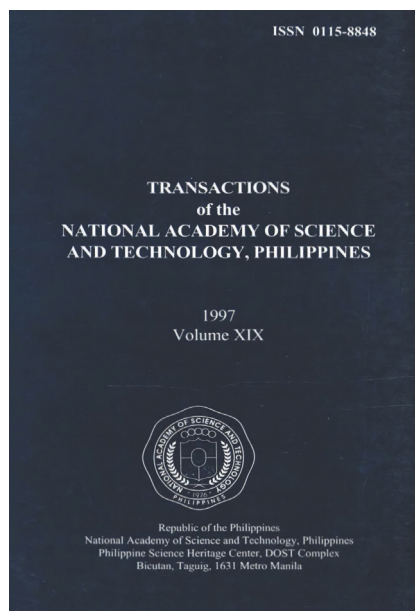


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A Century of Public Health in the Philippines

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PLENARY SESSION I

A CENTURY OF PUBLIC HEALTH IN THE PHILIPPINES

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What is Public Health

“Public Health is ecological in perspective, multisectoral in scope and collaborative in strategy. It aims to improve the health of communities through an organized community effort:

Public health infrastructures need to reflect that it is an interdisciplinary pursuit with a commitment to equity, public participation, sustainable development and freedom from war. As such it is part of a global commitment and strategy”.

– Ilona Kickbush

Let us first have a bird’s eye-view of the current health scenario in the Philippines. If you look back, as the year 1997 dawned on us, we were greeted by such dismal news as the measles outbreak, typhoid in Manila jail, lead in our water, increasing number of HIV/AIDS cases, hepatitis outbreak at U.S.T., ebola virus in monkeys, the poor condition of the water supply, TB on the upsurge, etc. This grim picture seems to dominate the public health scenario today. Have we really not made any headway in the status of public health in the Philippines? Allow me to take you on a flight to the past, “back to the future” to view how the real situation is. Our first stop is the pre-American occupation.

Pre-American Occupation

The Americans did not establish public health in a vacuum. When Spain came to introduce occidental civilization in the country, she had withal to make use of the type of hygiene and preventive medicine then understood and practiced in the Iberian peninsula. She undeliberately prepared the grounds on which the Americans later launched the public health program and it would be unpardonable to ignore her contributions. As historian E.G. Bourne stated in PHILIPPINE ISLANDS 1494-1898, the Philippines and Manila in particular were ahead of other English colonies with regard to provision for the sick and invalids.

Public health work during the Spanish regime inauspiciously began at the *portera* of the old Franciscan convent in Intramuros where a friar Fr. Juan Clemente put up a dispensary in 1577 for treating the indigents in Manila. This eventually became the San Juan de Dios Hospital (1659). When the Americans occupied the Philippines, there were already in operation:

Five General Hospitals

- * The San Juan de Dios Hospital (1659)
- * Chinese General Hospital (1891)
- * Hospicio de San Jose in Cavite (1611)
- * Casa de la Caridad in Cebu
- * Infirmaries de Sta. Cruz in Laguna (1870)

Four Contagious Hospitals

- * San Lazaro Hospital (1577)
- * Hospital de Palestina in Camarines Sur
- * Hospital de Leprosos in Cebu
- * Hospital de Argencina in Manila for smallpox and cholera

Two Military Hospitals

- * Hospital Militar de Manila
- * Hospital Militar de Zamboanga

Two Naval Hospitals

- * Hospital de la Marie in Canacao, Cavite
- * Hospital de Basilan in Basilan

Other Hospitals/Asylum

- * Hospicio de San Pascual Baylon in Manila
- * Asylum of St. Vincent de Paul in Manila for poor girls (1885)
- * Founding Hospital of San Jose for orphaned children and mentally ill (1782)

Real public health work started with the creation of the Board of Vaccinators in 1806 to prevent smallpox. Later, the office of “Medicos titulares” (health officers) was created together with a Board of Health with a priest as president. Maritime quarantine was instituted (1885). Spain can also be credited for the construction of the Carriedo waterworks (1876); for founding the first medical school, University of Santo Tomas (1872); a school of midwifery in 1879, a public health laboratory (1883) and “medicos forense” (forensic medicine) in 1892.

It may be worth mentioning the noble figure of Don Francisco de Carriedo as a benefactor of the City of Manila. He willed the amount of P10,000 to the city in 1733 to be invested in gainful trade and when the accumulated capital was sufficient, to employ it for the construction of waterworks. This provided Manila with piped water which served as an effective prevention of water borne diseases.

The American Military Government (1895-1907)

Our next stop is the American occupation in 1898 during the Military and Commission form of Government (1898-1907). At the outset, the unsettled state of affairs demanded the attention of the Commission in areas deserving priorities other than public health. However, a Board of Health, was established and Dr. Guy Edi was appointed as first Commissioner. He was unable to report immediately as he contracted typhoid.

The early pre-occupation of the Americans witnessed the control of epidemics - cholera, smallpox and plagues; the fight against other communicable diseases - leprosy, diarrhea, malaria as well as beri-beri; the establishment of a health organization and administration and general sanitation. These activities were undertaken during this period that underscores these concerns:

- * establishment of garbage crematory (1899)
- * first sanitary ordinance and rat control (1901)
- * established technologically that contaminated water and unclean vegetables are important factors in the control of amoebic dysentery while *Anopheles minimus* was first pointed out as the vector of malaria (1904)
- * cholera vaccine was first tried (1905) followed by compulsory vaccination of school children
- * confirmation of the theory that plague in man comes from infected rats (1905)
- * opening of the leper colony in Culion and compulsory detection of lepers (1906)
- * founding of the Manila Medical Society and the Philippine Island Medical Association (1902 & 1903).
- * opening of the College of Medicine U.P. with Preventive Medicine as one of the departments (1907)

Medical education was one of the concerns of the Insular Board of Health not only because of the intimate relationship of medicine to sanitation but because of the scarcity of local physicians. The only existing medical school was the University of Sto. Tomas.

