoo, 1982:648; Anyinam, 1987:101).

In 1952, Nkrumah's pre-independence government established a commission to examine Ghana's health care resources and the needs of the population. Among the commission's recommendations were a system of preventive and social medicine; more hospitals, health centres and dressing stations; and the encouragement of medical research.

II.2 Traditional Medicine

Twumasi defines traditional medicine as "a generic concept which embraces many practitioners of herbal medicine, the fetish priests, priestesses and spiritual healers of various categories" (Twumasi, 1975:340). He further attributes to traditional medicine a recognition of social, cultural and psychodynamic factors in the etiology of illness, and the importance of interpersonal relationships in therapy. Aidoo states that "traditional medicine, though not based on modern scientific medical discoveries and improvements, was nonetheless effective in dealing with many ailments suffered by the

people" (Aidoo, 1982:1349). He also suggests that unlike the biomedical system which was accessible to only a few of the indigenous population, traditional medicine was available to all who sought it.

Anyinam notes that indigenous (traditional) medicine has always been a part of the culture of the people of Ghana. Under colonialism, though, the practitioners of traditional medicine were denounced. They were often forced to abandon their practices or to work in secrecy. Efforts to raise the quality of the services of local traditional medical practitioners and scientifically validate some of the practices were unsuccessful.

II.3 The Post-Independence Health Care Delivery System

In a 1986 statement to the Social Sectors Aid Coordination Meeting the PNDC Secretary for Health described the health care delivery system at independence in 1957. It was a small but efficient hospital-based, physician-oriented health care delivery system made up of 76 hospitals and 32 health centres. The period from 1960 to 1975 was characterized by very rapid expansion of health services with emphasis on rural health. Between 1960 and 1975, for instance, the number of hospitals had increased from 76 to 112 and health centres from 23 to 137 (PNDC, 1986).

One of the Nkrumah government's principal objectives was to expand the health care delivery system to the rural areas. Anyinam cites the Physical Development Plan (1963-1970) as an expression of intent to coordinate the distribution of health services in rural areas. He suggests that the plan failed because of "political expediency and favouritism, poor management, and planning and financial constraints" (Anyinam, 1987:102). He offers a damning indictment of the Nkrumah administration's handling

of the health care delivery system, arguing that the inequalities evident during the colonial period in fact deepened in the post-independence period.

Neumann (1979) cites three commissions established to find ways of improving health care delivery to rural areas. The Brachott Committee (1961), the Easmon Committee (1966) and the Health Sector Committee (1971) uniformly recommended expanding rural health services and increasing the use of auxiliary medical personnel.

II.4 Decline of the Health Care Delivery System

Many reports chronicle the deterioration of the health care delivery system and the impairment of health. One 1985 World Bank report explains that although the allocation for health expenditures as a percentage of GNP has been maintained at 7% to 10% of the national budget, the per capita expenditure in the health sector has declined from the equivalent of \$10 (US) in 1974 to \$4 (US) in 1984. In real terms, the decline is even greater (World Bank, 1985:10).

Research findings of the Health Group of the Institute of Development Studies (IDS) at Britain's University of Sussex indicate that between 1970/71 and 1976/77, there was clear evidence of the Ghanaian health service's deterioration. The IDS group reports that as a result of rapid inflation the allocation to the health sector grew by only 2% in real terms. Per capita expenditures did not grow but instead fell by approximately 11% because the population increased by at least 13% during the seven-year period.

The study group points to the maldistribution of resources by documenting that in 1974/75 the central teaching hospital and the Greater Accra Region together were allocated about one-third of the health budget to serve only one-tenth of the country's

population. It further reported that in the same year, in the other regions, more than twice the resources per person were allocated to the best-off region compared to the worst-off area (Segall, 1981:343).

In a 1986 statement the Ghanaian government said that lack of expenditures has resulted in health centres remaining unfinished, incomplete for years and years, buildings being in a state of disrepair, and vehicles and medical equipment lacking parts (PNDC, 1986). The breakdown in the support and administrative system, including the Ministry of Health's national radio communications network has resulted in disruptions in health service delivery (World Bank 1985, 10).

Table II outlines total government expenditures and recurring expenditures for the health sector for the period 1978 to 1988. Total government expenditures (adjusted for inflation) show negligible growth between 1978 and 1983. Year-by-year declines ranged between 20% and 37%. The next three years -- 1984, 1985 and 1986 -- record increases in expenditures of 21.3%, 53.6% and 13.0% respectively. Total government expenditures in 1983 represented only 29.4% of the 1978 amount. The 1986 figure is 62.0% of the 1978 amount. Allocations to the health care sector suffered concomitantly. The low point occurred in 1983, when the allocation of 99.4 million *cedis* equalled only 14.8% of the 1978 allocation.

Table II also indicates that per capita health expenditures declined from 63.6 *cedis* in 1978 to a low of 8.3 *cedis* in 1983. Per capita health expenditures climbed to 39.0 *cedis* in 1986. However, estimates for 1987 and 1988 place per capita health spending at about 30 *cedis*.

Table II -- Recurring Ghanaian government expenditure and expenditure for health care, 1978-1988

	Expenditure (current <i>cedis</i> , 000,000s)		Expenditure real <i>cedis</i> , 000,000s		MOH Health expenditures	
	Total govt	MOH health	CPI Accra (1980=100)	Total govt MOH health (1)/(3) (2)/(3)	As a % of total	Population estimate (000s) Real <i>cedis</i> per capita
	(1)	(2)	(3)	(4)	(5)	
1978	3334.5	289.8	43.2	7718.8	670.8	8.8
1979	4076.8	278.2	66.6	6121.3	417.7	8.7
1980	6329.3	429.9	100.0	6329.3	429.9	6.8
1981	8602.6	510.4	216.5	3973.5	231.6	5.8
1982	8029.4	485.7	264.8	3032.3	183.4	6.0
1983	13401.0	586.6	590.1	2271.0	99.4	4.4
1984	22700.0	2112.3	824.1	2754.5	256.3	9.3
1985	38461.0	2612.0	909.1	4230.7	290.6	14.5
1986	60833.0	6496.8	1272.7	4782.0	510.9	9.4
1987	9832.6	1718.2	404.6	13500.0		30.0
1988	9832.6	2319.6	423.9	13851.0		30.6

Notes: CPI increases in 1986, 1987 and 1988 assumed at 40%, 35% and 35% respectively.

Population growth rate assumed at 2.6% annually. Source: Ghana Health Study, vol. 2, Ontario International Corporation, page 52.

Another indicator of the deterioration in the health care delivery sector is the loss of human capital, that is, skilled personnel. World Bank and UNICEF studies, using data from the Ghanaian Ministry of Health, show that the number of physicians in Ghana had grown to a high of 1665 in 1981. Between 1981 and 1984, however, the number of physicians in Ghana is placed at approximately 800. This decrease occurred despite the output of 60 medical graduates per year by the nation's two medical schools. Low wages, political instability and poor working conditions are blamed for this exodus of physicians. The number of physicians in 1987 is estimated to be 950

(OIC, 1988, vol. 3, p. 68). Following sections describe and analyze the distribution, training and use of health personnel in Ghana. The 1984 UNICEF Situation Analysis documents the emigration of 900 nurses in 1982.

The health of the Ghanaian population deteriorated severely through the 1970s and 1980s. Data were not collected through this period on a systematic basis, and existing estimates are believed to be low. The infant mortality rate fell to about 80 per 1,000 in the mid-1970s, increased to around 100 per 1,000 in 1980 and climbed to between 110 and 120 in 1983/84. The child death rate was reported at 15 per 1,000 in the late 1970s and approximately 30 per 1,000 in 1983/84 (UNICEF, 1986). The same report also states "the proportion of children whose weight-for-age was below the third percentile of the Harvard standard increased from 35% in 1980 to 47% in 1983, with some small fall in 1984."

The growth in new cases of malaria exemplifies increased outpatient morbidity during the period of the health care system's decline. In 1980 new cases of malaria in Ghana numbered 242,781. This figure had increased to 593,368 in 1985 and to 1,141,893 cases in 1987 as a result of new strains. Other infections and parasitic diseases such as upper respiratory infections, diarrhoea, sexually transmitted diseases and intestinal worms also increased significantly during the mid-1980s (Health Statistics of Ghana, 1989).

II.5 Current Health Care Delivery System

The number of health care facilities in Ghana is placed at between 535 and 538 by two separate 1985 studies (OIC, 1988, vol. 3; Anyinam, 1987). These facilities are

administered by the Ministry of Health, religious missions, mines and quasi-governmental agencies. Table III displays health care facilities by type and administration.

Table III -- Ghanaian health care facilities by type of facility and type of administration, 1985

Administered by	Type of facility				Total
	Hospital	Health centre	Health post	Clinic	
Ministry of Health	*57	74	178	139	448
Religious missions	35	-	-	35	70
Mines	7	-	-	-	7
Quasi-government	13	-	-	-	13
Total	112	74	178	174	538

*Encompassing 2 teaching hospitals, 8 religious hospitals, 36 district hospitals and 11 special hospitals. Source: Ghana Health Study, vol. 3, Ontario International Corporation, September, 1988.

The distribution of these facilities favours the most urbanized areas of the country. The Greater Accra region enjoyed a high bed per population ratio of 1:290. However, in the northern region of the country the bed per population ratio is 1:1643 (Anyinam, 1987:105). UNICEF work estimated that in 1977/78 only 30% of the country's population had access to formal health care (UNICEF, 1984; UNICEF, 1987).

Table IV details data about physician distribution by region for 1984 and 1987.

Table IV -- Distribution of physicians by region in Ghana, 1984 and 1987

Region	No. of physicians (and % of total Ghanaian physician population)			
	1984		1987	
Greater Accra	337	(41.2)	428	(45.1)
East	55	(6.7)	70	(7.4)
Central	39	(4.8)	40	(4.2)
West	60	(7.3)	66	(7.0)
Volta	56	(6.9)	47	(5.0)
Ashanti	197	(23.7)	196	(20.7)
Brong-Ahofa	34	(4.2)	45	(4.7)
North	24	(2.9)	25	(2.6)
Upper East	11	(1.3)	10	(1.1)
Upper West	7	(0.9)	21	(2.2)
Total	817	(99.9)	948	(100.0)

Source: Ghana Health Study, vol. 3, Ontario International Corporation, page 69 and UNICEF, 1984, page 327.

In 1984, 41.2% of Ghana's physicians practised in Greater Accra. This figure increased to 45.1% in 1987. The maldistribution is made even more striking by the fact that of the 337 physician in Greater Accra, 144 practised at the Korle-Bu teaching hospital, accounting for 17.6% of all physicians in Ghana. Similarly, the Komfo Anokye in Kumasi teaching hospital drew 102 physicians, or 12.5% of all physicians in Ghana in 1984 (UNICEF, 1984:327).

The ratio of nurses to the general population by region also illustrates the maldistribution of resources. There are three types of nursing personnel -- clinical nurses, public health nurses and community health nurses. With a rate of one nurse per 785 persons, the Greater Accra area has Ghana's best population per nurse ratio.

Segall and White report, and McEwan and colleagues concur that

"...in 1974-75 the central teaching hospital and the Greater Accra Region together were allocated about one-third of the health budget, which would have benefited mainly the tenth of the population living in that region. Further in the same year, among the other regions, more than twice the resources per person were allocated to the best-off region compared with the worst-off" (Segall and White, 1981).

The maldistribution found by Segall and White in 1974/75 continues. In 1984 the budget allocation for urban health care facilities accounted for more than 80% of the total budget allocated to the health care sector (World Bank, 1985; Government of Ghana, 1986).

II.6 Organization of the Ghanaian Health Care System

Ghana's health care system can be described as having four discernible subsystems: (1) government health services, (2) nongovernmental nonprofit health services, (3) private practitioners' services and (4) traditional medicine.

Government health services are administered primarily by the Ministry of Health. The health services include various types of hospitals (teaching, district, psychiatric, leprosaria), health centres and health posts, and health clinics. More than 62% of the country's hospitals are administered by the Ministry of Health or other governmental agencies (mines, army, police). Data in Table III show that for 1985 the

government was responsible for all health centres and health posts and approximately 80% of all health clinics.

Nongovernmental health services are dominated by the religious missions, organized since 1968 into the Christian Health Association of Ghana (CHAG). In 1987, 76 health facilities and programs operated under the auspices of CHAG. This number includes 31 hospitals, 40 clinics and 5 district primary health care programs (OIC vol. 4, 1988:67). CHAG institutions are reported to be well run, effective and efficient, offering their services principally in rural areas (OIC, 1988, vol. 4:16; Adjei, et al, 1984:11).

The senior staff of CHAG institutions -- physicians, nurses and administrators -- are foreign missionaries who stay for long periods with the institution. A 1984 UNICEF reports that recently CHAG has been recruiting Ghanaian health professionals to senior positions. The same report suggests that these institutions are protected from many of the effects of Ghana's economic crisis because their foreign affiliations and support yield donations, drugs and supplies from abroad.

The private for-profit operators include doctors, nurses and pharmacists, midwives and laboratory technicians. For the most part, health services delivered by physicians, nurses, midwives and other practitioners in private practice serve the urban populations. In 1984, there were 248 hospitals and clinics in the Accra region. Comparable and comprehensive data are not available from the same year, but in 1982 there were 417 registered private hospitals and clinics and 213 maternity homes in the entire country. Although data from the two years cannot be strictly compared, they suggest that the majority of private health services are delivered in urban areas (UNICEF, 1984:311).

Traditional medicine is delivered by practitioners that include traditional attendants, herbalists, bonesetters, fetish priests, psychic healers and spiritualists. Warren and colleagues suggest that "indigenous healers almost exclusively provide health care for approximately 70% of the Ghanaian population, but with the exception of the traditional birth attendants, they have been virtually ignored by health care policy makers until recently (Warren, et al, 1982:1873). Anyinam supports Warren's view by stating that "on the whole, the role of indigenous medical practitioners in the deployment of health services by the government has been kept ambiguous, though the MOH has been stressing the need to rehabilitate and harness the practices of healers into the national health care delivery system" (Anyinam, 1987:125).

II.7 Government Health Services

Administratively the MOH at the national level is directed by the PNDC Secretary of Health, currently assisted by an undersecretary, a director of medical services and a chief director. The headquarters in Accra is expected to be reorganized as a result of a June 1988 symposium sponsored by the PNDC (OIC, 1988, vol. 4:17). In each of the ten regions the MOH is under the direction of a regional director of health services, assisted by administrative and technical teams. The functional level of health services delivery is at the district level. Each of the 68 districts is intended to be the base from which health services of different types can be planned, practitioners trained and services tailored to the needs of the district. The administrative structure is outlined in the previous chapter under "The Post-Independence Health Care Delivery System".

The government is also involved in the delivery of preventive health services. Each region has units responsible for the delivery of environmental health services, health education programs, nutrition programs, family planning and maternal and child health services.

Chapter III

Health Care in the Economic Recovery

The shape of health-related policy is determined by several interrelated influences -- the type of government, economic conditions, geography, the organization of the health care system and the health status of the population, among others. When independence was declared in 1957, Prime Minister Nkrumah's stated political ideology was socialism (Benimadhu, et al, 1988). As practised in Ghana, socialism gave rise to an increased role for government in the ownership, production, and distribution of goods and services.

Introducing in 1962 what was called the "Party's Programme of Work and Happiness" the Nkrumah Government proclaimed that "the fundamental objective is the building of a socialist state devoted to the welfare of the masses" (UNICEF, 1984). To reach its objective, in 1964 the government introduced the "Seven Year Development Plan 1964-1970". The "Plan" was intended to increase the rate of growth of the economy through "the rapid development of the state and cooperative sectors" (UNICEF, 1984). Import substitution and industrialization were key elements of the "Plan", which called for developing domestic processing plants (where feasible) and establishing industries to provide materials to the construction sector. Basic industries in other fields such as chemicals and metals were also identified as targets for rapid development.

Aidoo argues that even though the thrust was toward a socialist model of development "imperialist investment" continued to have a significant role. He supports his case, saying "...it was during this period that the single most profitable imperialist investment in Ghana (an aluminum smelter operated by the Volk Aluminum Company-Valco) was made by Kaiser Aluminum and Chemical Corporation (90 percent) in partnership with Reynolds Aluminum (10 percent) (Aidoo, 1982:650). Benimadhu suggests that Ghana's socialist experiment ended in failure. "The state's enterprises were inefficient and had chronic excess capacity despite the extremely high effective rates of protection" (Benimadhu, 1988:71).

It was argued that part of the failure was due to the neglect of the agricultural sector. The direction chosen by the state ignored small farmers and herders, who account for the majority of Ghanaians. Benimadhu's analysis of the 1965 budget demonstrates the concentration on industrialization. Two million dollars (US) was devoted to agriculture, compared with \$114 million (US) and \$312 million (US) for manufacturing and imports, respectively. The country's economic problems contributed significantly to the overthrow of Nkrumah's government on 24 February 1966.

The Nkrumah government had initiated negotiations with the International Monetary Fund (IMF) and the World Bank in 1965 seeking to arrange debt repayment conditions and large amounts of foreign aid. Nkrumah, however, was unable to come to terms with the IMF. After his overthrow in February, 1966, the National Liberation Council (NLC) accepted to follow the IMF Stabilization Program which stressed the following:

- (1) the cutting of government budgetary expenditures in order to reduce the deficit;

- (2) the limiting of receipts from current revenue and borrowing from non-inflationary sources; and
- (3) the limiting of Central Bank and private sector loans at predetermined levels.

Hutchful argues that the IMF Stabilization Program was a failure resulting in deepening stagnation and unemployment. Although public sector investment fell by 17% in 1966, 20% in 1967 and 3.5% in 1968, the corresponding increase in private sector investment did not occur (Hutchful, E., 1987:39). As per capita GNP fell and the living standards of the poor deteriorated, social sector programs such as health care suffered.

The 1964-70 Seven-Year Plan and subsequent economic development plans have recognized the need to improve the health sector. The Seven-Year Plan included "thirty-two million pounds sterling for the health needs of the people" (UNICEF, 1984:43). Maternal and mental health programs, as well as dental care, were identified as priority areas in the Plan. "To provide efficient health services to the population, provision was made to produce by the end of the 7-year period, 1 doctor to every 10,000 people, 1 nurse to every 5,000 people, 1 technician to every 5,000 people, 1 health inspector to every 15,000 people (UNICEF, 1984:43).

Anyinam concurs with the UNICEF reports, but suggests that inequities in the health care sector deepened during the Nkrumah regime because of poor management and planning, financial constraints, political expediency and favouritism (Anyinam, 1987:102). After Nkrumah's overthrow the new National Liberation Council (NLC) Government also promised to give priority to health issues, but it too fell a year later in 1969. In that year, the Government, concerned about rapid population growth and

the need to have an official policy, announced the Ghana National Family Planning Programme, with the objective of making family planning services accessible to all Ghanaians (University of Ghana, 1979).

The same year the Government signed an agreement between the University of Ghana Medical School, the USAID mission in Ghana and the University of California at Los Angeles School of Public Health (see Appendix 2 for details of the project). This project -- the Danta Project -- had as its goal "to assist in initiating a demonstration rural family health program which would help improve the health and welfare of the people especially in rural areas". The objectives of the first phase of the project (1970-1975) as outlined in the 1970 Project prospectus were:

- (a) to investigate the state of the rural community and the factors associated with effective participation in health programmes;
- (b) to undertake research into the most efficient means of utilizing available manpower and other resources in the operation of health post-centred comprehensive rural health services;
- (c) to train doctors, sanitarians, midwives, community health nurses and other health personnel, both separately and in teams, for their role in rural health work,
- (d) to provide manpower oriented and equipped to handle the problems of the community (University of Ghana, 1979).

The project was a precursor of the PHC program.

On New Year's Eve, 1981, the Provisional National Defense Council took power under the leadership of Flight Lieutenant Rawlings. Faced with continued deterioration in the economic performance of the country, the new Government developed the Economic Recovery Program I (ERP I) in conjunction with the World

Bank and the International Monetary Fund (IMF). The ERP I (1984-86) was designed to reduce the dependence of the economy on the public sector. The objectives of the program were:

- To restore production incentives;
- To increase the availability of essential consumer goods;
- To increase foreign exchange availability and improve its allocation, particularly to high priority sectors;
- To lower the rate of inflation by adopting prudent fiscal, monetary and trade policies;
- To rehabilitate the physical infrastructure to be more supportive of Production activities; and,
- To restructure the country's economic institutions.

The economic reforms of ERP I were designed to deregulate prices, and to re-align relative prices in favour of the export of cocoa, timber, minerals and nontraditional products (Republic of Ghana, 1987). Private sector investment was also encouraged. According to the Ghanaian government, the ERP I program "achieved a considerable measure of success in terms of reversing the declining economic situation. There have been increases in real GDP and reductions in the rate of inflation" (Republic of Ghana, 1987:12). World Bank Reports support this assessment: "Since April 1983, when the Government announced a major Economic Recovery Program (ERP), there has been a marked improvement in economic policies and an impressive recovery of the economy" (World Bank, 1987:2).

Similarly, a 1986 UNICEF report on adjustment policies says "the Economic Recovery Programme has produced a remarkable turn-around in policies towards improving the macro-balances and rehabilitating parts of the economy" (UNICEF, 1986:iv). Further, it is argued that this change has been accomplished despite a severe drought in the early 1980s and the January, 1983 return of over one million Ghanaians from Nigeria (World Bank, 1987).

In *Economic Crisis and the Long Road to Recovery*, John Loxley presents data to support these views of improved economic performance. Real GDP increased by .96%, 5.1% and 5.2% in 1984, 1985 and 1986 respectively. Real GDP per capita also grew in 1985 (5.4%) and 1986 (2.1%). The inflation rate that was so high in 1983, running at 122% annually, fell to 40.2% in 1984 and to a low of 10.4% in 1985. It rose again in 1986 to 24.6%.

The 1984 UNICEF situation analysis, relating to child and maternal health in Ghana, questions the government's commitment to the social services of the ERP I. Data presented in the report indicate that of the \$3.2 billion (US) estimated in the limited care scenario to be needed for the rehabilitation programme and external capital requirements, only 4.6% was to be allocated to the social services sector. Expenditures for the fuel and power sectors and for improvements in the physical infrastructure of the country accounted for 64.3% of the total allocated expenditures (32.6% and 31.7% respectively). Agriculture and manufacturing were allocated 18.8% and export-oriented sectors (cocoa, mining and timber) 12.3% (UNICEF, 1984:55).

In November, 1985 the Ghanaian government presented a report to the Consultative Group for Ghana, in which it outlined Phase II of the Economic Recovery Program (ERP II). It was acknowledged that limitations in the areas of administration

and implementation of programs had resulted in a slower improvement than was possible in overall economic performance.

Five major policies were identified for the period 1986-88:

- (i) a continuation of macroeconomic policies aimed at sound fiscal and monetary policies, increased flexibility of trade and exchange policies, financial sector reforms, revenue mobilization efforts and a clearly defined set of public expenditure priorities;
- (ii) a renewed focus on policy reforms in the key production sectors of agriculture, energy, industry complemented by a renewed emphasis on the major social sectors of education and health, and a growing focus on improved welfare of vulnerable groups, including the rural poor;
- (iii) a restructuring of the relative roles of the public and private sectors, in part through improved wages and employment policies, state enterprise reforms and an improved overall incentive structure;
- (iv) significant improvements in the implementation of policies and programmes through (iii) above, as well as through a restructuring of the institutional framework for planning and project implementation; and improved procedures and resources for key areas such as aid liberalization, credit allocation and import programming, and a more selective reliance on the use of administrative controls.
- (v) continued external assistance -- both bilateral and multilateral -- to provide the underpinnings for the continuing recovery efforts as well as to reduce the

burden of debt-service obligations bunched up in the coming few years and arising from past and recent borrowings (Republic of Ghana, 1985:14).

The Report proposes an allocation of 8.7% of the capital expenditure programme to the social services sector. This is in contrast to the 4.6% allocated to the social services sector in the 1984-86 programme. It is also stated that for the 1986-88 period, recurrent health expenditures are programmed to increase by 60% in real terms over the 1985 level.

In 1985, in an effort to operationalize the ERP, the Ghanaian government launched the Structured Adjustment Programme (SAP). The objective of SAP is to improve economic management and reduce structured bottlenecks in the economy. The implementation instrument of the SAP is the Public Investment Programme (PIP). This programme is intended to "improve public investment planning and control in order to ensure efficient allocation of scarce resources and expeditious implementation of investment projects" (Republic of Ghana, 1987).

Planned investments for the 1986-88 period for the health sector are concentrated on seventeen projects. These projects are estimated to require an investment of 8814 million *cedis*. Of this sum, 55.8% will come from foreign exchange and the remainder will come from local currency.

The key projects include the following:

- Primary health care strengthening (900 million *cedis*);
- Maternal and child health/family planning programme support (885 million *cedis*);

- Equipment for health stations (585 million *cedis*);
- District hospital rehabilitation (1500 million *cedis*);
- Regional hospitals rehabilitation (655 million *cedis*).

The 1989 Ghanaian budget was presented on 14 January, 1989. It emphasized continued support for SAP. The budget indicates that the economy grew by a little over 6% for 1988, resulting in a growth in per capita income of 3.3% (an increase of 36% over 1987). Improving the access of all Ghanaians to key social services in health, education and housing is identified as a component of the two main objectives of the budget (Republic of Ghana, 1989).

In the budget's sectoral breakdown, the following are identified as priorities for 1989: accelerated improvement of health facilities (health stations and hospitals), the purchase of needed equipment and the improvement of public health programs to eradicate guinea worm, carry out mass immunization, deworm children in all regions and do vaccinations against meningitis (Republic of Ghana 1989).

These policies, programs and plans indicate successive regimes have recognized that economic development cannot ignore the need for development of the social services sector. The ability of the governments to translate the recognition into concentrated programs has been hampered by deteriorating economic conditions, poor management practices and the loss of skilled personnel.

In its 1986 report to the Social Sector Aid Coordination Meeting, the government presented the major policy issues and program constraints in the health sector. The report identified them as:

- The skewed allocation of resources which favour the hospital sector over primary health care and urban over rural areas;
- Limited non-wage expenditures and virtually no capital expenditures;
- Manpower constraints -- shortages, maldistribution and overspecialization; lack of technical and managerial skills; overstaffing of nontechnical personnel;
- Limited cost recovery measures;
- Lack of a long-term health sector plan; and
- The need for closer coordination of external aid.

III.1 Manpower

The exodus of health manpower has worsened an already inequitable distribution of health personnel. The country lost more than 50% of its doctors between 1981 and 1984, and about 8.5% of nurses in 1982 alone (UNICEF, 1986:10). These losses are indicative of the deteriorating state of health services in Ghana. The previous section on the decline of the health care delivery system paints a very bleak picture for Ghana through the first half of the 1980s. The National Health Advisory Council of Ghana released the policy document "Health Policy of Ghana -- 1982". The report outlined three directions for health manpower in Ghana:

- The need for the Ministry of Health to examine the current state of health manpower and assess its appropriate re-orientation and development to allow for better health coverage to the population;
- The need for a concerted programme to train community health personnel, making use of traditional health workers; and,

- The need for Ghanaians to become more involved in community health work (OIC, vol. 3:6)

The Ghana health manpower study sets out more detailed manpower policies from "Health Policies of Ghana (Draft 1987). The emphasis of this policy paper is on PHC, which puts health manpower training and planning in a much broader context. The draft 1987 document paid special attention to:

- The need to train adequate numbers of workers with appropriate knowledge and attitudes to achieve national health plans;
- The integration of health manpower training, planning and utilization with a broader educational and socioeconomic development system;
- Reliance on primary health care among community level personnel, first-level referral and district health management teams;
- The training of trainers;
- The development of teaching methodologies;
- The development of an effective system of supervision; and,
- The planning of staffing patterns and career opportunities for the health team. (OIC, 1988, vol. 3:7).

There are obstacles to achieving these policy objectives. One of the most crucial elements is the lack of trained and highly skilled personnel in the Ministry of Health. The exodus of highly trained senior civil servants left the MOH without the capacity to develop comprehensive health manpower plans. Such plans require the development of data collection systems and the ability to integrate the data with information from

experts in other areas and incorporate it with the PHC thrust. Other constraints to manpower policy implementation in Ghana are reported to include poor budgeting control; an absence of adequate job descriptions; the lack of planning based on attainable targets; and the exertion of pressure by various boards, associations and councils to prevent rationalization of health manpower categories of health cadres (OIC, 1988, vol. 3).

In 1972 Sharpston reported the uneven geographical distribution of medical care in Ghana, concluding that "doctors in Ghana constitute a tight elite with high status" (Sharpston, 1972:216). Doctors are further characterized as having political control of the Ministry of Health and as a group being subject to few pressures from public opinion or organized influential groups. Consequently, through inaction or active opposition, the doctors can slow change in areas not consistent with their individual or collective goals. Sharpston further argues that doctors in the MOH services avoid pressure to move to rural areas by choosing to work in the private sector. He suggests that "doctors in the private sector will congregate in major towns. Public sector doctors have effective control themselves, over the distribution of doctors in the public sector, and will also congregate in the towns" (Sharpston, 1972:217). These observations are still true. The 1984 UNICEF situation analysis suggests that the health professional associations like the medical association and nurses associations have been powerful enough to influence manpower policy. Thus, attempts by the MOH to rationalize health manpower categories have met with little success (UNICEF, 1984:324).

Data presented in the previous chapter indicate that physicians are still able to control much of their own distribution and therefore choose to locate primarily in the larger urban centres. Maldistribution of doctors is a problem common to developed and

developing countries. Two studies from very different parts of the world -- Korea and Peru -- illustrate the problem.

The Korean study concluded that "the shortage and disproportionate distribution of medical manpower is one of the major concerns of the central government. Considering those medically indigent in many rural and urban poor areas, the government must take an initiative to help them receive the necessary care for survival. If governmental policies are not effective in motivating physicians to move into shortage areas voluntarily, the issue must be raised as to whether health care personnel other than physicians can be employed on a wider scale in areas with physician shortages" (Yang, et al, 1989:68).

The Peruvian study, discussing the distribution of health workers, found that the "major urban areas (particularly Lima/Callao) enjoyed the highest ratios of doctors, nurses and pharmacists to population, but they also had the highest concentrations of paramedical personnel" (Zschock, 1988:332). Further, data are presented which indicate that in 1984, sixty-seven per cent of all physicians (and 71% of Health Ministry physicians) were concentrated in Lima/Callao alone (Zschock, 1989:332).

III.2 Health Manpower Production and Training

Two medical schools, 27 nursing schools and nine paramedical training schools account for the government's training of health personnel in Ghana (Republic of Ghana, 1987:38). The Ministry of Health schools produced more than 4700 professional and technical personnel between the years 1983 to 1987.

During this period 176 public health nurses (PHNs) were produced, an average of 35.2 graduates per year. The production of PHNs increased 38.7% between 1985 and

1986. The number of midwives produced between 1983 and 1987 was 1412, an average of 282.4 graduates per year. This production rate fell by 11% from 1986 to 1987 from 313 to 276).

A total of 1293 state registered nurses graduated during the same four-year period, an average of 258.6 per year. Community health nurses (CHNs) produced between 1983 and 1987 numbered 735, an average of 147 per year. The production by the School of Hygiene of environmental health inspectors has fallen significantly since 1983 when there were 33 graduates; in 1987 there were only seven graduating inspectors. A total of 103 graduating inspectors are reported during the period 1983-87.

The total production of physicians between 1983 and 1987 was 342, or an average of 68 per year. The number of graduates from the two medical schools (the University of Ghana Medical School in Accra and the School of Medical Sciences at the University of Science and Technology, Kumasi) was 54 in 1985 and 42 in 1987 (OIC, 1988, vol. 3).

Ghana has had considerable problem retaining the health manpower it trains. One of the reasons cited for the loss of trained health manpower to other countries and from the public to the private system is the lack of competitive salaries in the public sector. One of the major initiatives of the Structural Adjustment Institutional Support Project (World Bank, 1987:6) is a Salary Rationalization Committee and a National Incomes Policy Committee, charged with preparing an appropriate civil service salary structure. The intent is to try to fill the government's skill requirements with Ghanaians partly by attracting Ghanaians abroad with high qualifications to return by paying a repatriation allowance.

Advanced training for physicians, specialized nurses, physiotherapists, laboratory technologists and dietitians is received out of the country. Figures for 1980 to 1986 indicate that 84% were trained in specialty areas abroad. Eighty per cent of the MOH training budget is reported to have been used for advanced courses abroad (UNICEF, 1984:324). The cost for a medical officer training in epidemiology and health planning in Great Britain was calculated to be C6,015,283 (1988 May exchange rate). These costs include: transportation, tuition, maintenance, books and clothing allowance and, in most cases, a salary (OIC, 1988, vol. 3:32). The Ghana Health Study argues that this high cost of advanced out-of-country training provides little return because the MOH estimates that only 10% of physicians trained outside of Ghana at the postgraduate specialty level return to service in Ghana.

It is further argued that the penalty imposed for breaking a bond is inadequate considering the potential for income for those Ghanaians trained abroad. Unless working conditions improve and remuneration levels become more internationally competitive the prospects for repatriating Ghanaians studying abroad will continue to be dismal.

Greater emphasis is being placed on in-service training designed to improve the skills and management capacity of workers in the PHC schemes. Programmes and workshops are geared to providing technical information and updating skills and knowledge. Although the numbers that have taken part in the PHC in-service training programmes are small compared to the total numbers working in the health care sector, it appears to be a promising start at costs that offer a greater return than specialized overseas training can. "A total of 605 health personnel benefitted from these

programmes, an average of C15,713" (OIC, 1988, vol. 3:35). The MOH will need to weigh carefully the benefits and costs of specialized overseas training.