Of outstanding importance to public health was the establishment of the Bureau of Science in 1905. Working in close collaboration with the Philippine General Hospital and the University of the Philippines, it became an active center for scientific instruction and research and made valuable contributions to public health.

Philippine Assembly (1907-1916)

We arrive at our next stop, the period of the Philippine Assembly (1907-1916), a step towards Filipinization. While most of the executive departments were placed under Filipinos, the Bureau of Health remained under American administration. The public health program started to take off.

Major developments in public health took place. The period was marked with several "first".

1908

- * first institution of the search for germ carriers
- * the new waterworks in Manila was inaugurated first using general chemical disinfection as emergency measure against cholera
- * first recruitment of nursing students who began studies at the Philippine Normal School sponsored by business firms in Manila
- * passing of the Employers Liability Law which made employers liable for injury and death of employees

1909

- * inclusion of Hygiene and Physiology in the curriculum of public elementary schools
- * start of anti-tuberculosis campaign with P35,000 appropriation from the government
- * conduct of first sanitary survey of rural community
- * dissemination of the results of first nutrition survey

1910

- * organization of the Philippine Tuberculosis Society
- * opening of Pasteur Prophylaxis treatment against rabies
- * recognizing that Beri-beri as associated with eating white polished rice
- * opening of the Philippine General Hospital with the P1,000,000 appropriation from the government

1911

- * First demonstrated the eradication of beri-beri among Philippine scouts by means of simple change in the diet.

The first epidemic of beri-beri was described by Koeniger in 1882. It was claimed that 60% of infant mortality was due to infantile beri-beri. The results of the researches of Fraser and Stanton, Aron and Hocson, Cromwell and Concepcion advanced the theory that the etiology of beri-beri is food deficiency especially diet consisting mainly of rice. This theory was endorsed by the Far Eastern Association of Tropical Medicine in 1910. The credit for the discovery of a specific treatment for the disease, tiqui-tiqui extract belongs to Chamberlain of the Army Board for the study of Tropical Diseases and two Filipino physicians: Dr. Joaquin Quintos and Dr. Manuel S. Guerrero. In 1914, Congress passed a law allowing free distribution of tiki-tiki to indigent mothers.

The control and prevention of beri-beri is a distinct triumph of modern medicine. Some practitioners, however, discount the existence of the disease.

1912

- * initial use of anti-typhoid vaccine
- * use of hypochlorite of lime for the first time for treating Manila water supply
- * initial study on vitamin deficiency as cause of beri-beri which ultimately culminated in the isolate of Vitamin Biothiamine

1913

- * use of etiology of amoebic dysentery in the detection of carriers and mild cases
- * first use of dry vaccine against smallpox with successful results with potency for two months versus one week of glycerinated lymph vaccine
- * first offering of graduate courses in hygiene and tropical medicine at the UP College of Medicine.

1914

- * manufacture and free distribution of tiki-tiki for treatment of beri-beri
- * inauguration of first "clean up week"

Rise of non-government health organizations, such as: Gota de Leche, later named La Protection de la Infancia for the protection and care of infants; La Liga Nacional Filipinos Para la Proteccion de la Infancia; Asociacion de Damas Filipinas to help poor women and children; Settlement House - for the temporary shelter of destitute women and children; and Women's clubs.

Definitely, public health has gained momentum and one could view the important cornerstones upon which the public health program could be erected. Technological advances were visible and the epidemiology of common communicable diseases- tuberculosis, rabies, typhoid and beri-beri had been defined and control measures instituted such as immunization, environmental sanitation and proper nutrition, smallpox, cholera and plague were gradually brought under control. These measures were supported by the education of health personnel, budgetary allocation, and partnership with non-government organizations, foremost among which is the Philippine Tuberculosis Society that pioneered in TB work.

The Jones Law (1916-1936)

The next leg of our flight is the period from 1916-1936 covering three decades from the enactment of the Jones law until the Philippine Commonwealth. The take off was characterized by some turbulence but it was able to recover altitude and fly smoothly later on. There was a shift in administration in Washington. The Democrats were able to wrest control from the Republicans. The appointment of Francis Burton Harrison as Governor General led to the enactment of the Jones Law which promoted further Filipinization. This was done rather hurriedly resulting in the Civil Service being increasingly riddled with politics. However, the Department of Public Instruction where education and the health services were located, still remained under an American leadership, while the rest of the departments became nationalized.

Hayden reports that the Harrison administration was one retrogression rather than progress in so far as health is concerned. Crude death rate and infant mortality rate rose. Deaths from smallpox, cholera, typhoid, malaria, beri-beri and tuberculosis increased. Even Governor Harrison admitted that the health record of 1919 was a disappointment.

By 1921, the Republicans regained control of the White House and Governor General Leonard Wood, a physician, an administrator, a sanitarian and a humanitarian assumed office. Governor Wood had a militaristic orientation. He re-energized the health service and encouraged effective supervision. He had a profound effect on the public health service. It was recognized however, that whatever accomplishments the Wood administration made could not be attributed solely to him. A good deal was contributed by the Filipinos who manned the health services supported by necessary legislation and budgetary outlay.

Governor Wood was succeeded by four other governors until the Commonwealth: Henry Stimson (1928-29); Dwight F. Davies (1929-32); Theodore Roosevelt (1932-33); and Frank Murphy (1933-35). To the Roosevelt administration could be attributed improvement in the organization of the government. The semi-militarized Philippine Health Service was transformed again into a Bureau of Health and together with the Bureau of Public Welfare formed the Office of the Commission of Health and Welfare (Reorganization Act of 1932).

Public Health under the American period from 1898-1935 prior to the Commonwealth was marked by the performance of three men who helped advance the frontiers of public health and welfare in the country. The first was Dean C. Worcester (1898-1914), member of the Philippine Commission, later Secretary of Interior under which was the Bureau of Health under Director Victor Heiser. Worcester, a scientist, had the creativity and the driving force that put through the revolutionary health program in the new American colony. The second was Governor Leonard Wood (1921-1927); and the third was Governor General Frank Murphy who launched a public health and social welfare programs well designed to raise the health level of the Filipino people through a comprehensive program including maternal and child health, slums, unemployment, latrine, nutrition, recreation and leprosy. His technical adviser was Major George C. Dunham, U.S. Army Medical Corps, whose personal qualifications are distinctive of a great public health official, having graduated from the School of Hygiene and Public Health, John Hopkins and the London School of Tropical Medicine coupled with a vast experience of public health and welfare work in the Philippines.

The following were the outstanding contributions during the period:

- 1916** - A Committee was appointed to study the cause and prevalence of typhoid fever.
- 1913-34** . The composition, value and vitamin distribution of many Philippine foods were studied. This is part of the drive for better nutrition.
- 1919** - Schick test was first used on a large scale to determine the susceptibility of Filipino children to diphtheria.
- 1921** - Rockefeller Foundation extended cooperation. Government and Rockefeller fellows were sent abroad to develop a corps of competent public health men who could assume leadership roles. Among these were Dr. Jacobo Fajardo, Director of Health, and Dr. Jose Fabella who became first secretary of Health and Welfare. Dr. Hilario Lara, Dean, Institute of Hygiene. Yaws was found controllable. Yaws clinic for administration of salvarsan opened.
- 1922** . Campaign against hookworm was launched. Anti-dysentery vaccine as first tried locally. Role of seafood in transmission of cholera and of pollution of fishing sector to typhoid were studied.
- 1923** . First training course for sanitary inspector Sewage of Manila purified by hypochlorite of lime Women and Child Labor Law - Act No. 3071 was conducted.
- 1924-26** . Mechanism of transmission through Aedes Egypt of dengue fever was studied successfully.
- 1925** . Construction of Novaliches dam started.
- 1926** . Success of the first rapid sand treatment to purify water of swimming pool constructed at state university was attained.
Legislation was passed for the establishment of School of Hygiene and Public Health with support from the Rockefeller Foundation.

- 1927 - Conceived in 1927, the National Research Council of the Philippines was officially organized in 1934 to promote comprehensive projects of research in the basic sciences of which health and medical research were areas of concern.
- 1928 - B.S. in Education, major in health education was offered in U.P.
- 1929 - Compulsory notification and inoculation for reportable disease was effected.
- 1930 - Law was enacted to establish civil registry. Tuberculosis Commission was created.
- 1932 - Free Emergency Medical Treatment for Laborers was offered. Industrial Hygiene and Sanitation were initiated. Philippine Public Health Association was organized. Building of School Hygiene and Public Health (Donation of Rockefeller Foundation) was constructed. First Child Health Day observed.
- 1933 - Reorganization Act - consolidating public health and welfare activities under the Commission of Health and Welfare was promulgated.

The Commonwealth (1936-1942)

Public health has weathered the turbulence after the Jones Law period and is now in the process of gaining and maintaining altitude. The epidemiology of additional life threatening diseases was studied - diphtheria, yaws and dengue. Health research was promoted. The U.P. School of Public Health was established for the training of public health leaders. The consolidation of welfare and public health activities was ensured. The health of laborers was addressed and the sanitation of the environment pursued. However, with the initial phase of the Commonwealth period, some turbulence once more occurred. Later, this was overcome and public health gained headway up to the Japanese Occupation.

The Jones Law ceased to be in operation and the Filipinos came in control of the executive branch of the government. The rallying cry of President Quezon was social justice to ensure the well-being and security of all people.

The responsibility of the Commonwealth became the preparation of the Philippines for the difficult task ahead. There were many problems to be hurdled, foremost of which were political, economic, and social security. However, President Quezon gave attention to public health as attested by a gradual increase given to health appropriation. An additional P19,150,000 was made for specific projects for the construction of additional leprosaria, of provincial hospitals, for the construction and rehabilitation of the Philippine General Hospital, and for the drilling of artesian wells, waterworks, public market and slaughter houses. In 1936, the National Assembly appropriated P500,000,000 for the construction of three regional leprosaria in Cebu, Luzon and Cullion. Four Filipinos gained international three recognition for their contribution to the scientific study of leprosy.

The Philippine Charity Sweepstakes was equally generous, appropriating around P2 million for the Philippine TB Society for the operation and maintenance of the sanatoria and the construction of the Quezon Institute. The thrust of the period was research in and control of Tuberculosis, Malaria, Leprosy, Yaws and Maternal and Child health.