In his report to the Social Sector Aid Meeting in 1986, the PNDC Secretary for Health stated that "recently the government of Ghana approved salary increases for all workers which helped to raise the morale of staff and this coupled with the economic difficulties faced by neighbouring countries that once attracted our trained health workers is responsible for the return of about 100 doctors and 500 nurses into the service" (Ghana, 1986:4).

The Ghana Health Study recognizes that not only are salary levels in the public sector very low but large disparities exist between health workers with comparable education, training and responsibilities. The Study recommends a critical review of the mechanism for determining salaries and other benefits, emphasizing that compensation scales must be realistic enough to retain individuals in their jobs.

III.3 Health Financing

The level, type and sources of financial support to the health sector care are crucial decisions to be made by governments in all countries. For developing countries this question is most difficult given poor economic performances and the number of competing demands.

In "Strategies for Paying for Health Services in Developing Countries" David de Ferranti argues that the financial problems faced by developing countries are of three types:

- The large and growing gap between resources requirements to meet planned goals (both health-for-all goals and other country-specific objectives) and

projected availability from public sources and external assistance both now and in the future;

- The pervasive underfunding of existing health services administered by government authorities resulting in diminished quality (e.g. when drugs run out) and increased investment costs (when inadequate spending on maintenance leads to replacement of vehicles, equipment and buildings ahead of their normal expected lifetime); and
- The demands on public funds to rescue institutions that become burdened by deficits (e.g. some social security systems) (de Ferranti, 1984:428).

The ability of developing countries to address the above problems varies significantly from one country to another. Much depends on their ability to raise revenue domestically. A study of African nations presents data that demonstrate these differences. In 1979, Ghana, for example, was able to mobilize 6.3% of GDP from taxes whereas Nigeria and Somalia accumulated 23.9% of GDP from this source (Dunlop, 1983:2021). Countries that look to import and export duties for a significant proportion of their revenues are sensitive to the world demand for exports and changes in the economic conditions of industrialized countries.

Developing countries also have different methods of financing health services. These methods can be characterized as "indirect" and "direct" financing. Source of indirect financing include central and local governments, compulsory insurance, voluntary insurance and/or employment insurance and any government subsidies associated with the provision of insurance. Charities and religious organizations within and outside the country and official foreign aid can be both direct and indirect sources

of financing. Direct financing can be strictly defined as "payments by consumers of health services" but it does not include payments they have already made under the different insurance provisions (Abel-Smith and Leiserson, 1980:142). Lee and Mills agree that these sources of financing are appropriate but suggest that village councils should not be ignored as an important source of financing (Lee and Mills, 1983:54).

Not only the sources of financing but the methods of financing are important in the development and shaping of health policy. Abel-Smith, et al, argue that it is important to understand how much different groups of the population are ultimately paying toward the cost of health services and how this compares with the value of the health services they receive. The method of financing can influence what is provided and to whom. As an example the authors argue that "even the provision of a free and universal health service financed from taxation does not necessarily result in services being available to the rural poor. Where services are concentrated in urban areas, the rural poor may not be able to get them even if they are free" (Abel-Smith and Leiserson, 1980:148).

In Ghana financial resources devoted to health care can be derived from Ministry of Health budgets and elements of other budgets such as education and transportation. Financial resources for health services denoted as private sector payments are from direct payments to doctors, dentists, midwives and pharmacies. Fees paid to health facilities and payments in the traditional health sector to herbalists, healers and traditional birth attendants are also private payments. The level of financing from the private sector is not known but Ghanaian sources suggest that private spending must exceed government spending (Government of Ghana, 1986:24).

The Ministry of Health recurrent (operating) budget in 1978 was 289.8 million *cedis* in current dollars, representing 8.8% of total government expenditures. This portion fell to a low of 4.4% in 1983, increasing to a high of 14.5% in 1985 and dropping again to 9.4% in 1986, the last year for which total government expenditure data are available. The Ghana Health Study 1988 reports that "when budgets for related health sectors such as water sanitation, selective agriculture and educational programs are added, total health related expenditures may exceed 15 per cent of total government expenditures" (OIC, 1988 vol. 2:5).

The capital expenditure budget for the MOH in 1986 was 603.8 million *cedis*, representing 9.3% of the recurrent budget for that year. Consistent with the government's capital expenditure program for the social services (part of Phase II of the Economic Recovery Program), capital health expenditures as a proportion of total recurrent health expenditures grew to 16.5% in 1988.

In 1983 the per capita MOH recurrent budget (in 1985 constant prices) was 78.8 *cedis*. This sum increased significantly over the next five years to 259.0 *cedis* in 1985, 404.6 *cedis* in 1986, 289.8 *cedis* in 1987 and 295.5 *cedis* in 1988. The MOH recurrent budget can be segmented in a number of ways. One method identifies budgets directed by main programs: MOH, teaching hospitals and medical/dental services. Table V presents data that allow examination of the relative shares between these programs for the years 1983 and 1988. The MOH program areas was allocated 38.5% of the total recurrent budget in 1983, increasing to 50.5% in 1986.

Table V -- Ghanaian Ministry of Health recurrent budget allocation, by main program, 1983, 1985-1988

Expenditure in 000s of current <i>cedis</i> (and as a % of total health budget)										
Main program	1983	1985	1986	1987	1988					
MOH	233,766	(38.4)	1,613,585	(49.7)	2,649,255	(40.8)	3,442,057	(49.5)	4,965,143	(50.5)
Teaching hospitals										
Korle Bu	63,548	(10.4)	226,499	(7.0)	512,291	(7.9)	429,445	(6.2)	602,797	(6.1)
Komfo Anokye	24,747	(4.2)	116,657	(3.6)	271,410	(4.1)	238,487	(3.4)	288,298	(2.3)
Medical/dental services	286,155	(47.0)	1,287,136	(39.7)	3,064,025	(47.2)	2,842,007	(40.9)	3,976,321	(40.4)
Total	608,216	(100.0)	3,243,877	(100.0)	6,496,981	(100.0)	6,951,946	(100.0)	9,832,559	(100.0)

Source: Ghana Health Study, vol. 2, Ontario International Corporation, September, 1988, page 53.

In contrast both the other program areas have declined over the period. The MOH program includes services common to the health care system, regional health administration, stores, the health education unit, health statistics and the training unit. This program area increased by 12.1% over the period 1984 to 1988.

The recurrent budget is also separated by "programmatic classes": Administration, common support services, curative care and primary health care. Data for 1983 and 1987 indicate that of total current expenditures, the share devoted to administration fell from 14.0% to 12.9%. Similarly the share allocated to common support services fell from 13.2% to 9.9%. However, curative care (of which 85% is medical care) increased from a 53.8% share in 1983 to 59.1% in 1987. Primary health care's share fell from 19.1% in 1983 to 18.0% in 1987. PHC's share includes basic curative care in health centres, posts and polyclinics, environmental health, epidemiology, maternal and child health and nutrition.

The Ghana Health Study suggests that if the definition of PHC is expanded to include resources from administration and common support directed toward PHC, the share would increase to a constant 20% over the period (OIC, 1988, vol. 2:6).

The Ghana Health Study further reveals a gap between budget allocations and actual spending. The Controller and Accountant-General imposes spending limits at various times throughout the year in an effort to control government expenditures. The Study presents data showing that in 1987 the actual MOH departmental spending was about one-half of the allocation. In 1987, however, because of severe drug shortages, supplemental spending limits were allowed, bringing the actual funding to approximately two-thirds of the allocations.

In some instances and for some program areas, it is argued that actual spending is as little as 20% of the allocation. The complexity of the voucher system used to get funding from the Treasurer's office is cited as a possible explanation for programs that fail to reach even the minimum spending limits (OIC, 1988, vol. 2).

Actual funding for capital budgets has also fallen short of the budgeted amounts. Sectoral capital budgets are part of the Public Investment Program (PIP). The 1986-88 PIP identified 17 projects in the health sector at a planned investment of 8814 million *cedis*. It was expected that 4920 million *cedis* (56%) would be obtained from foreign sources and the remaining 3894 million *cedis* from domestic sources. Table VI provides an example of the PIP for the designated social infrastructure sectors for 1986-88.

Table VI -- Public Investment Program in Ghana, financed by ODA budgetary and other sources), 1986-1988, including foreign cost from domestic and international sources (FC) and local cost from domestic and international sources (LC), exchange rate \$1 US = 150 *cedis*

Sector	No. of projects	Spending (000,000s of <i>cedis</i>)								
		1986			1987			1988		
		Total	FC	LC	Total	FC	LC	Total	FC	LC
Education	10	333	290	45	3169	687	2482	56	37	19
Health	17	990	360	630	2213	1217	996	5611	3343	2268

Source: Taken from summary table 1.0, Republic of Ghana -- Public Investment Programme 1986-88, vol. I: Main Report, April, 1987.

Data for 1987 indicate that of the total cost of 2213 million *cedis* for the 17 health projects phased for 1987, 94.5 million *cedis* (14.5%) had been secured from

foreign sources. Only 19.3% of the amount planned from domestic sources had been secured for the 1987 phase of the projects.

Estimates for the 1988-90 PIP program for 20 health sector projects indicate that it is expected that only 47.8%, 22.9% and 30.0% of the planned budgets will be secured for the years 1988, 1989 and 1990 respectively. These sums represent a 66.0% shortfall in expected foreign financing and a 79.0% shortfall in expected local financing (OIC, 1988, vol. 2:Table 17).

The Ghana Health Study indicates that the projects having the least shortfall are those which support the curative health care sector. The establishment of a cardio-thoracic centre at Korle Bu Teaching Hospital was budgeted 23.4% of the total domestic budget of the PIP for 1988. It also appears that foreign donors tend to target projects that are concrete and capital intensive rather than PHC-related projects.

III.4 Sources of Health Care Financing

The three main sources of health care financing in Ghana are government sources, personal service fees and external sources. The government dispenses fund from the consolidated fund (subject to periodic spending limits imposed by the Accountant-General) to cover expenditures of institutions run by the Ministry of Health. The government also provides some funds to mission hospitals and quasi-government hospitals. The second source, personal service fees, are direct payments by individuals for services they receive from traditional and conventional practitioners and a portion of some hospital services.

The economic recovery program for 1984-86 identified "the introduction of cost recovery in a phased manner to supplement increased budgetary allocations as a basis

for improved health services" (Republic of Ghana, 1985:25). A hospital fee regulation (HFR) was introduced in 1985. The HFR is based on a country-wide fee schedule for medical services with differentials for outpatient services. The HFR required that patients pay full costs for drugs. It is intended that there be no charge for preventive services and for services to those individuals who are judged unable to pay. Provision was also made for institutions to keep a portion of the fees they collected.

Data from Health Statistics of Ghana (1989) indicate that in 1985 cost recovery resulted in 193 million *cedis* in revenue. This sum increased to 519.4 million *cedis* in 1986 and 865.7 million *cedis* in 1987. A higher fee schedule was introduced in July of 1985, resulting in significant increases in subsequent years. Total fees collected represented 6.0% of the allocated recurrent budget in 1985, increasing to 8.0% in 1986 and 12.2% in 1987. On a regional basis, revenue per capita in 1987 was greatest in the two more populous and urbanized areas, reflecting the higher per capita family incomes in the urban areas. The revenue per capita in the urban Greater Accra region (133 *cedis* per capita) is greater than the per capita revenue in the rural Volta region (22 *cedis* per capita) by some 605% (Ghana, 1989).

The Ghana Health Study suggests there is a gap between the fees collected and those that could be collected. It is further suggested that the dramatic increases observed in cost recovery are a partial function of an improved reporting mechanism. Fees not collected are difficult to estimate. Other west African countries are also engaged in cost recovery programs. Comparing Ghana with Senegal, Mali and Côte d'Ivoire reveals that Senegal has a broader range of services subject to cost recovery fees. The fees levied in Ghana are lower than in the most west African countries. In 1987 the daily charge for a first class room was 250 *cedis* in Ghana, compared to

5430 *cedis* in the Cote d'Ivoire, 1846 *cedis* in Senegal and 1358 *cedis* in Mali (Ghana, 1989).

The Ghana Health Study reports that data collected by Dr. K.A. Enyimayew indicate that the introduction of user fees (direct payments) in the Ashanti Akim District resulted in a 50% decrease in health centre outpatient attendances within six months. It is further reported, however, that by the end of 1987 attendances had increased to about 15% above the level existing before cost recovery. The same data source reports that attendances at the two health posts in the district (which serve more rural poor populations) exhibited more severe declines in attendances than the health centre. It is concluded that "increased fees is a major factor in the declines of out-patient attendances at health posts" (OIC, 1988, vol. 2:17).

III.5 External Sources of Financing

A number of donor countries and nongovernment agencies are involved in providing financial and technical assistance to Ghana. These include WHO, USAID, UNIPA, IDA, UNICEF, the EEC, the governments of Canada, West Germany, Japan and Switzerland, the African Development Bank and the Saudi Fund, and the World Bank. The securing and disbursement of foreign aid for Ghana is facilitated by the World Bank sponsored Consultative Group for Ghana.

The three-year Economic Recovery Program (ERP) for 1986-88 estimated that financial requirements for the public health sector during the period would amount to \$144.3 million (US). The program called for \$49.2 million (US) or 34.0% to be obtained from external sources (Ghana, Health Rehabilitation Project).

The need to actively pursue more international assistance was identified by the 1986-88 ERP as a major policy action (Ghana, 1985:25). The ERP also called for the development of a disbursement strategy to reverse a pattern of falling disbursement observed between 1984 and 1985. The 1985 government of Ghana report to the Consultative Group for Ghana claims that "a major cause of this fall was the sharp rise in commitments of slow disbursing project aid in 1985 and a significant fall in fast disbursing aid. The result was that disbursement for new commitments fell sharply from 34 per cent in 1984 to an estimated 21 per cent in 1985" (Ghana, 1985:46).

The Consultative Group suggested that improved implementation of domestic policies aided by external support was one of the keys to Ghana's future. It suggested the following three thrusts:

- (1) Better monitoring mechanisms of programs in all ministries and the simplifying of procedures of processing by the Ghanaian government and external donors to allow for faster disbursement of funds;
- (2) a reduction in the fragmentation of aid assistance by improving co-ordination between the government and donor countries or agencies coupled with a better accounting of local funding requirements for programmes and projects;
- (3) improved debt management in order to handle the high debt-service burden through the rest of the 1980s and also to manage the expected large inflow of external aid over the same period while setting the basis for efficient debt servicing in the future (Ghana, 1985:42).

Ghana, like many developing countries, relies heavily on external aid for the development and maintenance of its health care sectors. In a study of health care

financing in Africa, David Dunlop found that international donors have been instrumental in expanding the government health sector into rural areas. He states that in some countries the donor countries continue to pay for rural programs they develop. There are arguments that this type of assistance can produce problems for developing countries if the following questions are not considered carefully:

- Can the donor country afford to pay the recurrent cost of donor-initiated activities when the embodied technology often requires many imported inputs and skilled personnel?
- Is the government able to integrate donor-initiated vertical programs e.g. immunization, malaria control and family planning) into the basic health care system? If so, how? (Dunlop, 1983:2021)

External assistance is essential to the development and maintenance of Ghana's health care system. It will play a prominent role in the rehabilitation of existing curative care facilities and the building of new facilities necessary to the restructuring of the system and its orientation to PHC.

III.6 Privatization and Cost Recovery

The simplest way to control health spending is to make each individual pay part of the cost when services are used. Thus most of the bills for comprehensive health insurance in the United States envisage co-payment, deductibles and co-insurance -- or what in other countries would be called charges to consumers. But the consequence of such policies is to restrain the consumption of the poorer and place virtually no restriction on the expenditure of the better off. Charges of any kind frustrate the

objective of ensuring that health services are readily available to all (Brian Abel-Smith 1976, 125).

This position outlined by Abel-Smith, one of the world's recognized authorities in health economics, is still being debated aggressively. The majority of western industrialized countries have adopted policies which minimize the extent of private involvement in the direct financing of the health care system. The United States is the exception, with 58.6% private involvement, compared to a range of between 31% and 8.4% in the other countries. With the exception of the United States, these societies have adopted policies tending to support the principle that money should not be a deterrent to the consumption of needed health services. Put differently, all residents should have access to needed health services regardless of their ability to pay. The primary sources of public financing are general tax revenues, local tax revenues, social insurance, earmarked taxes, state-run lotteries and deficit financing.

David de Ferranti has examined strategies for paying for health services in developing countries. He argues that in the developed countries, many governments have viewed user charges with disfavour, taking the position that health services should be free as a basic right for all citizens. User charges, however, continue to be used widely in developing countries and are the major portion of private financing because coverage charges are not equally widespread (Ferranti 1984, 434).

Distinction must be drawn among the types of user charges. Nominal charges, for example, are designed to deter unnecessary consumption of services, but are not expected to be a substantial source of financing. User charges designed as cost recovery vehicles are intended to generate significant revenues.

Comparing user charges for the use of public facilities in 14 developing countries (using data for 1979 to 1983 as available), Ferranti concludes that the amounts are nominal. He used the daily agricultural wage in each country as an indicator of the country's ability to pay. The user charge expressed as a ratio of the daily agricultural wage was less than 1 in all but one country (The Cameroon) where the ratio equalled 1. The majority of countries had fees less than half the daily agricultural wage.

In 1987, the World Bank released a policy study of reforms for health financing in developing countries. The reforms are designed to reduce the responsibility of governments for health financing of services "that provide few benefits to society as a whole (as opposed to direct benefits to the users of the services)" (*PAHO Bulletin* 22(4) 1988:417). The World Bank study suggests that those able to pay should do so. It is argued that this policy would free up government resources that would benefit society as a whole and also allow government to direct their efforts to providing needed health services to the poor. The first of the reforms (which the World Bank study suggests should be treated as a package) is user charges for government health facilities. It is proposed that charges be instituted for drugs and curative care. To capture the benefits of user fees, the study stresses the necessity of three complementary steps to be taken by the government.

First, to guard against underutilization, the government must ensure that the services are accessible and of reasonable quality. Second, unless the revenue from user charges is directed to programs previously inadequately funded or to new programs, they will not benefit the poor or public programs. Third, the poor who cannot afford user charges must be protected through differential charges.

Commenting on the World Bank policy study, Julio Frenk cautions that user charges should not be viewed only as a way of generating revenues, but primarily as a policy instrument that can be used to modify the behaviour of providers and consumers. He points out that although free services may be desirable the cost to the population does not disappear if there are no monetary fees. In the absence of accessible and quality health services there will be waiting lists, protracted bureaucratic procedures and a loss of control by users. This is a cost to the consumer. Further, free services are often used more by the population having greater access to them, the working urban population. In this case, free services are a subsidy to this group. He suggests that differential fees based on the following four criteria are supportable: (1) the type of unit where the service is provided; (2) unit's locality; (3) the service provided; and (4) the patients' socioeconomic status (Frenk, 1988:440).

Differential charges to urban and rural populations are suggested by Lee and Mills as a possible method of effecting a more equitable utilization of health care throughout a country. These user charges would be intended to reduce the relative overutilization of services by populations who enjoy easiest access to them (Lee and Mills, 1986:99).

Discussing the Primary Health Care concept and support of their own health services by local communities, Amonoo-Lartson and colleagues state that "in some places fees for services, for example, attendances at health centres and medical consultations, are charged for those who can afford it" (Amonoo-Lartson, et al, 1984:166). They argue that although direct payment may give local communities a sense of greater involvement in their health services, it has the danger of deterring

necessary use. Further, residents may not be willing to pay for services that do not appear to provide immediate benefit (e.g. preventive or environmental health services).

The World Bank policy study proposes insurance or other risk coverage as the second element in the policy reform package. Insurance for catastrophic risks is supported by the study. Compulsory insurance for employers in the formal sector is identified as the model used in most low-income countries (*PAHO Bulletin* 22(4) 1988, 422).

The World Bank policy study argues that costs associated with increased use of services because of insurance coverage can be modified if consumers have to pay a deductible and co-payment for each illness treated. The study further argues the merits of competition between insurance providers to keep costs and insurance premia low.

Compulsory health insurance can create greater disparities between the urban workers and the rural and urban poor if it leads to increased costs of health service delivery. Abel-Smith argues that compulsory health insurance for those regularly employed will lead indirectly to increased labour costs and therefore increased costs of goods produced in the urban area. As a consequence, the rural populations that consume urban-made goods will in fact be paying part of the increased cost of delivering urban health services (Abel-Smith, et al, 1980:142).

Latin America has a long history of risk-sharing schemes. In 1924 Chile adopted a national health insurance scheme modeled after Otto von Bismark's social insurance scheme in Germany.

Private health insurance is a relatively new method of health care financing in Latin America. In Peru, for example, private health insurance was not used as a method of financing health care until the mid-1970s (Zschock, 1989:323). In the Peruvian case private health insurance is said to be consumed by a small minority of the population whose real income is relatively high and a larger middle income group who, Zschock suggests, are dissatisfied with the government-run services as their primary source of ambulatory care. In 1982, cooperative and private voluntary insurance accounted for services to approximately 24% of the population receiving health care from the modern sector.

Voluntary health insurance with affordable premia can help in the development of local services because this type of risk-sharing can be under the control of the participating community. The need for the population to be involved in establishing the rules of a financing scheme is stressed by Carrin. He concludes that "when selecting a scheme consideration should be given in particular to the people's capacity and willingness to pay for drugs and health care and to their notion of equity (Carrin, 1988:601).

Private health insurance is an alternative source of financing which can relieve some of the cost burden from the government. However, it can lead to higher health care costs and be in conflict with government objectives of equity and greater accessibility of services to urban and rural poor populations (Abel-Smith, et al, 1980; Plaja, 1988).

Health insurance in Ghana has yet to be developed. The Ghana Health Study does not present an indepth study of the possible effects of health insurance in Ghana. However, it suggests that "risk-sharing through health insurance may be a viable

consideration for health sector financing" (OIC, 1988, vol. 2:45). In this conclusion the Health Study is consistent with the World Bank study, which suggested that if a scheme is developed it should first be targeted to fully-employed subscribers and then immediate dependents. A "low" estimate of 1.8 million persons is presented as the number of possible beneficiaries. The World Bank study also holds out hope that savings can be redirected to the PHC sector. The study supports the contention that if health insurance premia are too high only the privileged minority will benefit. It warns against the possibility of two distinct health care systems being created -- one for the middle- and upper-income families and the government system catering to the poor. In such a case it is feared that the government system will not be able to compete with the private system for resources, especially human resources.

Chapter IV

The Development of Primary Health Care in Ghana

Ghana's PHC program as outlined in the introduction has the ultimate goal of providing "to all districts simple but effective community based health services, supported by a number of health centres" (Republic of Ghana, 1986:7). The objectives for PHC services were detailed by the Secretary for Health in 1986. The program is designed to address the basic issues of:

- urban-rural imbalance in the distribution of health facilities;
- inappropriate health care strategy which emphasizes cure instead of health promotion; and
- unduly high morbidity and mortality among mothers and children.

To accomplish PHC the government proposes a system with three levels of health service delivery. The levels are designated A, B and C.

The Community or Level A: It is planned that every village with a population of 200 or more should enjoy basic health services such as good drinking water, clean environment, good maternal and child care including immunization and the treatment of minor ailments. Traditional birth attendants and community health workers selected by the communities, trained and supervised by the Ministry of Health, will provide these services. They will work in close cooperation with the local political and traditional authorities.

Level B or Health Centre: This is the most peripheral government health facility and is manned by trained para-medical staff. Its main functions include care of pregnant women, supervised delivery, family planning, child care including growth monitoring, nutrition education, promotion of good sanitation and the treatment of minor ailments. In addition, staff in Level B train and supervise Level A workers and also take care of their referred cases.

Level C or the District: The unit of health administration is the district, of which there were 65 in 1988. It is at this level that the health services of the district are planned and managed. Each district is manned by a District Health Management Team comprised of professionals --

1. District Medical Officer of Health (most often not available).
2. District Public Health Nurse
3. Health Inspector
4. Technical Officer -- Communicable Diseases Control
5. Medical Officer in charge of the District Hospital.

The teams are supposed to work in close cooperation and collaboration with staff of other health related agencies such as Water and Sewage Corporation, Ministry of Agriculture, Ministry of Education, Department of Community Development as well as NGOs. Apart from its managerial role, the District Health Management Team will also train and supervise Level B staff who will in turn train and supervise Level A workers.

The Secretary for Health told the members at the 1986 Social Sectors Aid Coordination meeting that "28 out of 65 districts have trained District Health Management Teams and can be deemed to be implementing Primary Health Care systematically" (PNDC, 1986).

In their 1981 evaluation of primary health care services in Ghana, McEwan and colleagues used as a benchmark for their work the following principles;

- (a) Activities should be relevant to priority health needs; the interventions should be effective against the major disease problems of the country;
- (b) Services should reach priority population groups such as those most at risk, e.g. mothers and young children, and those for whom health must be maximized to ensure productivity and economic development;
- (c) Service should consist of an integrated package of independent activities including preventive and curative health care at the personal level, and also directed toward the general environment;
- (d) Health services should be provided in liaison with other sector programmes, especially those sectors whose responsibilities include activities which have a major impact on health;
- (e) Communities should participate in the organization and control of health activities as well as being involved directly in health actions;
- (f) Health services should be efficient in operation; a given health output is achieved at the lowest cost.

This approach is supported by Amonoo-Lartson as he identifies features of primary health care. He emphasizes community involvement in development,

implementation of programmes and the delivery of services. He adds, however, the need for training based on locally assessed needs (Amonoo-Lartson, et al, 1984:17).

Primary health care in Ghana is intended by the PNDC to be consistent in the fundamentals of the approaches presented above. A restructuring or reorientation of the health care system from the traditional institutional, physician-based one to a PHC system requires a great deal of planning and coordinating. The Ministry of Health National Health Planning Unit (NHPU) has the responsibility of planning services for the national level, assisting planning at the national and district levels. Information about the NHPU was not presented at the 1986 Social Sector Aid Coordination meeting in Vienna in 1986, but the PHCD Secretary of Health indicated Ghana's intention to add three additional health planners, one statistician and a health economist to the NHPU. By the end of 1989, these positions had not yet been filled.

In 1977 the Ghanaian government expressed the following position, which it subsequently reiterated: "Every Ghanaian shall have ready access to basic and primary health care. A primary health care system including environmental and personal health components built on the principle of district community participation will serve as a base for all health care." (UNICEF, 1986:302).

IV.1 Primary Health Care Policy

Previous sections have outlined the basic policy positions adopted by Ghanaian governments since 1975. The thrust as outlined in the 1975 five-year development plan was to reallocate resources from the urban sector to the rural. The specific objectives, supported by successive governments, are "to achieve basic and primary health care for 80% of the population of Ghana and to effectively attack the disease problems that

contribute to 80% of the unnecessary death and disability afflicting Ghanaians (UNICEF, 1984:303).

The development of Ghanaian policies related to PHC can be traced chronologically. The PHC strategy first appeared in 1977 and 1978. Ghana adopted a three-tiered structure (outlined in Chapter II) as its model of PHC. In 1980 the government formally adopted the PHC strategy (OIC, 1988, vol. 4).

In 1982, a National Health Committee of the PNDC developed and presented a policy paper to the government, which accepted the paper and again endorsed the PHC concept. The policy paper suggested that to realize the objectives of PHC the following strategies should be implemented.

- (1) Decentralization of health management by making the district the basic unit of administration. The district unit would have responsibility for planning, management and evaluation of health services;
- (2) The formation of district, regional and national health committees to help coordinate between levels. The paper also advised that members of the committees should include ordinary community members, including at least one woman;
- (3) Town and village health care committees should also be organized to help promote health and PHC strategy at the local level (UNICEF, 1984; OIC, 1988, vol. 4:22).

The Economic Recovery Programme for 1984-86 had as one of its main policy thrusts the "rehabilitation" of human capital. The ERP announced its intent "to address issues related to rehabilitating the country's human capital through programmes targeted

at specific vulnerable groups, the upgrading of our local training and retraining capability as well as increased expenditures and improved policies in the health and education sectors" (Ghana, 1985:4).

The ERP II, 1986-88 identified health and education as important objectives, stressing efficient provision of basic social services to realize improvements in living standards. Seven specific policy actions for the health sector were identified:

1. phased implementation of a primary care (PHC) system to cover at least one half of the 68 districts by 1988;
2. phased rehabilitation of the secondary and tertiary hospitals alongside the PHC system;
3. a program to ensure expanded procurement of low-cost essential generic drugs;
4. introduction of cost recovery in a phased manner to supplement increased budgetary allocations as a basis for improved health services;
5. development of targeted programmes for especially vulnerable groups with special reference to the rural and urban poor, to children and to lactating mothers, with possible assistance from various donors, including UNICEF;
6. a concerted effort to solicit international assistance for the health sector, in addition to assistance already being provided or requested from IDA, UNICEF, the Saudi Fund, ABD, USAID and CIDA;
7. development of a medium-term health sector plan as well as schemes for increased and equitable cost recovery measures and for budgetary policies to support PHC (Republic of Ghana, 1985:16).

In 1987 the Ministry of Health produced draft health policies which identified the manpower actions necessary to support the PHC goals:

1. training adequate numbers of health workers;
2. integrating manpower development in the educational system;
3. strengthening the capacity of training institutions for PHC;
4. training PHC manpower instructors;
5. developing managerial capacities for PHC programmes;
6. planning staffing patterns (OIC, 1988, vol.4:24).

The Ghana Health study reports that the draft 1987 policy for health also stresses the need for intersectoral coordination and collaboration. These policy positions suggest there are close and inseparable links between primary health care agriculture, education and other social welfare programmes.

The 1989 Ghanaian budget indicates the government's intent to continue to rehabilitate the health care sector. It concentrates on the improvement of existing health care facilities.

The development and support for policies to promote PHC have been outlined earlier. However, there remains a significant gap between the intent and the reality. The 1984 UNICEF Situation Analysis of Women and Children observed, "It is without doubt that the thrust of the national health policies is towards improvement and expansion of the services to the rural areas. However this has only been minimally achieved" (UNICEF, 1984:302). There are number of reasons for this gap, including the lack of human and financial resources and the lack of commitment by government officials.

Another reason why there is a gap between health policy and action is the failure of governments to regard health policy as an integral part of multi-sectoral plans. Agbonifo support this contention by stating "health policy must be incorporated as an intrinsic composite in every development plan rather than be included as an afterthought" (Agbonifo, 1983:2006).

Human Resource Development and PHC

One of the key elements in the development of a country and its health care system is the building of human resources.

The importance of educated and trained manpower in the process of development is well recognized in the literature (Fester, et al, 1983:115; Meier, 1970:612; Mehmet, 1990:1). Fester, et al, (1983:115), referring to Becker suggest that "in recent decades it has become clear that among a nation's most important resources essential to the development process are its human resources".

Meier (1970:612) argues that the rate of modernization "requires very large doses of strategic human capital". Human capital is needed for expansion in government services, new programmes and support for these programmes. Policies concerning manpower must, therefore, be integrated with other policies directed toward overall development.

The construction of manpower strategies designed to facilitate the development process can be called human resources development (HRD). Meier and Mehmet are consistent in their categorization of HRD as dealing with the development of skills and the appropriate use of those skills. According to Meier (1970:612), "The strategy of human resources development is concerned with the two fold objective of building

skills and providing productive employment for unutilized or underutilized manpower". Mehmet (1990:1) adds "the allocation of human resources in occupation, industries and regions" is one of the roles of HRD.

Before developing HRD strategy it is necessary to determine what the current problems are. Meier (1970:614) refers to this process as "manpower analysis", the objectives of which are:

- (1) the identification of critical shortages of skilled manpower in each major sector of the economy and the reasons for such shortages;
- (2) the identification of surpluses, both of trained manpower as well as unskilled labour and the reasons for such surpluses; and
- (3) the setting of forward targets for HRD.

The strategy that is subsequently developed will have to address questions of investment in education, appropriate training and the role of the private and/or public sectors.

Health human resources development (HHRD) is a subset of HRD, thus implying that investment policies in HHRD should be consistent with HRD investment policies in other sectors. The opportunity for conflict in education planning between sectors should be minimized in order to avoid the potential cost of mismatches between capital investment and human capital investment. In most developing countries -- and especially in rapidly developing countries -- the supply of skilled personnel does not equal the demand (Meier, 1970; Abel-Smith, 1976).

A policy of increased capital investment in, say, agriculture, which requires a level of trained managers to support it, will compete with capital investment in health

facilities or programmes (PHC, for instance) that also require equivalent levels of managerial skills to support it. Fester and Tilden (1983, 117) argue that investment policies in human resources development "should be synchronized... to ensure that demand with different levels of educations [is] congruent with supply". If the supply is not able to meet the demand in competing areas, one area will suffer. The sector that promises higher private rates of return to investment in terms of wages, status, job satisfaction and expected longevity of position will gain.

Costly distortions can result where the growth in supply of trained personnel is faster than the growth in demand (i.e. the capacity of the government or private sector to fund the sector to meet the increased supply).

Meier (1970) cautions that unlike material capital investment that can be scrapped if it is the wrong investment and proves too costly to salvage, investment in human capital cannot be scrapped. He argues that inappropriate training can lead to social infrastructure disruption as a result of unemployment and underemployment.