In 1939, Commonwealth Act No. 430 provided for the creation of the Department of Public Health and Welfare, with Dr. Jose Fabella as the first secretary. Thus, public health administration was removed from the Dept. of Public Instruction to include the Bureau of Quarantine, health departments of chartered cities, provincial, city and municipal hospitals, dispensaries and clinics, public markets, slaughter houses and health resorts and charitable and relief agencies.

The Bureau of Census and Statistics was created in 1940; therefore vital statistics was transferred from the Bureau of Health to this new Bureau.

In spite of the advances made in facilities and manpower, the nagging problem was still the inequitable distribution of health facilities and resources. It was noted that 80% of those who die never received medical attention. Death rate remained high, the terrible havoc of tuberculosis remained unaborted; malaria, beri-beri and intestinal disease claimed their undiminished toll.

In response to this situation, the establishment of charity clinics supported by the Philippine Charity Sweepstakes marked one of the significant developments during the period. The plan called for the establishment of charity clinics in towns and cities with less than 8,000 inhabitants where there were no private hospitals or government physicians. These were placed under the Bureau of Health and eventually under the Bureau of Hospitals. This was an attempt to have equitable distribution of health facilities and human resources and to reach the periphery.

Maternal and Child Health, School Health, Health Education of the public, Public Health Nursing, Public Health Dentistry, Hospital and Laboratory services were all strengthened.

By the end of 1939, the state of health was fairly satisfactory. Only one case of smallpox and no cholera case was reported. The Commonwealth government acquitted itself well of its responsibility in public health. Hayden reported "The Filipinos continued the general health and welfare policies and agencies which had been developed during the period when final control lay in American hands. They adhered to and carried forward the modern long-time inclusive program initiated during the last years of the American regime. They kept public health and welfare administration out of politics and in the hands of highly trained permanent personnel.....".

Japanese Occupation

The bright public health landscape that we had viewed suddenly turned into one of gloom.

The Japanese occupation practically paralyzed the activities. Public health and sanitation were set back a quarter of a century. Hunger, disease and epidemic stalked the land and health and other social services were in a large measure a shambles.

The Bureau of Health continued to function but the activities were directed towards the handling of emergencies; the prevention of the occurrence of epidemics especially malaria, which was ravaging the Japanese military; regulations for slaughtering of cattle, hogs and carabaos and the creation of the Board of Nutritional Research in 1943.

There were no available reports on health status during the period.

Post World War II To Martial Law (1946-1972)

After five years of this grueling experience came Liberation. Slowly public health tried to pick up the debris and rise from the ruins. A U.S.P.H.S. post war survey of public health conditions showed that the incidence of TB, VD and malaria had reached a new high; over 5,000 leprosy cases were dispersed; there was widespread evidence of malnutrition and beri-beri; general sanitation had been reduced to a level to constitute a national hazard; there was widespread destruction of quarantine installation and laboratory; and imminent chances of the introduction of cholera, plague, smallpox and other epidemics. A one million dollar emergency measure was passed by U.S. Congress to assist the Commonwealth government in the reestablishment of its public health activities and facilities.

Given priority in this emergency program were disease control (VD, TB, malaria, leprosy, malnutrition and immunization), general sanitation, maternal and child health, school health, health education, hospitals and public health laboratories.

Still reeling from the ravages of the war, the Philippines was given its independence in 1946 with Manuel A. Roxas as president. The tragic evidence of the war still stared at the country from the broken ruins of the city. Whereas, the Philippines were a land of comparative plenty, the brutal hand of war blotted its progress toward economic development (M. Roxas). The Republic was confronted with grave problems of rebuilding the nation's economy, restoring peace and order, coupled with facing the challenges and responsibilities of a newly attained independent nationhood.

Many agencies came to the rescue of the Department of Health such as the PCAU (Philippine Civil Affair Unit), an agency of the Army of Liberation, the U.S.P.H.S. under its Phil. Rehabilitation program and later on such other agencies as the U.S. Mutual Security Agency (MSA), UNICEF, WHO, etc.. The sad note was that in the Rehabilitation Act, the U.S. demanded parity rights, i.e. the same rights as the Filipinos enjoy in the exploitation of resources in the country.

On 17 July 1946, a joint cooperative agreement was signed by representatives of U.S.P.H.S and the Philippines Secretary of Health and Welfare which provided for programs related to communicable disease control (malaria, TB, VD, leprosy) general sanitation; MCH, Nutrition, Health Education, Public Health Training Centers, Rehabilitation of Public Health Laboratories and of the Philippines Quarantine Service.

Among the highlights of this period are:

- research on DDT saw dust as a larvacide and DDT residual spraying of houses in the control of malaria.
- construction of the National Chest Center, establishment of a control case registry for TB. Mass case finding surveys and mass BCG immunization for TB control.
- inauguration of an industrial hygiene laboratory
- the Bataan Enriched Rice Project which amply demonstrated the efficacy of enriched rice in the eradication of beri-beri and iron deficiency anemia.
- introduction of one - infection method for gonorrhoea with penicillin which established a routine procedure in all VD clinic.
- creation of a Central Health Laboratory of Philippine under the newly organized Department of Health.
- reorganization of government offices in 1947 resulting in the transfer from the Dept. of Health and Public Welfare of the Bureau of Public Welfare to assume the name of Social Welfare Administration, and the creation of the Bureau of Hospitals and Quarantine under the Dept. of Health.
- creation of the Institute of Nutrition - 1948 which was charged with the duty of unifying, centralizing and coordinating all nutrition research and activities. The Institute of Nutrition was transferred to the newly created Bureau of Research and Laboratories through Reorganization of 1958. In 1959, with the passage of Science Act of 1958, the Institute was transferred to the National Institute of Science and Technology and renamed Food and Nutrition Research Center - later named Food and Nutrition Research Institute.