Accepting that HHRD strategies will be consistent with overall development policies and the enabling HRD plans, it is necessary to ensure that the HHRD plans are themselves consistent with plans for the development of the health care system. Abel-Smith suggests that "plans for education and training should be derived from long-term plans for health service manpower. In turn plans for health service manpower should be derived from long-term plans for the development of the health services (1976, 198). It follows, therefore, that in developed and developing countries, health manpower policies and the resultant planning should be an integrated part of general health policy.

Investment in PHC should be accompanied by HHRD policies and strategies that ensure the education and training of appropriate human capital to foster the development of PHC.

What are the health human resource needs of PHC? A PHC system does not negate the need for highly educated and trained health personnel such as doctors, pharmacists and specially trained nurses. To meet the needs of the population, it suggests instead a balance between the use of highly educated and skilled health personnel with less skilled health personnel and community non-health personnel.

Chapter V

Primary Health Care in a Cross-Section of Developing Countries

This chapter provides examples of the experiences of a selected group of countries with PHC-centred programs. The information is drawn primarily from reports of the WHO, reproduced in various publications of World Health Forum. The framework that follows identifies the policy intent, the mechanism designed to realize PHC, the scope of the PHC program(s), identified difficulties and results to date.

Zambia

Following the Alma-Ata Conference of 1978 the government of Zambia began the process of adopting primary health care as the main focus in further development of its national health services (Kasonde and Martin 1983, 25). The Ministry of Health established a National Coordinating Committee (NCC) with membership from the United National Independence Party, the ministries of agriculture and water development, education, information and broadcasting, financial, and community development. Representation was also sought from the medical association and church organizations. Kasonde reports that the NCC failed because the nonhealth sector participants were not given specific health proposals to which to react. A new process consisting of a committee made up of department heads within the Ministry of Health and the country representatives of WHO and UNICEF developed and published a set of proposals for PHC in January 1980. A consultation process of seminars held in different parts of the country was initiated. This led to the adoption of a national

program of PHC which was adopted by the government in August, 1981. community participation was realized by the creation of 450 health committees. These committees were to be responsible for the implementation of primary health care programs at the local level. The committees also identified individuals to act as community health workers after six weeks of training.

Kasonde suggests that there has been progress in developing PHC in Zambia. The process has not been without problems, though. Kasonde cites 4 major problems.

- There has been a lack of support by physicians.
- Health education has not been accepted by the majority of health workers.
- Health promotion and disease prevention do not have wide public support. The public, argues Kasonde, seeks the expansion of curative services.
- Reallocation of resources to the rural areas is slow, there being a continued bias in favour of urban areas.

Other constraints to successful implementation of PHC include the lack of managerial skills and the poor economic performance of the country.

Zimbabwe

As in many other developing countries, Zimbabwe's health care delivery system has a large urban bias. In the two largest cities the distribution of physicians is 1:800 persons covered by medical aid societies (private insurance). For those not covered by private insurance, it is 1:4,000 persons. In smaller towns the ratio is 1:30,000 and in rural areas it is 1:62,000" (Manga, 1987:5). Other health care resources are similarly inequitably distributed.

Manga suggests that soon after gaining independence in 1979 the government began to reorient the allocation of health care resources to a system of primary health care. Manga provides data supporting this perception. The projected growth rates of the different levels of care for the rural populations were expected to increase 185 per cent between 1981/82 and 1984/85. In the two-year period "1981-82 to 1983-84, 316 new rural health centres and the upgrading of 450 existing rural primary care clinics was [sic] planned by the Ministry of Health" (Manga, 1987:13). There is also a greater emphasis on local and community participation in the organization, management and delivery of primary health care services.

Reviewing the 1984 government health policy paper "Planning for Equity in Health: A Sectoral Review and Policy Statement", Manga argues that Zimbabwe's government still places a lot of emphasis on hospital and medical care. Further, there does not appear to be the necessary integration of nonhealth programs that are consistent with the implementation of a comprehensive primary health care program (e.g. agriculture, water and sanitation). However, he is optimistic about Zimbabwe's ability to achieve significant steps toward a comprehensive primary health care program and increased health status.

Nigeria

Robert Stock examines Nigeria's ability to achieve "health for all by the year 2000" in a 1985 study of Kano State, the country's most populous state. As in Zaire and Zimbabwe the provision of western style health care services appears to be heavily biased in favour of the urban populations. "As of 1981 there were only 204 doctors for a population of 9.5 million -- one doctor per 46,500 people. Of these physicians, 143

were Kano State employees and 38 were practising privately. However, there were only 30 doctors, all of whom were state-employed, to serve the 8.7 million people living outside the city of Kano. This represents a doctor/patient ratio of 1:289,000 (Stock, 1985:472).

Nigeria's model of primary health care is called the Basic Health Services (BHS) scheme. The Third National Development Plan of 1975-80 and local government reform in 1976 are cited as the two polity initiatives responsible for the BHS. Funded by the federal government, BHS is administered at the state level. A model of integrated levels of health facilities beginning with local health clinics, primary health centres and finally comprehensive health centres was planned (Stock, 1985:474). The Kano State study reports that of a target of 600 clinics to be built, only 61 had been completed by 1982. Further, because of staff and equipment shortages, not all 61 were fully operational.

Cited as barriers to effective and efficient expansion of BHS in Kano State are:

- Nigeria's financial constraints;
- Continued urban bias in the allocation of resources;
- Low utilization of health services because the health clinics provide only rudimentary health services and because very few potential patients have access to motorized transportation;
- Lack of effective coordination of health policies between the different levels of government; and
- Lack of coordination between traditional health providers and western medical system providers. (Stock, 1985:478 and passim).

Stock argues that Nigeria's colonial legacy of urban bias and class privileges is one of the major reasons why BHS does not meet the objectives of PHC in Kano State.

Pakistan

The political strength of the urban-based elite and the corresponding class structure are cited by Zaidi as the fundamental reasons for the apparent failure of Pakistan's Rural Health Programme (Zaidi, 1985:461). Data indicate that in 1982, 85% of doctors were in urban areas. Population per health facility in urban areas was reported to be 1:50,811 persons, while the ratio for rural areas is 1:444,837 persons. The skewed distribution of resources is increased by the better infrastructure of roads and telecommunications and transportation available to the urban populations. Another crucial element is the maldistribution of access to clean water and sanitation facilities. Zaidi states, "On the basis of this evidence, one can suggest that apart from having fewer medical resources, the rural population is more vulnerable to disease due to its poor social infrastructure" (Zaidi, 1985:476).

Reasons for the urban bias and the reported measured success of the Rural Health Programme include:

- the pattern of medical education which favours curative rather than preventive and community medicine;
- failure to train physicians for rural settings;
- inconsistencies in government policies.

On this last point, Zaidi illustrates his point by reference to government stated policy (in its sixth five-year plan) to "upgrade the existing facilities in the Rural Health

Programme and to create posts for physicians in rural areas; in contrast, the government also provides "loans on easy terms, free import of medical equipment and tax exemption" for physicians setting up private clinics (Zaidi, 1985:479). Almost all private clinics are in urban settings.

Zaidi cites Navarro's contention that a maldistribution in the different sectors of the economy is responsible for maldistribution of health care resources and the resultant services. Zaidi concludes that if better distribution to the rural areas is to be realized, there must be greater investment in rural infrastructure in general.

Tanzania

The countries of Cuba and Tanzania are often held out as examples of successful PHC-type programs (Stock, 1985; Boland, et al, 1982). "According to the published data, these countries have provided virtually 100 per cent of their urban and rural populations with access to and coverage by primary health care of adequate quality" (Boland, et al, 1982:234). Although Tanzania's record cannot be held up as exemplary, it is better than most African countries' and is thus presented.

The Arusha Declaration of 1967 is the foundation of Tanzania's current health policy. Reaffirmed in 1971, the Arusha Declaration expounds a policy of "equality in health" (Dominicus and Akamatsu, 1989:193).

In 1987, 86% of Tanzania's 22 million people lived in rural areas. To meet the objective of equality in health, the national health policy has been directed toward rural development. Specifically, it has outlined these tenets:

- People living in rural areas are entitled to the basic needs of water and health care services.

- Health care services should be free of charge close to the homes of the patients.
- Preventive health must be emphasized over curative.

A 20-year development plan (1981-2000) was drafted with the following 8 main objectives:

1. To raise the average life expectancy at birth to at least 55 in the year 2,000 and to reduce infant mortality to 50 per 1,000 [live births];
2. To have a village post in every village without a dispensary or a health centre by the year 2,000 with every village governing its own health services independently, supported in commodities by the government;
3. To be self-sufficient in health manpower;
4. To strengthen the management and supervision of health services at different levels;
5. To involve the people in implementation and management;
6. To co-operate with the relevant parastatals and ministries;
7. To improve the drug supply system, to strive for self-reliance in it;
8. To have an inventory and evaluation every 3 years. (Jonsson, 1986:747).

The period 1970 to 1978 produced the greatest change in primary health care. Table VII illustrates during that time expenditures devoted to the health sector were allocated to rural areas in increasing ratios in relation to the amount allocated to urban areas (Dalmas, et al, 1989:199). Dalmas reports that although there has been continued emphasis on rural health care the pace of reallocation has slackened in the 1980s.

Table VII -- ratio of rural to urban Tanzanian government spending on health care, selected years, 1970-1979

Year	Ratio of rural to urban spending
1970/71	20:80
1973/74	37:63
1976-77	41:59
1979/80	42:58

To better coordinate the national PHC program a Primary Health Care Coordinating Unit was established in 1983. This unit laid down broad policy objectives: Health care should be provided to people wherever they live and services provided by the government sector should be without cost to the individual.

The target is to provide:

1. One regional hospital in every one of the 20 administrative regions;
2. One district hospital;
3. One dispensary to serve 10,000 people;
4. One health center to serve 50,000 people;
5. One health post for each village without any health facility (Dominicus, et al, 1989:196).

In their respective reviews Jonsson and Dominicus conclude that development and implementation has been satisfactory. The fact that health care coverage is very high is held up as an important accomplishment. Both studies report that 72% of the population lives within 5 km of a health facility and that 93% per cent lives within

10 km of a health facility (Jonsson, 1986:752; Dominicus, et al, 1989:193). The significance of these high rates of coverage must be tempered by what the facilities have to offer and the capabilities of the staff working in them.

Impediments to full development of PHC include the country's poor economic performance, the poor transportation system and the lack of a domestic market for medical supplies and drugs. Jonsson suggests that although health workers are present in most villages, they are often isolated and rarely make home visits. Further, "a study conducted in 1984 showed that the capability of RMAs [rural medical aids] and MAs [medical assistants] to diagnose, prescribe and treat patients is quite high. But their ability, or rather the feasibility, to refer cases is very low. Out of the 36% of all cases who should have been referred, only 3% actually were" (Jonsson, 1986:752). This suggests a need for increased training of health workers to facilitate appropriate referrals. This, however, must be accompanied by a better system of coordination and supervision between levels of care.

Tanzania's success with its primary health care programs can be measured by the changes in health status measures. According to the World Bank's 1989 report, life expectancy at birth in 1965 was 44 years for females and 41 for males. The comparable measures for 1987 were 55 years and 51 years, respectively. Similarly, infant mortality decreased from 139 deaths per 1,000 live births in 1965 to 106 deaths per 1,000 live births in 1987. Other measures associated with a successful PHC program are changes in the level of education and changes in diet. In 1965, 32% of children eligible for primary school were so enrolled; in 1986, 69% were so enrolled. In the same period, the percentage registered in secondary school education remained low, increasing only marginally from 2% to 3%. The daily calorie supply per capita

rose from 1,932 in 1965 to 2,192 in 1986. This 19.7% increase was only slightly higher than the average increase for low-income countries (as defined by the World Bank) of 19.6%.

Cuba

New Year's Day, 1959 marked the beginning of Dr. Fidel Castro Ruiz' government. Cuba's health care system before the revolution has been characterized as a centralized system which favoured the urban privileged. For example, in 1959 about 58% of all hospital beds were in the city of Havana, where only 27% of the population lived. By contrast, the province of Oriente (considered one of the poorest in Cuba) accounted for 35.5% of the population, but housed only 15.5% of all hospital beds. Most doctors worked in the cities, where other medical services were concentrated. Despite the inequities, the health of the pre-revolution Cuban population was favourable in comparison to other Central American or Caribbean countries. "Infant mortality in 1969 in Cuba was 66 per 1,000 live births, whereas it was 119 in the Dominican Republic and 92 in Guatemala. The infant mortality rates for the same year in Jamaica and Trinidad and Tobago were more favourable" (de Brun and Elling 1987:687).

The new government declared that all private health facilities were to be nationalized and that health care would be provided free of charge and administered by the state. This resulted in an estimated 40% to 50% of physicians leaving Cuba. Gelpin reports that "from 1953-1959 the number of physicians who left Cuba varied from 22 to 44 annually, but in 1969 it jumped to 582, and reached its peak in 1961 with 778. By mid-1969 Cuba was left with 3,000 physicians and only 16 full professors at the medical school" (Gelpin 1989, 406).

It became necessary, therefore, that there be a concerted effort to train health professionals. The Ministry of Public Health (MINSAP) was given the responsibility of coordinating national planning while ensuring local participation.

The government based health services on four basic principles:

- The health of the population is a government responsibility.
- Health services should be available to the total population.
- The community should participate actively in health work.
- Preventive and curative health services should be integrated. (Elliot, et al, 1981:568)

For administrative purposes, health services are organized into 7 health provinces of approximately 1.25 million people each. These provinces correspond to the 6 political provinces, with the largest, Oriente (with approximately 3 million persons), divided into two health provinces. Each province is further divided into several regions having approximately 250,000 residents each. The region is then subdivided into health centres responsible for 25 to 30 thousand people. The smallest administrative unit is the health post, which services about 3000 people.

The hospital services at each political level are grouped together according to the type of care provided: primary or community care at the area and sectoral level, secondary or specialty care at the regional level and tertiary care at the provincial level. The referral mechanism is supplemented by transportation services which allow for a continuous flow of patients within levels from the rural to the urban sectors and of consultants from the urban to the rural levels.

Through the party system, the community is active in helping in the provision of its own health care needs. Local health committees are presided over by a physician director, with representatives from the mass organizations such as the Committees for the Defence of the Revolution, the Federation of Cuban Women and the labour unions. In rural areas a number of small farmers belonging to the private sector are also participants in the People's Health Commissions. The Committee is usually completed by a member of the Communist Party.

Cuba's health care strategy has resulted in a number of gains in health status. According to de Brun and Elling, by 1974 polio had been eliminated and the incidence of tetanus, malaria, diphtheria, tuberculosis and typhoid fever had been reduced (deBrun and Elling 1987:683). Life expectancy at birth in 1965 was 67 years. By 1987, this figure had increased to 75. Infant mortality had fallen from 38 deaths per 1,000 live births in 1965 to 13 deaths in 1987. The daily calorie supply per capita increased from 2,374 in 1965 to 3,124 in 1987.

V.1 Measuring PHC Progress

For the monitoring of progress toward "Health for All" based on a strategy of PHC, the World Health Organization has outlined the following four classes of indicators:

- Health policy indicators;
- Social and economic indicators;
- Indicators of the provision of health care;
- Health status indicators (WHO, 1981, p. 6)

Health policy indicators are designed to measure the commitment of a government to the PHC strategy. Examples of government action that would indicate commitment include: the amount of resources devoted to the health care sector, the percentage of resources devoted to the urban population as compared to the rural population, and the role of the community in the decision making and the delivery of primary care health services.

Social and economic indicators provide a general picture of the country, the demographics of the population and of many of the variables that have a direct impact on the health of the population. The average level of income can be measured by the GNP or the GDP. Usually, the greater the average income level of a country, the greater the resources devoted to the health care sector.

The age and sex structure of the population, its rate of growth, the education level and the nutritional status of the population are all determinants of health. The level of and changes in such indicators as life expectancy at birth and the crude death rate provide a partial indication of the absolute level and changes in the development of a health care system. The nutritional level recognizes the relationship between diet and health (malnutrition) measured by the daily caloric supply per capita. Higher daily caloric intake can be linked with reductions in crude death rates and infant mortality.

Measures of health care provision give indications of availability and accessibility, by describing and analyzing the number of resources (beds, clinics, manpower, drugs, and so on) and their distribution (resources per population and/or by region). The use of health care resources -- the utilization of services -- provides further indications of availability and accessibility. For example, if urban populations

make greater use of hospital beds and physician services than their counterparts in rural centre, it may be a function of the availability of these services within acceptable travel distances for the urban but not the rural populations.

The fourth class, health status indicators, can be said to measure the outcome of health policy, the interaction of the health sector with the societal and economic factor and the use of the available resources. The result of these interactions is reflected in the "health status" of the population. A commonly used measure is the infant mortality rate, the number of deaths among infants (between birth and one year of age) per 1,000 live births in a year. WHO suggests that "the infant mortality rate is not only a useful indicator of the health status of infants, it is also an indicator of whole populations and socioeconomic conditions under which they live. In addition the infant mortality rate is a sensitive indicator of the availability, utilization and effectiveness of health care, particularly perinatal care" (WHO, 1981:34). Other health status indicators include child mortality rates, maternal mortality rates, disease-specific mortality and morbidity rates and indicators of the prevalence of disabilities in a given population.