In 1950, at the termination of the joint Department of Health and U.S. Public Health Program, through the request of the Phil. Government, a survey was carried out by the U.S. Economic Survey Mission known as the Bell Trade Mission, to look into the economic and financial situation of the country. One of the six-point recommendations of the mission was to restore the high degree of efficiency of the public health service to help in rural development. An offshoot, the Foster-Quirino Agreement, was signed in Nov. 14, 1950. A mutual assistance and cooperation was forged between the U.S. Economic Cooperation Agency (ECA) (forerunner of U.S. AID and the PHILCUSA (Phil. Council of U.S. AID) created by Pres. Quirino. The objective of the Phil.-American Public Health Program was to provide health services on a continuing basis to all areas of the country especially the rural areas.

On June 1951, Manila was selected as Headquarters for the Western Pacific Office. Other international organizations stepped in such as UNICEF, UNESCO, FAO, ILO. With the assistance of bilateral and international organizations, many projects sprouted.

Several milestones in public health marked this post-war period.

- Enactment on 19 June 1954 of Republic Act 1082 entitled: **An Act Strengthening Health and Dental Services in Rural Areas** and providing funds thereof, during the Magsaysay Administration. This concept of an integrated health service was first demonstrated in 81 pilot provinces. The staffing pattern included 1 MHO, 1 nurse, 1 midwife and 1 sanitary inspector for municipalities with 5000-10,000 population, with those with less than 5,000 could have no MD; those with over 10,000 will have a corresponding complement of health personnel.
The RHU program was instrumental in-bringing to the people the basic health services and has improved the total health picture of the country.
- Reorganization of the DOH in 1958, a step towards decentralization. Eight regional offices were organized under which were the provincial and municipal health offices. The national office assumed only staff functions; line functions emanated from the regional offices.
The same period saw the creation of several offices - The Dental Health Services (1963), the Malaria Education Services (1966), the Disease Intelligence Center (1961), the Division of Nutrition (1960), Food and Drug Administration (1963), National Schistosomiasis Control Commission, National Nutrition Program (1968).
- Enactment of R.A. No. 6111 otherwise known as the Philippine Medical Care Act of 1969, an answer to the long felt need of extending medical service to as many people as possible.
- Definitive programs were initiated with multilateral assistance such as: WHO/UNICEF assisted TB and BCG program, the piloting of an integrated TB control program into the basic services of rural health units, TB sputum case finding by microscopy; Serum and Vaccine production in Alabang; the Foreign assisted Expanded MCH Program, the Mental Health Program, WHO/UNICEF School Health Education Program; Training Program for midwives; strengthening of the graduate public health program at the Institute of Hygiene (now CPH); the WHO/MSA/PHILCUSA assisted health education project at the Dept. of Health, the setting up of demonstration training centers such as the WHO/UNICEF Rural Health Demonstration and Training Center in Quezon City and the U.P Comprehensive Community Health Program in Laguna which served as laboratories for extra mural activities of the students of the Institute of Hygiene and the College of Medicine and of other health allied colleges. In all these endeavors, coordination with other government sectors-education, social work, agriculture, welfare, community development, etc. and NGOs-Phil' Medical Association, PNHA, Phil. Hosp. Association, PRRM, PTS, PNRS, Nutrition Foundation of the Phil., CARE, Catholic Relief Services, Phil. Business for Progress, IIRR, etc. were promoted.

- The development of the Family Planning movement. This started as early as 1957 as a Family Relations Center of the Presbyterian and Congregational ministers. This gained momentum and in 1965, the Family Planning Association of the Philippines was organized while the Family Relation Center served as the nucleus for the Planned Parenthood Movement of the Phil. These two organizations eventually merged to form the FPOP (Family Planning Organization of the Phil.), an NGO partially funded by the International Planned Parenthood Federation. Meanwhile on 15 May 1970, the Commission on Population was created (Ex. Order 233) an intersectoral body, and on 16 Aug. 1971 R.A. No. 6365 approved the Population Act of the Philippines. Many foreign assistance came in - USAID, IPPF, Pop. Council of New Work, Pathfinder Fund, Ford foundation, WHO, UNDP, Rockefeller Foundation, Church World Service.
- Launching of health programs during Secretary Elpidio Valencia's term from the private sector on a volunteer basis to support on a volunteer basis to support the government's effort to provide services to the periphery. Project Helping Hand, Operation Tribal Minority, the Maria Way (Medical Assistance to Rural Indigent Areas) launched by PMA, AKAP, and supported by business firms and charitable institutions are some examples of efforts to attract doctors to doctorless areas.

Of note is the Philippine Rural Reconstruction Movement, (PRRM) another NGO, which was a potent force in the public health picture. From a handful of volunteers in 1952, the PRRM has demonstrated the importance of a wholistic and innovative approach to rural reconstruction, an integrated four-fold program including 1) livelihood (agriculture, cooperatives and cottage industries); 2) education; 3) health and; 4) self-government. The seat of the Project was San Leonardo, Nueva Ecija.

Three of the principal ways in which PRRM works with barrio people in health improvement are: 1) establishment of barrio health centers; 2) training and activities of young adults as auxiliary health workers and; 3) planning and carrying out urgently needed education for mothers. The PRRM is ahead of the DOH in establishing health centers at the barangay level which was institutionalized during the Primary Health Care Movement. PRRM has been utilized as a social laboratory for the training of public health workers.