Table VIII presents a picture of the state of PHC development in the selected countries using seven indicators that reflect the four classes discussed above. Ghana performed relatively poorly compared to three of the other developing countries profiled above: Cuba, Tanzania and Zimbabwe. Ghana's life expectancy in 1967 was 54 years. That is one year longer than Tanzania's life expectancy, but four years less than Zimbabwe's figure and 21 years less than Cuba's. For the same year, the crude death rate per 1,000 population in Ghana was 13 compared to 6 in Cuba.

Table VIII -- Selected Primary Health Care Indicators

Selected Countries	Life			Maternal			Population per					
	Expectancy at birth (years) 1987	Crude death rate per 100 population 1985	per 1987	Daily caloric supply per capita 1985	per 1986	Infant Mortality per 1,000 live births 1985	Mortality per 100,000 live births 1980	Population per physician 1984	Nursing person 1985	per 1984		
Zambia	53	20	13	--	--	123	80	110	11,380	7,100	5,820	740*
Zimbabwe	58	17	11	2,105	2,132	104	172	150	8,010	6,700	990	1,000
Nigeria	51	23	15	2,185	2,146	179	105	1,500	29,530	7,980	6,160	1,020
Pakistan	55	21	12	1,761	2,315	150	109	600	--	2,900	9,910	4,900
Tanzania	53	22	14	1,832	2,192	139	106	370(a)	21,700	--	2,100	--
Cuba	75	8	5	2,374	3,124	38	15	--	1,150	530 (1987)	--	--
Ghana	54	17	13	1,950	1,759	121	90	1,000(a)	13,740	14,890	3,730	640
Canada	77	8	8	3,212	3,462	24	8	2	770	510	190	120

Source: World Development Report 1989 - World Bank

(a) data refer to maternal mortality in hospitals and other medical institutions only

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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
STANDARD REFERENCE MATERIAL 1010a
(ANSI and ISO TEST CHART No. 2)

The daily caloric supply per capita is one measurement of nutritional status. "Greater malnutrition leads to increased susceptibility to infection, higher morbidity and mortality rates, greater demand for health services, and increased medical expenditures" (Martonell, 1987:3). Between 1965 and 1987 the daily caloric supply in Zimbabwe increased by 1.3%. Over the same period it increased by 19.6% and 31.6% in Tanzania and Cuba, respectively. In contrast, the daily caloric supply per capita in Ghana decreased by 9.8% over the period.

Infant mortality is one of the key indicators of the health of the population. In 1965 Ghana's infant mortality rate was 121 per 1,000 live births. This was better than Tanzania's 139 infant deaths per 1,000 live births and better than Pakistan's 150 deaths per 1,000 live births. Zimbabwe, with 104 infant deaths per 1,000 live births, fared relatively better than Ghana. Cuba, however, performed vastly better, recording 38 infant deaths per 1,000 live births.

Cuba was able to further reduce its infant mortality rate over the period 1965 to 1987 from 38 to 13, a fall of 65%. Zimbabwe realized a reduction of 30.8%; Tanzania's fell by 23.7% and Ghana improved its record by 25.6%

An indicator of the state of the provision of health care is the population per physician. Among the developing countries compared, Cuba's population per physician decreased from 1,150 in 1965 to 530 in 1987. Zimbabwe also posted a decrease of 16.4% between 1965 and 1985. In contrast, Ghana's population to physician ratio increased by 8.4%.

The percentages of population with access to safe water and to health services are indicators of health policy initiatives as well as of health service provision. Data

provided by UNICEF (Grant, 1990) for the period 1985 to 1987 measures these indicators for the total population, the urban and the rural populations. Data for Cuba are not available. In Tanzania, 56% of the total population has access to safe water. This breaks down to 90% for the urban population and 42% for the rural population. Comparable figures for Ghana show that 56% of the total population, 93% of urban residents and 39% of rural Ghanaians have access to safe water.

Both Zimbabwe and Tanzania have a better record of access to health services for their rural populations for the years 1985 to 1987. The percentage of total population in Tanzania with access to health services is 76%. 99% of the urban population and 72% of the rural Tanzanians have access to health services. Similarly, 71% of the total population of the Zimbabwe, 100% of urban residents and 62% of the rural population have access to health services. Once more, in contrast, only 60% of the total Ghanaian population has access to health services. Access for the urban population is comparable at 92%, but the rural population fares less well where only 45% of the residents have access.

The Ghanaian government's success in health care planning will be measured in part by its ability to reduce the urban/rural imbalance in accessibility to health care and by indicators such as the availability of safe water.

Tanzania, Cuba and Zimbabwe have a number of features in common that have contributed toward an improved distribution of health care services:

- Tanzania's primary health care policies have been directed extensively at the rural areas;
- Expenditures devoted to the health sector have actually been allocated to rural areas in increasing ratios compared to those allocated to urban areas

- A special unit, supported by the government, has the responsibility to develop PHC;
- Cuba, Zimbabwe and Tanzania's governments have made it a priority to improve human capital through the improving education and primary health care;
- In Cuba the political party system allows for the greater involvement of the community in the provision of health care services. Further, the fact that the urban elite has been effectively neutralized by the political process minimizes the bias against the development of rural health services;
- Primary health care is successful when it is treated as an integral part of providing health services, not only as a way of providing services to the poor. Primary health care in Cuba, for example, is integrated into the overall system of health care provision through a referral mechanism that is intended to move patients to appropriate levels of care.

Success in PHC is dependent on a variety of factors. These factors include the government's commitment to PHC; the country's access to foreign capital either from development assistance or export earnings; the existence of good health human resources (including both management and service providers) and the overall economic performance of the country under consideration.

Chapter VI

Primary Health Care Performance in Ghana

The Ghana Health Study reports that as part of the Study a group of Ghanaian health and policy specialists met on June 3, 1988 to discuss the implications of PHC. The specialists concluded that PHC is a strategy for achieving long-term health status objectives and not a vertical programme (OIC, 1988, vol. 4, 28). The PNDC Secretary for Health reported that Ghana's PHC is designed to address the basic issues of (1) urban/rural imbalances in the distribution of health facilities; (2) inappropriate health care strategy which emphasizes care instead of health promotion; (3) unduly high morbidity and mortality among mothers and children (PNDC Secretary 1986).

The urban/rural imbalance can be measured by the relative accessibility of the urban and rural populations to health care. Anyinam, discussing the accessibility of ethno-medical practitioners (EMPs) proposes that there are two types of accessibility (1987:805). The first is locational accessibility defined in terms of space and time and the physical distance that must be travelled to obtain care. The second is revealed accessibility defined as patterns of utilization of services.

Locational accessibility can, in turn, be approximated by comparing ratios. The use of physician-population ratios and primary health care centre/population ratio is relatively common in the primary health care literature. Resource-to-population ratios, however, can only be regarded as general indicators and not an indicator of quality of health or an accurate indicator of a country's (or region's or district's) health status. Resource/population ratios can, however, reflect the level of development (Rahman and

Al-Swailem, 1990). For example, the physician:population ratio in Ghana in 1988 was estimated at 1:13485, compared to 1:525 in Canada in the same year. Hall and Mejia (1978) suggest that physician:population ratios are useful as "comparative norms" that allow health care planners and policymakers to focus their attention on differences within planning areas.

The previous section on health manpower policies has briefly identified the disproportionate distribution of physicians, nurses, pharmacists and paramedical personnel. The distribution of doctors is reported to be 72% urban and 28% rural. In the Greater Accra Region data provided by Health Statistics for Ghana indicate that all physicians in the region are in the urban area. The corresponding population distribution is 16% urban and 84% rural. Ghana's second largest city, Kumasi, is located in the Ashanti Region. Of the doctors in this region, 79% practise in the urban setting, where only 32% of the population lives.

The Greater Accra Region also has the highest proportion of primary health care personnel (16.2%). The second most urbanized area is the Eastern region, with 68% rural population. This region has 12.7% of the national primary health care personnel.

Health status varies significantly across regions. Table IX from the Health Statistics of Ghana provides data indicating that the health status of the more rural areas is worse than that of the urban areas.

Table IX -- Regional differences in health status in Ghana, 1987

Region	Infant mortality rate	Child mortality rate
Western/Central	106	61
Greater Accra	41	58
Eastern	50	38
Volta	59	59
Ashanti/Brong-Ahafo	48	38
Northern/Upper	90	105

Source: Health Statistics of Ghana, Government of Ghana, 1989

The Greater Accra Region, with the second smallest rural population, has the lowest infant mortality rate. The relatively high child mortality rate of the Greater Accra Region may reflect the poor socioeconomic conditions of the urban poor.

The Western/Central and the Northern/Upper regions with relatively high rural populations report the highest infant mortality and child mortality rates.

Another way of measuring the urban/rural imbalance is the coverage of rural populations by primary health care facilities. One hundred percent of the rural population in the Greater Accra region is covered by "lower level facilities". In contrast, the Northern region, where 75% of the total population is rural, covers through primary care facilities only 10.8% of that population.

The Ministry of Health and the World Bank estimate that to achieve the PHC target of covering 80% of the rural population by the year 2,000, there will have to be an increase of 788 new PHC facilities. This requires a 92% increase between 1985 and the year 2,000 (Ghana 1989).

The ten leading causes of morbidity in Ghana are presented in Table X. The data indicate that the populations in the more rural areas primarily have higher levels of morbidity. The disparity can be seen in comparing morbidity due to malaria in the Greater Accra region and the Northern region. The population of the Northern region is four times more at-risk of contracting malaria than the population in the Accra region.

Anyinam (1989:534) reports that "33 percent of all reported deaths in Ghana result from infective and parasitic diseases. The disease problems of children with malnutrition interacting with gastroenteritis, intestinal helminths, and other communicable diseases are particularly severe in many areas".

The barriers to primary health care in Ghana are many and complex. Reasons for deficiencies in the provision of services include the "lack of resources such as trained staff, transportation, basic drugs, vaccines, disinfectants, soap, etc." (Segall and White, 1981:342). Segall and White also found that inappropriate allocation of tasks resulted in tasks being neglected. They suggested that overspecialization of rural health workers led to morale problems as well-trained providers were being asked to do work that could be performed by much less qualified personnel.

An overall lack of integration of health services, support from the top to the bottom and referral mechanisms from the bottom to the top is another factor working against the development of PHC. In their study of the Jasikan district in the Volta region and Birim district in the Eastern Region, McEwan, et al, (1981:402) found that in many of the health units "staff trained in one or more of the basic skills -- polyclinic curative care, midwifery, child care and environmental sanitation -- were missing". They found that all four skills were available only in one third of the units

Table X -- Incidence of morbidity per 1,000 population, ten leading causes, Ghana, 1987

Region	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Greater Accra	69	22	20	12	12	5	6	7	4	4
Ashanti	120	27	20	9	9	8	4	3	3	4
Brong-Ahafo	99	13	21	9	9	7	13	3	2	3
Central	92	17	24	13	8	11	7	6	4	6
Eastern	118	18	22	11	14	14	6	5	8	7
Northern	272	60	85	55	30	35	19	24	10	14
Upper East	201	24	42	13	9	15	18	9	4	6
Upper West	33	12	8	7	6	1	2	1	1	1
Volta	114	23	22	19	13	17	17	7	8	6
Western	104	26	18	15	11	14	9	11	8	5
National	101	21	21	12	10	9	8	5	5	5

1. Malaria;	2. Upper respiratory infection;
3. Diarrheal diseases;	4. Skin diseases;
5. Accidents;	6. Intestinal worms;
7. Complications of pregnancy;	8. Acute eye infections;
9. Rheumatism/joint pain;	10. Hypertension

Source: Health Statistics of Ghana

studied. Concerning health human resources, they concluded that there was very little inservice training in the primary care units. Further, "the frequency of supervision was low and its level poor: supervisory visits tended to be one-off affairs, which focused on fault finding rather than on training and the provision of technical or moral support" (402).

The Ghana Health Study discussing the reasons for unsustained PHC development suggests the following:

- (1) The need to strengthen regional control of health care planning and development. It is argued that "regional health offices should be given greater autonomy to make decisions about health programmes and control the resources needed to mount them" (OIC, 1988, vol. 4:29).
- (2) There is a need to better integrate NGO and donor health programmes with other government programmes. In addition, the established hospital system must become an integrated part of the overall primary health care system. The Study suggests that the roles and responsibilities of the District Health Management Team (DHMT) and district hospital management and their boards are not clear. The mission-owned hospitals are recognized for their resource contributions to the health care system but it is argued that continued separation of mission and government hospitals in the overall management of the system will act to slow the development of PHC at the district level;
- (3) There is a lack of basic training programmes that are essential to the training and re-training of staff at the district level. The methods of selection of trainees, the preparation of teachers and the lack of field training are cited as some of the problems (OIC, 1988, vol. 4:31). It is argued that the District Health

Management Team should receive training in health management planning, monitoring and evaluation.

- (4) There is a need for better logistical support for the district-regional system. Appropriate referrals are hindered by lack of transportation, and shortages or lack of other supplies and equipment.

These four points contribute to the difficulty that Ghana has in realizing the targets for PHC that it has set for itself. Health human resource planning and training is one of the key areas that can and must be addressed in the near future if Ghana's PHC programme is to succeed.

The Ghana Health Manpower Study (OIC, 1988, vol. 3) identifies the categories of staff engaged in the delivery of health services in that country. Personnel who work for the Ministry of Health (MOH) are discussed separately from personnel who work for the mission system. The total MOH staff in 1987 is listed at 38,000; 59.8% are engaged in administrative and supportive work. The remaining 40.2% are engaged in direct service delivery.

In 1987 the MOH system employed 593 physicians -- 4% of the total service delivery staff. The Mission system employed 80 physicians -- 7% of their total service delivery personnel.

Nursing personnel is generally regarded as the second most important element in the delivery of health services, and in Ghana in 1987 there were 11,862 nurses in the MOH system (OIC, 1988, vol. 3:13). These nurses are divided into three categories: clinical nursing personnel, public health nurses (PHNs) and community health nurses

(CHNs). Clinical nurses are engaged in curative care, working for the most part in hospitals and clinics.

Public health and community health nurses are at the core of the primary health care programme, working in health centres and health posts. Of the 11,862 nurses, 268 (2.3%) are PHNs and 1527 (12.9%) are CHNs. The urban regions have the greater proportions of clinical nurses. The clinical nurse to population ratio in Ghana in 1987 is reported to have been 1:1,312; the PHN to population ratio was 1:49,286 persons. There was one CHN to every 166,162 Ghanaians. The Ghana Health Study -- Manpower Study suggests that the number of PHNs and CHNs is insufficient to permit effective or comprehensive PHC. In contrast the study points out that there were, in 1987, more clinical nurses than hospital beds (OIC, 1988, vol. 3:13).

In 1987 the mission system employed 939 people engaged in nursing activities, representing 88% of the system's staff. The majority of nurses in the mission system were also clinical nurses.

Primary health care depends on a group of health care providers called primary health care technicians. This category of 1,866 health workers is comprised of nutritionists, medical field unit personnel, medical assistants and environmental sanitation personnel. These numbers are also considered insufficient to accommodate for a viable PHC programme. Pharmaceutical suppliers are also reported to be in short supply and distributed in favour of the urban areas.

Of the 1866 primary health care technicians, an estimated 1471 are engaged in direct service delivery. Approximately 96% of them work in the MOH system. As a proportion of total health delivery personnel within the MOH system, 10% are

categorized as technical officers. In contrast only 5% of the health delivery personnel in the mission system are technical officers.

As an indicator of movement toward the PHC approach, the technical personnel staffing pattern of the MOH system would suggest that it is more PHC-oriented than the mission system.

The MOH system is staff by 22,739 administrative and support personnel. The majority -- 12,212 -- are ungraded positions. There are also 6,780 skilled and unskilled artisans. The managing group consists of 70 accounting personnel and 32 administrators. The MOH appears to have an abundance of unskilled personnel and a shortage of skilled and administrative people (Table XI).

Table XI -- Distribution of MOH administrative and support personnel, 1987

Category	Number	% of all MOH personnel
Administrative	32	-
Accounting	70	-
Supplies and materiel	330	1
Catering	385	2
Clerical and secretarial	727	3
Artisans, skilled and unskilled labourers	6780	30
Ungraded posts	12212	54
Other	2203	10
Total	22739	100

Source: MSD, Office of the Health of the Civil Service, 1987, Ghana Health Study (OIC, 1988, Vol. 3:62)

Identifying the exact number of health-related training institutions in Ghana has been difficult. Data provided in various reports, however, put the number at approximately 30 in 1987. Of that number, the Ghana Health Study reports that the MOH operates at least 24 institutions: "One school for public health nurses, seven midwifery schools, seven state registered nursing schools, four community health nursing schools, two schools for health inspector assistants as well as a number of single schools for the training of health inspectors, lab and x-ray technicians and medical unit personnel!" (OIC, 1988, vol. 3:17).