Secretary Juan Flavio was honed into a public health man through his vast experience he accumulated while working as a physician at the PRRM which provided the materials for his book "Doctors to the Barrios" and his daily parables in the Philippine Star.

The PRRM was expanded into an international organization - The International Institute for Rural Reconstruction located in Silang, Cavite, catered to different countries in the world. Its field of operation covers 200 villages which serve as its social laboratory and training field.

- ***The Rizal Development Project*** an operation research of the DOH, the Institute of Hygiene U.P. and WHO led to the restructuring of the Dept. of Health Rural Health Care Delivery System. Additional responsibilities were given to nurses; treatment functions for common ailments were delegated to midwives. Each barrio was provided with a midwife with expanded role. This research became the centerpiece of the first national health plan.

This bright public health picture was marred when Cholera El Tor lurked its ugly head together with that of hemorrhagic fever and a new disease of man, intestinal capillariasis. For the first time, dengue virus was isolated from typical "H" fever cases in children. Philippine hemorrhagic fever, a new disease of children, was found to be one of the clinical manifestations of the local dengue virus strain (Hammon et al). The resurgence of cholera el tor paved the way to test the efficacy of three different cholera vaccines with Negros Occidental as the site of the study. These were found ineffective inasmuch as there were different strains of the bacilli. Proper waste disposal and safe water were found better measures in the prevention of the disease. Indiscriminate vaccination was stopped and restrictions especially to travellers were lifted as they as they were found to be unnecessary and ineffective. Five antibiotics were tested as it was clear that they shorten the duration of diarrhea and the excretion of vibrio in the stool. Immunization against cholera was no longer obligatory.

By the early 70's improved biologicals were produced and widely used which proved as a breakthrough in public health in the prevention and control of communicable diseases.

The Martial Law Years (1972-1986)

At the height of all these developments in public health came the declaration of the Martial law on Sept. 21, 1972. The nation was at a state of unrest. The nation was transformed from a Presidential to a Parliamentary form of government. Declared a new society, Presidential decrees were issued one after the other. The first decree created the National Economic Development Authority for economic planning. The DOH was changed to Ministry of Health with now 12 instead of 8 regional offices. In spite of the political change, the Ministry of Health continued to function in accordance with the public health structure previously laid. Acted as Ministers of Health during this period were Drs. Clemente Gatnaitan, Enrique Garcia and Azurin.

The following highlight the accomplishments of the period:

- Formulation of a National Health Plan drafted by NEDA and the MOH. An offshoot of this were the following events:
 - * Implementation of the Restructured Health Care Delivery system where the three levels of care was evolved - the primary, the secondary and the tertiary. The problem of access was addressed by the establishment of Barangay Health Stations manned by

- midwives. Tertiary Hospitals were constructed - the Philippine Heart Center, the Lung Center; the Kidney Center, and the Children's Hospital (Lungsod ng Kabataan).
 - * Implementation of Medical Care in 1972:
 - * The Rural Health Practice Program of the Dept. of Health requiring graduates of Medicine and Nursing to render service in rural areas.
- **The adoption of PHC** as an approach to health development in the Philippines which was eventually launched nationwide on Sept. 11, 1981. After the Alma Ata Declaration in 1978, the Philippines, being a participant in the international gathering, introduced to the country the global goal "Health for all by the year 2000". The LOI 949 dated Oct. 19, 1979 provided the legal basis.

The Philippines has the distinction of being the first country in the world to implement Primary Health Care nationwide through the Ministry of Health then under Minister Azurin. In his words, The MOH "has been able to penetrate the world of lethargy and convert the people to the cult of self reliance". By early 1984, 39,000 barangays have been organized to carry out PHC with 9,000 midwives, 8,000 nurses and 4,500 physicians trained to implement the program. The national health program was given world recognition when it won the first Sasakawa Health Prize in Geneva.
- **Operation Timbang**, a nationwide nutrition program providing supplementary food for infants and school feeding programs.
- **The Integrated Provincial Health Office (IPHO)**. The brain child of Minister Azurin came into being which merged public health and hospital services at the provincial level and the various health units, personnel and financial resources of the different health programs were integrated. This is another move towards decentralization which was fully implemented in April 1988 by Dept. Administrative Order 144.
- **The Oral Rehydration Therapy** for the National Control of Diarrheal Disease became one of the major thrust of the DOH with the collaboration of the DECS, NMPC, Ministry of Information, NEDA, U.P, UNICEF, WHO, USAID, MLGCD, MWSS, LUWA and the PMA - Phil. Pediatric Society.
- **Community-Based Health Programs** - (CBHP) This was started in 1973 by three Catholic sisters and one physician nun of the Rural missionaries. The vision was to train lay people and utilize local and indigenous resources for preventive and curative health care instead of Western-oriented system. Many other groups have utilized the CBHP approach like AKAP.
- **Public Health Research** - Breakthroughs in public health are generally based and supported by research. The Martial law years can be credited with:

- * Creation of the *Nutrition Council of the Philippines* in 1974 began to address the problem of malnutrition. This has significantly saved millions of lives of mothers and children from this dark scourge. Now the country is engaged in an aggressive campaign against micro-nutrients malnutrition. Through research linkages with the international institutions, the Center is able to contribute to the strengthening national policies and programs. Some of its outstanding output are the Vitamin A fortified star margarine, fortification of wheat flour, salt iodization program, assessing the health and nutrition status of 10 million school children and enlisting teachers in the detection and intervention of nutritional disorder in schools.
- * The *Research Institute for Tropical Medicine* (RITM) was inaugurated on 23 April 1981 as the research arm of the Department of Health in infectious and tropical diseases. The vision is that advances in health technologies could have an impact of the survival and quality of life of millions of people. The research programs include acute respirator infections (ARI), diarrheal diseases schistosomiasis, human immunodeficiency virus (HIV-AIDS) infection, malaria, viral hepatitis, leprosy, TB, dengue, rabies, poliomyelitis and other infectious diseases. Recently, field studies on human immune response to recombinant *S. japonicus* antigens are being conducted in Leyte. This has promise of discovering immunization against schisto. The RITM has become the center of infectious diseases training for doctors and paramedical staff of both public and private hospitals, the national reference laboratory for polio eradication program, the coordinating center for anti-microbial resistance surveillance and reference center for problematic infectious and tropical diseases. Results of studies from Hepatitis Study Groups can be credited for the integration of Hepa B vaccine into the expanded Program of Immunization. It also showed the affinity of HBV for human liver and causes infection which may lead to liver cancer. The Rabies Research Group developed strategies for rabies control which have been implemented by local governments. The Virology Laboratory has established capabilities for virologic studies including virus isolation and identification, serologic diagnosis and preparation of dengue antigens for serologic methods.
- * The *PCHRD (Philippine Council for Health Research and Development)* was created in 1982. Its mandate is to lead, direct and coordinate science and technology activities in health and nutrition. It sets the goals of health research in the country; establishes implementing mechanisms develops/strengthen research capabilities of institutions through manpower development pro-

grams or improvement of equipment and laboratories, monitors and evaluates research and promotes research utilization.

During the latter part of the so-called New Republic of the Marcos Administration, the nation was in a state of political unrest. This was aggravated by the assassination of Ninoy Aquino in 1983 which led to a chain of events culminating in the EDSA Revolution (People Power Revolution) on 24 February 1986. This spelled the collapse of the dictatorship and the end of the Parliamentary form of government. Hence, the Ministry of Health was again renamed as the Department of Health.

Post-Edsa Revolution - 1986

A documentary by the Department of Health, titled *Panorama of Concerns of the Department of Health* featured the state of the nation's health condition, such as: increase in life expectancy have slowed down; morbidity and mortality rates from preventable causes stabilized at high rates; declines in infant and child mortality have decelerated malnutrition incidence has increased; practice of family planning has declined; health status of large pocket of disadvantaged sectors further deteriorated. In short, as the economic status of the nation worsened, advanced in health status slowed down.

State of Health Sector

The Government Health Service

- weakened by three years of budgetary strangulation demoralized by a politicalized reorganization in 1975-1985
- sustained a long tradition of service orientation and professionalism
- retained the basic technological capabilities for tackling infectious and communicable diseases
- retained a corps of experienced and technically prepared but poorly motivated middle managers
- stuck in ancient systems and procedures handed down from generation to generation
- blessed by clearly defined problems and priorities

The Private Health Sector

- provided a parallel network of hospitals and practitioners
- sustained itself from its own efforts and revenues
- weakened by the post-assassination recession
- strengthened by market discipline
- lacked coherence and standardization

By virtue of Exec. Order 119 Jan. 1987, the DOH was reorganized. Five offices headed by undersecretaries and assistant secretaries were created. These were the Office of the Chief of Staff, Public Health, Hospitals and Facilities, Standard and Regulation and Management. At the lower level, the integrated scheme remained.

The Aquino Administration

The new Constitution of 1987 contained more specific provision on health making available comprehensive health care and emphasized private sector and NGO participation. A new office to deal specifically with non-government organization was created called Community Health Service. Research was strengthened with the creation of the National Health Research Program.

During the term of Pres. Aquino and Secretary Bengzon foremost among the legislation and DOH activities influencing the health of the public were:

- The Milk Code Exec. Order 51, 1986 which required the marketing of breastmilk substitute to promote breast feeding.
- Proclamation No. 6, 1986 which committed the government to the goal of universal child and mother immunization by 1990.
- In 1987, the International Safe Motherhood Initiative was launched to reduce maternal deaths.
- Passing of RA 6725 in 1989 prohibiting discrimination against women with respect to terms and conditions of employment.
- Formation of Population and Development Foundation Inc. by the Phil. Legislator's Committee with its advocacy mission for formulating and reviewing population legislations.
- Start of the National Epidemic Surveillance System in 1988 under the Field Epidemiology Training Program in 8 sentinel sites in different region of the country to track down the occurrence of 14 diseases which have the potentials of causing outbreaks including HIV/AIDS surveillance. Established in 1986 with the support of USAID, the US Center of Disease Control, the FETP aims to strengthen the Department's epidemiological service.
- The National Drug Policy together with the Generic Act of 1988 to ensure the availability of safe, effective and affordable quality drug identified by their generic name and to give the patient the first decision in the choice of their drug.
- RA 7160, The Local Government Code of 1991, fully implemented in 1993 which devolved the process, resources and functions of the provincial and municipal governments from the national to the governors and mayors.
- RA 7170 - Organ Donation Act of 1991 - Legalizing donation of all or parts of the body after death for specified purposes.

- The Magna Carta of Public Health workers, RA 7305, dated March 1992 which seeks to promote and improve the social and economic well being of public health workers. Corollary to this was the passage of the Code of Conduct to Public Health Workers in 1992 to define the nature and scope of the duties of public health workers.
- RA 7277 in 1992, The Magna Carta for Disabled Persons providing the rehabilitation, self development and self-reliance of disabled persons and their integration into the mainstream of society and other purposes.