Other health personnel are educated in the mission system and in the university system, which produces physicians, pharmacists and BSc-level nurses. The mission system trains primarily nursing personnel for its hospitals and clinics.

This difficulty springs from health's interaction with other factors, such as education, housing, environment, psychological adjustment and political and social climates.

In the early 1960s Jan Drewnowski and other scholars at the United Nations Research Institute of Social Development began to argue that "the purpose of economic growth and of development was the satisfaction of human needs and the promotion of well-being." (Elliot and Cole-King, 1981:56).

Coming out of this new approach to health and development was the basic-need approach which espoused the principle that health should be an outcome of economic growth and not just a determinant in the process. "Basic needs" are said to comprise "minimal requirements for survival, such as food, shelter, clothing and health services, psychological needs such as participation and democracy. The approach is characterized not as an economic or social theory, but rather as a movement directed at a series of priorities for action, which usually includes action on health." (Lee and Mills, 1985:195). The provision of health services is only one of the factors that contribute to the health status of the population. The health of a population is often more significantly influenced by social and economic factors such as nutrition, water supply, sanitation, housing, education, income and its distribution, employment, communication, transportation and the social structure.

In an analysis of health services in India, Banerji concluded that "political forces play a dominant role in shaping the health services of a community through factors such as decisions on resource allocation, manpower policy, choice of technology and the degree to which services are available and accessible to the population." (Banerji, D., 1979:511).

enough to provide concrete help in formulating planning programmes". In addition, they propose that the planning method should have a well designed conceptual framework that will allow for some degree of international comparisons.

The crash manpower planning method is presented as the first stage of longer range planning. The method relies on the use of subjective estimates of health problems, health personnel and other resources in the determination of health manpower needs. A Delphi consensus method using experts with experience in the relevant areas is used. Where good data are available, they are also used.

An inventory of health facilities and the personnel that work in those facilities is mapped. The third phase sets out the constraints associated with health problems identified during the Delphi process. A set of recommendations on how to solve the problem is also developed.

To ensure that the planning process is successful, a multidisciplinary team of health professionals and a statistician is created to manage and provide research support for the planning. Morera and colleagues set out specific tasks for each of the planning team members. The planning team develops a set of alternatives with the experts which is then presented to the decision makers for their choice.

This method does not rely on large data collection efforts that are time-consuming and costly. It is a practical and relatively short planning process. The process can be expanded to include the participation of the community through community workshops, forums or community experts.

Health planners in Ghana have not adopted the crash manpower planning approach. Instead, health planning has been based primarily on trying to attain manpower production and service ratios that have been developed by the World Health

Organization. The Ministry of Health has the responsibility for the development and execution of health manpower plans. The Ghanaian government has recognized that it is not able to attain the standards outlined by the WHO because of the severe cost and other resource capacity constraints that it faces. Accordingly, Ghana has begun to adjust its targets based on challenging but attainable goals. This thrust is said to be meeting resistance from influential health associations. The 1984 Primary Health Care Review reports that "the health manpower policy has been to increase the numbers of all categories of health manpower. Attempts at rationalizing health manpower have been met with a lot of resistance from the various health associations who have endeavoured to keep up with certain standards especially Commonwealth standards without due consideration of the needs of the country" (Adjei, 1984:37).

It is expected, therefore, that there will be continued pressure to produce physicians at the expense of less costly primary health care practitioners. The Ghana Health Study suggests that "with a 1987 physician to population ratio of 1:13,876, it is not necessary to increase their level of output" (OIC, 1988, vol. 3:22). Actions should be taken, however, to reduce the attrition rate which is currently placed at about 30% and to improve the regional distribution of physicians.

The Ghana Health Manpower Study (OIC, 1988, vol. 3) presents projections to the year 2,000 using 1987 data on rates of physician production and attrition and general population growth. WHO standards and projections based on 100% population coverage are compared. Examples of the situations that will exist in the year 2,000, the year in which WHO targets are supposed to be met, are presented.

- The 1987 production of 42 Public Health Nurses will have to be increased to 501 per year;

- Production of 180 Ministry of Health Community Health Nurses per year will have to increase to 647 per year;
- Ministry of Health Inspectors, produced at the rate of 100 per year, will have to be produced at the rate of 1497 annually;
- The 1987 production of 7 health inspectors will have to rise to 318 annually.

In contrast the current (1987) production of clinical nurses is 590 per year. The Study estimates that to meet the WHO's standard of one clinical nurse per one hospital bed there should be a reduction in clinical nursing production to 577 per year.

It is evident from the examples drawn from the projections in the Ghana Health manpower Study that Ghana, or any other developing country faced with economic constraints, cannot realistically hope to meet the WHO standards. Realistic health manpower policy objectives, improved management of existing health manpower and a better use of informal health manpower will have to be combined to achieve the PHC policy objectives of the government.

The manpower planning projection approach used in the Ghana Health Manpower Study does not provide practical solutions for the decision makers. It does, however, provide information that can be used in the decision process. It clearly demonstrates that the standards to which Ghana plans must be adjusted to take into consideration the economic and political realities of the country. I would, therefore, suggest that a more appropriate approach for Ghana may be one like the crash manpower planning approach, that is an approach that is pragmatic and grounded in the provision of desired services, not in the production of personnel.

This approach could be made sensitive to regional needs and disparities by the provision of different combinations of health personnel (inasmuch as a degree of substitutability and levels of delegation exist).

VI.1 Health Manpower Training

Determining the required number of health personnel given a set of policy objectives is only a part of a health human resource development (HHRD) strategy. Preparing the base for appropriate training, designing the curriculum and ensuring competence and relevance of training are important aspects of HHRD.

The cost of state-run education and training can be very high in developing and developed countries. It involves the cost of staff, facilities, teaching equipment and the cost of maintaining those being educated or trained. There is also the opportunity cost to the state of loss of investment in another sector. Decisions concerning training must, therefore, be made carefully.

Health personnel trained outside the country can be costly to the government, especially if the curriculum does not prepare the personnel (doctors, clinical nurses, physiotherapists, dieticians, and so on) for the type of practice in which they will ultimately be engaged. Other costs include trainees abroad who default on agreements to return to Ghana (discussed briefly in Chapter III).

One method of reducing the cost of training is in-service training. It can be used to improve skills and/or to obtain new skills. In-service training can often make use of existing in-house expertise and knowledge that is shared through workshops or team tasks, where the trainee works with the skilled person for short periods of time. Klezkowski and colleagues (1984) suggest the training of supervisors as instructors.

They would be given a mandate and the resources to provide continuing education to those under their supervision. An alternative is to use skilled persons from the community. This would have the advantage of increasing community involvement (one of the goals of PHC) and of increasing the role of the private sector. Another method suggested is the creation at the district or regional level of courses that can be offered at different centres across the country. Travelling teams would have to be trained and provided with transportation and presentation materials. This last option may prove to be prohibitively costly where transportation is at a premium.

As already discussed in Chapter III, Ghana has little experience with in-service training, but is beginning to design and hold workshops for various categories of PHC personnel. The management of health manpower policies, plans and development has not been effective in Ghana. Although there is a Central Health Manpower Unit (CHMU) it is poorly staffed and does not have the mandate to integrate the actions of other divisions within the MOH as they relate to health manpower planning. The MOH further has no authority over private sector or mission production of health care personnel. In 1987 the CHMU was "staffed by a single professional, the Director, with no professional staff to develop policies, plans, norms and other crucial functions" (OIC, 1988, vol. 3:44). The Study suggests, however, that planned restructuring of the MOH should result in a greater role for the CHMU. In addition, at the regional level there is planned a functioning manpower planning unit as part of the Regional Health Management Team, which will be responsible for the integration of regional health manpower strategies within PHC regional strategies.

Ghana does not have a comprehensive HRD programme and consequently does not have an integrated HHRD programme. It has recognized, however, that human

capital development is essential to its development plans. In 1983 a Manpower Utilization Committee was struck with a mandate to investigate overstaffing and underemployment in the public service and to look for opportunities for redeployment and re-employment in the civil service (Ghana, 1985:30). In 1987, following up on this Committee's work, the Office of the Health of the Civil Service (OHCS) issued guidelines intended to assist PNDC Secretaries readjust their respective staff complements.

Ghana faces a difficult task in trying to define and design an HHRD strategy that will be consistent with increasing primary health care delivery. Improved coordinating of HHRD by the MOH is a key factor in ensuring future success of PHC in Ghana. Meija (1980:116) points out that between 60% and 80% of health care expenditures are on health personnel. There are a number of other areas that must also be improved, including the development of district plans, and an improvement in the capacity to plan and to manage the plans. These areas will be discussed in the final chapter as part of the design of a system approach to health sector planning in Ghana.

Chapter VII

Elements of a Rational Approach to Health Sector Planning in Ghana

"Health and development are inseparable: good health since it enables people to lead socially and economically productive lives, is both a major pathway to development and an end product of it." (Ramalingaswami, V. 1981)

VII.1 Health Planning

Today the majority of health care planners would support the above statement; however, this was not always the case. Abel-Smith and Leiserson (1980) suggest that until the 1960s health services planning played a minor role in development planning. Further, when considered it was in relation to the contribution that health services would make to a per capita increase in production.

The neglect of health in development was due in part to the influence of an economic approach to development, which emphasized economic growth through the creation of capital, concentrated on physical capital and failed to consider human capital (Elliot and Cole-King, 1981). Increasingly the body of literature on the determinants of the efficiency of human capital in the development process has led to suggestions that economic growth can be partially explained by changes in the quality of labour (Yotopoulos and Nugent, 1976; Meier, G. 1970).

Health was considered to be among the range of determinants of effectiveness of labour, affecting productivity of investment and the rate of the growth of the economy. It has been very difficult to prove empirically the contribution of health to changes in the quality of labour and hence to changes in the rate of growth of income.

This difficulty springs from health's interaction with other factors, such as education, housing, environment, psychological adjustment and political and social climates.

In the early 1960s Jan Drewnowski and other scholars at the United Nations Research Institute of Social Development began to argue that "the purpose of economic growth and of development was the satisfaction of human needs and the promotion of well-being." (Elliot and Cole-King, 1981:56).

Coming out of this new approach to health and development was the basic-need approach which espoused the principle that health should be an outcome of economic growth and not just a determinant in the process. "Basic needs" are said to comprise "minimal requirements for survival, such as food, shelter, clothing and health services, psychological needs such as participation and democracy. The approach is characterized not as an economic or social theory, but rather as a movement directed at a series of priorities for action, which usually includes action on health." (Lee and Mills, 1985:195). The provision of health services is only one of the factors that contribute to the health status of the population. The health of a population is often more significantly influenced by social and economic factors such as nutrition, water supply, sanitation, housing, education, income and its distribution, employment, communication, transportation and the social structure.

In an analysis of health services in India, Banerji concluded that "political forces play a dominant role in shaping the health services of a community through factors such as decisions on resource allocation, manpower policy, choice of technology and the degree to which services are available and accessible to the population." (Banerji, D., 1979:511).

Health sector planning is not only relatively new it is extremely complex. Countries have employed differing approaches in the design, management and scope of their health plans. The plans range from specific sector plans to national development plans which incorporate health as a component. Reviewing development plans in twenty-nine countries, Wheeler (1983) finds that the plans range in duration from three to six years with the overwhelming majority, 5 years. Some of the plans incorporate the health sector as part of a national plan. Growth in the health sector in this case is dependent on growth in the overall economy. Other plans explicitly identify the health sector as one of the areas for public sector investment programs.

Chapter III discusses some of the development plans in Ghana, following the country's independence in 1957. The Ghanaian plans identified social sector development as a general goal and improvement in the health sector as an explicit objective. The announcement of specific policies and the development of related programs and projects is the approach that dominates in Ghana.

VII.2 Ghana's Capacity to Plan

The Ministry of Health in Ghana (MOH) set up in 1975 a National Health Planning Unit (NPHU) with a mandate to examine and reappraise the health care system. Adjei (1984) suggests that "this was because despite huge infusions of resources (both facilities and additional personnel) since 1960, there had been little or no improvement in the general health status of the nation's population." The NPHU was given the task of developing a strategy for PHC.

The NPHU's working document "A Primary Health Care Concept for Ghana," released in 1977, outlined a restructuring of the health care system based on a "much

greater emphasis on village level work and an easily accessible first line of referral" (McEwan, et al, 1981:401). This working document which was revised in 1978 formed the basis for Ghana's initial attempt at PHC. The NPHU under the leadership of Dr. P.K. Nimo in the late 1970s was involved not only in the development of health plans but also in the design of methods of health status measurement. Combining morbidity and mortality considerations including average age at death, the NPHU estimated day of health life lost. This led to an identification of the leading causes of morbidity and mortality in Ghana and the development of priorities actions to address them.

More recently the NPHU have been short staffed. A 1986 policy study reports "Since then its output has suffered from insufficient human resources, and now it consists of one senior budget officer." (Government of Ghana, 1986:56). In support of the difficulties being faced by the NPHU the Ghana Health Study states "Health planning is one of the greatest weaknesses in the country's current health system. There once existed a capable unit at MOH headquarters. That capability is needed again and the UNDP has invested in a project to develop it at the MOH central headquarters level (OIC, 1988, vol. 4:46).

VII.3 Primary Health Care and Planning

The PHC concept focuses on the delivery of health related services at the appropriate level of care with mechanisms in place for necessary referrals to higher levels of care. This system requires planning not only at the national level but at other administrative and service (or program) levels. In the Ghanaian system, the district is the basic unit of health management and planning. Effective planning would involve the collection of data and information at the district level about the service utilization

and health needs of a community and/or village (community diagnosis). This information would then be used as input into a district plan. District plans in turn would form the basis of a Regional Plan. The NHPU collects the Regional Plans and uses them in the development of a National health plan. The National health plan should be incorporated, integrated with other sectoral plans consistent with a comprehensive development plan for the country.

The Ghanaian health care system according to consultant and government reports referred to above does not yet have the human resources sufficient to realize effective planning at the three levels of administration. Health sector planning in Ghana has focussed on the public sector and on projects funded by donor countries, agencies in conjunction with the government. One of the major long-term collaborative projects in Ghana is the Danfa Comprehensive Rural Health and Family Planning Project. The project involves the University of Ghana Medical School and other university departments, Ghana's Ministry of Health, the Department of Social Welfare and Community Development and the School of Public Health at the University of California at Los Angeles. Funding is provided by the government of Ghana and USAID (Neumann, et al, 1979:129). The Danfa project was designed to develop and test methods of improving health service delivery and the strengthening of the health service infrastructure.

The project included training at different levels of health service delivery and the development of information sharing techniques between agencies such as the Ghana methods of planning and health outreach programmes to rural populations which were pioneered by the project. An important part of the project's work focussed on finding ways to involve the local population and their leaders in the use and delivery of health

related initiatives (sanitation methods) and health services delivery. The NPHU attempted to collect, analyse and transfer the results from the Danfa project to other areas in Ghana. The lack of appropriate staffing and expertise has negated the level of information transfer that was hoped for when the project began.

The projects with multilateral and bilateral funding range from those aimed at controlling specific diseases (eg. World Bank/WHO/UNDP, Onchocerciasis Control Programme) to those directed at improving the infrastructure for PHC delivery. In order to coordinate the many projects at the national level in January of 1984 a National Primary Health Care Committee was set up. The Committee membership included representatives from government, non-governmental groups and a number of international agencies (UNCEF, USAID and the WHO). Adjei (1984) reports that five areas were identified for priority action by the PHC Committee: (1) Expanded Programme on Immunization (EPI); (2) Control of Diarrhoeal Diseases (CDD); (3) Health Education; (4) Environmental Sanitation; and (5) Growth Monitoring. Adjei suggests that although the PHC Committee met a number of times between January and July, 1984, the size of the group was prohibitive to real coordination of PHC services. He recommends that: "The national PHC Coordinating Committee should be reduced to an intersectoral core group to which the Committee of Secretaries should assign the responsibility of reviewing the strategies and plans of action for the attainment of Health for All by the Year 2,000." (Adjei, 1984:49) The importance of developing the capacity to plan and coordinate not only the delivery of services but also the funding of projects is crucial to effective development of PHC. A 1986 Policy Paper claims that "another important factor affecting Ghana's absorptive capacity for foreign health

inputs is the planning and senior executive strength at the Ministry of Health, needed to deal with foreign health project proposals." (Government of Ghana, 1986:34).

Health sector planning in Ghana as demonstrated above can be characterized as a series of projects loosely strung together with the principle of PHC as the key element. There is very little coordination between the projects and less evaluation of their potential outcome. Wheeler (1983:201) refers to this type of planning as "disjointed incrementalism." He states that other characteristics of this type of planning re: (1) concentration on government services; (2) often the plans lack logistical consistency (i.e. programmes are developed and/or facilities are built without attention being paid to the need for health human resource development; (3) the actual selection of projects does not reflect the declared priorities (Wheeler, 1983:201). These characteristics are also consistent with health planning in Ghana. The main advantage of "disjointed incrementalism" is said to be the flexibility of choosing projects as they come along. The disadvantage is that the projects chosen may not be optimal ones given the needs of the population and the limited resources available.

VII.4 District Health Care Planning

The key to health care planning for PHC is ensuring that planning at the basic unit of health care delivery, the district level, level C, is well developed. Amonoo-Lartson et al in their book "District Health Care" sets out a planning approach that identifies some concepts for effective health planning. The authors argue that planning at the district level should be pragmatic, based on a national policy for health care delivery but sensitive to the local needs and resources. The planning process involves the definition of goals and objectives, the identification of available resources, the

selection of options and the implementation of the chosen options. The process is completed by an evaluation of the chosen options.

An effective district plan is dependent on the involvement of the local communities and the interaction between the different levels of health care providers. Aronson-Larson, et al, (1984:77) believes that "community involvement in health and action on determinants of ill health is essential." The importance of involving the community in planning is supported by a number of authors. Abel-Smith and Leiserson (1980:146) argue that local communities should be involved in the planning process and that planning should be from the bottom up not the top down. The need to understand the "social structure of a community is the first prerequisite to planning and adapting health service delivery to local conditions" (Uyanga, 1990:658). In a study of economic development strategies for maternal and child health in Nigeria, Uyanga concluded that the demographic structure of the population, their position in society and the economic class contributed to their role in the delivery of health services at the community level.

Having a health program and/or facility in a community can influence the behaviour of people seeking health care, as they become more aware of their own health and the resources available (Zwart and Voorhoeve, 1990:716). The training of village-based health workers and gaining the support of local populations they serve is another important feature in the development of PHC services and the planning that is necessary to make it work (Ramprasad, 1988).

Planning and community involvement in the process has been discussed as key elements for Ghana as they strive to implement a system of PHC and the objective of greater access to health services for the rural populations. The failure of the Ministry

of Health to maintain an effective NHPU has also been identified as a barrier to the achievement of PHC. A well staffed NHPU with appropriate tools and clear objectives can serve as support for and a catalyst for the development of planning units at the regional and district levels. Improving the capacity to plan can also lead to an increase in the capability for coordination of health and health related services. The present planning approach in Ghana "disjointed incrementalism" can be enhanced with the development of a framework that sets out the overall objectives of the PHC system, its relationship to the medically dominated system and the roles that are currently being played by the private for profit and private not for profit sectors.

VII.5 Improving Health Human Resource Development

Chapter VI presents an outline of some of the health human resource planning models and a description of different levels of health human resource production in Ghana. Determining the type and quantity of health care providers necessary for a health care system depends in part on the organization of the system. By supporting PHC the Ghanaian government has in fact committed itself to a reorientation of the system from one dominated by physicians to a system that makes use of village health workers, traditional birth attendants and community and district nurses. This explicitly requires a shifting of resources away from the production of physicians and clinical nurses to PHC personnel.

The migration of physicians from Ghana to other countries has acted to prevent a shift of resource. There are many factors that affect the migration of physicians, the primary one being economic. Differentials in wages and in earnings potential is a key factor, however, the differential must be large enough to outweigh the cost of moving

and the psychic cost associated with home, family, culture and tradition. The cost of moving would include "direct cost - such as transportation cost and indirect cost such as income foregone during the period of the move, job search and relocation." (Yotopoulos, 1976:226).

Ojo (1990) expands the economic argument to include general economic conditions in the home country. It is suggested that prospective immigrants will assess the potential of the economy at its present and expected levels to provide opportunities to gain their expected return to their education. He further finds from a study of international migration of health manpower in Sub-Saharan Africa that professional opportunities and the chance to work with colleagues abroad is a further lure to international migration. Political instability and/or political persecution are also determinants of migration.

The cost to developing countries of physician migration to other countries can be significant. The home country loses the direct cost of training and intellectual capital that can contribute to social and economic development. There is also a cost to the health of the population as a result of human resources shortages that lead to shortages in service delivery.

Ghana is also faced with the loss of training post graduate physicians out of the country. As reported in Chapter III only 10 percent of physicians trained outside of the country return. There will be a need to develop methods that will increase the incentives for Ghanaians studying abroad to return. Designing an incentive that will be sufficiently high yet not too prohibitive will contribute to combating default. The government is also attempting to increase the competitiveness of the Ghanaian salary structure.

The emigration of Ghanaian physicians further distorts the maldistribution of resources available to the PHC sector. Policies and initiatives that are directed at minimizing the level and rate of emigration will result in a more efficient use of investment in education. The resulting saving can be directed towards the PHC sector.

VII.6 Improving Management

PHC requires a balance between the hospital based sector and the delivery of services at local levels. The coordination of programs at the various levels of care and ensuring that plans are implemented depends on good management. There are various levels of management within the health care system:

- (1) management at the MOH of the National plan and corresponding programs,
- (2) management teams at the Regional level, and
- (3) management teams at the District level (DHMT).

Some of the duties of managers, such as the District Health Manager, would include:

- planning and budgeting of District health programs;
- evaluation of such programs;
- managing human and managerial services;
- coordination of health programs;
- collection of data and initial analysis;
- formulation of strategies; and
- promulgation of by-laws.

The range of duties are broad and complex requiring a set of skills not easily obtained. District and other Health officers (managers) positions have traditionally been filled by

physicians who do not necessarily have the necessary training. The above list of managerial duties is expanded for the Community physician engaged as a manager. This group of physicians must also be able to deliver care (in most cases), teach, manage resources, plan with the aid of the appropriate data, be involved in community development and address minor administrative concerns (Amonoo-Lartson, 1984:25). Unless specifically trained in community health, most physicians have not been adequately trained in research methods, administrative and other non-clinician activities. They have, however, assumed the managerial roles because of their hierarchical level in the health care system or alternatively the roles have been defaulted to them.

The Ghana Health Study (OIC, Vol I:9) found that there were insufficient training programs to meet the need for managers. Although the Ghana Institute of Management and Public Administration (GIMPA) "can provide initial training to middle-level managers" there is a lack of continuing education and refresher courses. There is a move towards increasing in-house training programs in Ghana. It is important that knowledgeable trainers be identified and a cadre of potential managers trained. The tendency of trying to convert skilled clinical personnel (nurses and physicians) into managers must be changed. The use of clinical personnel in inappropriate functions is a double cost; a cost to the system of poor management and a cost to the individual and the state of the investment in clinical education. There are also personal costs associated with job misfit and dissatisfaction. This may result eventually with a loss to the health care system as the individual chooses a different career or work setting (e.g. from the government service to the private sector). There is an increasing recognition that management skills are as important to making PHC work as is the training of appropriate health care providers. Ghana must not only

recognize this need as a key element in the development of a PHC system, they must also identify it as a priority but also as a part of an integrated health human resource development strategy.

VII.7 Traditional Medicine

Strategies to improve access to health and health care services in developing countries have increasingly attempted to incorporate traditional medicine. Resolutions supporting the use of "indigenous health practitioners in government sponsored health programs" (Green, 1988:1125) was issued by the WHO and UNICEF in 1978. The integration of traditional practitioners into the modern system of mental health delivery in Ghana was recommended by Twumasi (Ojanuga, 1981: 407).

Kikhela et al (1981:99) suggest that "By gradually integrating them (sic. traditional healers) into the public health system and incorporating their skills into both primary and specialized care, the developing countries would be able to meet their people's health care needs more adequately and more effectively."

There are significant obstacles to the integration of indigenous health care providers in the modern system. The attitudes of both traditional and medical doctors to the health care system varies tremendously. They vary in their concept of how the patient should be treated. This is referred to by Green as a "cultural distance" which translates into often "incompatible world views or paradigms of illness." (Green, 1988:1126).

Rejection of traditional medicine has its roots in colonial missionary based health care systems. The conflict is grounded, therefore, not only in differing treatment paradigms but in religious beliefs (Green, 1988; Anyinam, 1987). Ojanuga also points to competitive factors: economic, social and cultural. He found that medical doctors

were of the opinion that traditional healers should be paid fee-for-service, and if they were on salary, the salary should be less than that commanded by medical doctors. Traditional healers indicated that they should be paid as much as if not more than medical doctors.

Ghana has taken a positive approach towards the integration of traditional and Western style medicine. Warren, et al (1982:1873) finds that the Ghanaian public do not make clear separations between the two systems of medicine. They state "the majority of the Ghanaian population regard the two systems as acceptable alternatives and patronize both freely." A program to incorporate indigenous healers into the PHC system has been set up in Ghana, the Primary Health Training for Indigenous Healers (PRHETIH). This pilot project in Techiman has resulted in the development of a willingness to cooperate and even for each group to incorporate elements of each other's healing practices into their method of treatment.

The program is intended to allow for increased accessibility to health care services, particularly primary health care services by the rural populations. Traditional practitioners have not been included in manpower planning in Ghana. A clear definition of the services they provide, the population to whom they provide it and their role as complimentary or substitute practitioners is necessary if they are to be included in a PHC program. A successful PHC program must be based in part on the development of appropriate health human resource strategies.

Summary

The Ghanaian health care system is faced with a tremendous challenge, one that cannot be met through the action of any one government official, department or agency. Many of the factors that are involved in the successful delivery of health care services in Ghana are outlined in this study.

Primary Health Care (PHC) as a strategy strives to make effective and efficient use of limited resources. The strategy recognizes the interrelationships between sectors (agriculture, transportation, health services, etc.) and relies on local communities to take an active role in maintaining or improving their own health. It attempts to incorporate clean water, sanitation, food, family planning and health service programs. There are many initiatives and activities directed towards PHC. These actions, however, will fall short of their objectives unless they are integrated and coordinated.

An overall planning approach that defines goals and objectives, identifies resources, outlines strengths and weakness and sets out areas for change is essential for Ghana to make the transition to PHC. Planning by itself is not a solution. It allows, however, for the building of a process for integration and coordination of policies and resources. Planning can create a framework that can be used by the different actors to measure the compatibility of their actions with the PHC process.

Improving the ability of the three administrative levels (the national, regional and district) to plan is crucial to the building of methods for coordination. Lines of communication with clear responsibilities must be established among the three administrative levels.

Human resource development programs for managers, service professionals and community health providers should be coordinated in order to ensure that the programs

are not duplicated. It is important also that as training takes place the role of local communities be incorporated.

The not-for-profit, non-governmental health care sector represented in part by the Christian Health Association of Ghana (CHAG) provides a range of services that should be integrated with services provided by the government sector. The coordination between the two has to take place at all three levels. Similarly, initiatives that seek to involve the private sector must be coordinated with governmental and CHAG programs. To achieve the necessary coordination and subsequent integration among sectors, programs and administrative levels will require that the various levels and groups accept PHC as the appropriate strategy.

The Ghanaian government must assess the resources available and develop ways to appropriately integrate the various levels of health care providers into the health care system. The move to PHC cannot realistically ignore the role that the Western style medicine establishment plays, or its ability to affect the allocation of health sector resources. The government should, therefore, seek ways to encourage the use of traditional health care providers while at the same time improving its capacity to train different levels of health care personnel. Public health nurses, community nurse/midwives, traditional birth attendants and local community health workers must be incorporated into the overall strategy of PHC. The integration of health professionals and programs at all the different levels of care is one of the key building blocks of primary health care.

The transition to a Primary Health Care System (PHC) in Ghana is an ongoing process, one that requires commitment by the government and an overall planning approach that can take advantage of opportunities as they present themselves. The

government has available to it a series of studies it has commissioned and studies of agencies such as the World Bank and UNICEF (some of these studies have been discussed in this paper). Commentaries on factors that act to inhibit change are also widely available. With this information the government of Ghana is in a position to continue to shape a PHC system that maximizes the use of available resources.

Although opposition to the reallocation of resources to PHC will continue, it is important that the government continue to pursue its reallocation policies. Activities such as the readjustment of salary levels in the public sector so that they are closer to remuneration levels in the private sector in order to contribute to increasing the availability of manpower to the PHC sector must continue.

Much has been made of the involvement of the local communities for the success of PHC. There is little evidence, however, from available reports that Ghana has directed resources to the development of this important component of PHC.

This study has not addressed a number of crucial concerns of the health care sector. The pharmaceutical industry and the medical transportation sector has not been analyzed. Drug costs for example have been estimated to account for about 67% of medical costs (Barnet, et al, 1980). Ghana's pharmaceutical industry is negligible. As a result, shortages in foreign exchange and increasing cost of drugs have resulted in drug costs increasing so as to absorb "21 per cent of the MOH budget in 1987 compared to eight percent in 1983." (OIC, 1988, Vol. 4:10).

A good transportation system is key to the supply system for drugs and other suppliers as well as for referrals through the different levels of the PHC system. The National, Regional and District Management Teams must give priority to improving the procurement, maintenance and organization of the transportation supply system.

The government as well as continuing to stress its commitment to PHC must give priority to the development of mechanisms that will stimulate coordination among the private sector, non-governmental health organizations and providers, donor agencies and other non-governmental organizations.

Each of the above elements are crucial to the successful development of a PHC program in Ghana. These steps alone will fail, however, to achieve the laudable goals of the Ghanaian government if the "colonial legacy of inequality" (Anyinam, 1989:532) is not broken. This inequality is evidenced by the continued concentration on resource allocation in the health care sector favouring the urban areas and the major hospitals.

The decentralization thrusts undertaken by the PNDC in its Economic Recovery Program must extend to decision making at District levels for the health care sector. The local communities must be mobilized to take an active part in their own health care delivery and improvement of health status.

Mobilizing local communities, however, requires a conviction on their part that they can have some input into and an impact on decisions which affect them. This also requires a commitment on the part of the central government to relinquish some of its "top down" control of the local areas. It requires decentralization of both political and economic decision making.

The establishment of 110 District Assemblies, which are intended to be the highest political and administrative authority in the districts, may provide the structure that will facilitate the development of a PHC strategy.

The Assemblies are to have "two-thirds of their members elected through universal adult suffrage and one-third appointed by Central Government in consultation with traditional authorities and other groups in the district" (Iddrisu, 1987:2). The

responsibility for local development will fall to the District Assemblies. Their responsibilities will include: working to achieve adequate shelter for their populations; improved drinking water, environmental, health facilities and health care improvement and education at the local level.

Administratively the District Assemblies will also be responsible for the establishment of Town/Area Councils and Unit Committees. Although the actual functions of these entities have not been specified, in terms of PHC, the creation of District Assemblies creates some of the conditions that will be necessary for expansion of the PHC program. The local groups should be in a position to identify the resources that are available within their communities. These groups, for example, should be able to help to assess the availability of indigenous practitioners, their acceptability and their relationship to our health care practitioners.

It would fall to the local groups with the help of the District Assemblies to meet with Village Councils (or other traditional village authorities) and encourage them to establish Village Health Committees in order to increase the involvement of the people in their own health care. Jonsson suggests that for Tanzania this was necessary for the improvement of "planning, implementation and monitoring of health care in their communities." (Jonsson, 1986:751). He argues that local communities do not necessarily require a highly trained health worker because "most people can learn how to monitor children's growth by using growth charts and to apply oral rehydration therapy" (Jonsson, 1986:751). Those providing instruction must, however, be aware of local customs. Village Councils can provide this awareness.

PHC is based on the development of fundamental strategies to address the needs of the greatest number. These strategies require not only a shifting of resources from

the urban to the rural areas, they also require a change in attitude, a recognition that western-style medicine is not the answer to improvement in health status. Western-style medicine attempts to provide cures for illness or injuries once contracted or to maintain health status. A balance between an urban oriented physician and clinical nurse dominated health care system and a PHC system as described by the WHO and outlined in this study must be obtained. The changing of attitudes and emphasis on different ways of providing health care and the reorientation of a health care system is generally a relatively slow process. Ghana's record since independence is an example of this. Cuba on the other hand was able to reorient its system in a short period. The revolution which ended in 1959 is credited with creating the conditions that allowed for a transformation of the health care system from a "primarily market-oriented private system to a quite fully regionalized, publicly funded and controlled, national health service system." (deBrun and Elling, 1987:681).

The Rawlings government is not in a position to establish a national health service, nor is it evident that a publicly funded and controlled national health service would be suitable for Ghana. The government has an opportunity, however, as it expands its decentralization programs, to break the colonial tradition of "top down" management and urban biased inequalities by a significant reallocation of resources to the PHC program. This must be accompanied by meaningful decision making at the local levels.

The establishment of the District Assemblies can provide the PNDC with an opportunity to take a bold step and turn their commitment to the PHC program into a reality. Expanding PHC in Ghana will continue to be difficult. It remains, however, Ghana's best opportunity for extending health care services to the majority of the population.

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