It was during the Bengzon years that the onslaught HIV/AIDS emerged. By August 1988, the Government of the Philippines and the World Health Organization approved the First Generation Medium Term Plan for the prevention and control of HIV/AIDS. By 1992 the DOH approved 12 policy statements developed by the National Program.

One legacy of the Bengzon administration is the face lifting of the DOH - the construction of four impressive building which greatly improved the image of the Department.

Significant external cooperation were negotiated with USAID (The Health Policy Development Project and the Health Finance Development Project) and with the German Agency for International Cooperation of the Federal Republic of Germany addressing the problem of health and management information system (HAMIS).

In 1986, the newly installed Aquino Administration launched the Community Employment Development Project (CEOP) as a major pump priming program of the government. This was an effort to institutionalize “people power” through active people participation in the process of development.

A survey in 1982 by the Philippine Business for Social Progress listed over 16,000 NGOs throughout the Philippines. Of these 284 are health-oriented NGOs. Others are welfare organizations, socio-civic and professional organizations, developmental issue-oriented organizations. The 284 health NGOs are scattered throughout the different regions. Some of these are religious based; some University based, some internationally funded, TV channel based. They cater to different clientele - children, mothers, occupational groups, welfare groups of general population or by urban and rural sector etc. Whatever programs they sponsor will have an impact on health, no matter how little. Some are very innovative and in general supplement and complement the DOH programs.

The Ramos Administration

The 1992 election ushered in the Ramos administration with its rallying cry TOWARDS PHILIPPINE 2000! This was matched by secretary Flavier’s slogan HEALTH IN THE HANDS OF THE PEOPLE and LET’S DOH IT! Being media friendly, the Flavier years continued to build on the foundations laid by this predecessors but added a great deal of adornment into it. His appeal was more affective rather than cognitive.

During the Flavio Administration, the DOH continued to adopt Primary Health Care as its strategy. Emphasis shifted from curative to preventive and promotive care; health services were gradually shifted from the Central Office to the local governments. The Flavio administration in his own words “sought to bring in a fresh wind of excitement to the existing health program” initiated by his predecessors. All the health programs carried a special touch best described by the acronym MEDIC which stands for Media-friendly, Exciting, Doable, Innovative and Current. Let’s DOH it became the national battlecry. The following are among the memorable initiatives conducted during his administration:

- ***Nationwide Immunization Day (NID)*** - While the expanded immunization program has already been launched by the Bengzon administration, there were still some who have not been reached because of peace and order conditions or were in inaccessible areas. A nationwide call for “Ceasefire for Children” was aired so people would devote one day for the immunization of their children against TB, Diphtheria, Tetanus, Pertussis, Polio and Measles. The response to the call was tremendous. Non-government and government sectors, religious organizations, civic groups, local officials, media, private corporations, international organizations and volunteers gave their support. This led to Reaffirming the Philippine Commitment to the U.N. Goal of Universal Child Immunization and Proclamation 147 declaring April 21 and May 19, 1993 and every third Wednesday of January and February thereafter for two years, as National Immunization Days. Later RA 746 required compulsory immunization against hepatitis for children below 8 years old.
- ***Mother and Baby-Friendly Hospital Initiative*** - In 1992 the Philippines gained the coveted distinction of being the only country that succeeded in meeting the UNICEF goal and was conferred an award by Director James Grant. This strategy ensures the survival and health of children through breastfeeding. This is supported by RA 7600 - “The Rooming in and Breastfeeding Act of 1992”
- ***Promotion of Philippine Traditional Medicine*** - While the DOST and DOH have been producing and packaging herbal medicine this was carried a step further towards developing other forms and innovative packaging. Traditional medicine has been institutionalized with the creation of the Traditional Medicine Unit at the DOH.
- ***Hospitals as Centers of Wellness*** - transforming 45 government hospitals from “disease palaces” to “centers of wellness”.

Other innovative projects were: Yosi Kadiri (anti-smoking campaign), Araw Sangkap Pinoy to prevent Vitamin A iron and iodine deficiencies, (Micro-Nutrient Campaign) voluntary blood donation, family planning (Kung sila’y mahal mo magplano) water for life, Oplan Sagipmata, Oplan Batang Buhay, Doctors to the Barrio, Disaster Management, Ur-

ban Health and Nutrition Program. Among other significant legislations passed during this period were:

- * RA 7394 - "Consumer Act of the Philippines" An act providing penalties for manufacture, distribution, sale of adulterated food, drugs, cosmetics and other devices.
- * Ra 7610- Special Protection of Children Against Child Abuse, Exploitation and Discrimination act.
- * RA 7624 - Integrating drug prevention and control in the intermediate and secondary curricula.
- * RA 7431 - Radiologic Technology Act of 1992 - regulating the practice of radiologic technology.
- * E.O. 39 - Creating the Philippine National AIDS Council as a national policy and advisory body in the prevention and control of HIV/AIDS
- * RA 7637-Mt. Pinatubo Assistance Resettlement and Development Fund-An act appropriating the sum of P10 B for the aid, relief, resettlement, rehabilitation and livelihood services as well as infrastructure support for the victims of Pinatubo.
- * R.A. 7432 (1992) Senior Citizen's Act - to maximize the contributions of Senior citizens to national buildings, grant benefits and Special Privileges for other purposes.
- * R.A. 7719 - National Blood Services Act of 1994 - to promote voluntary blood donation.
- * R.A. 7876 - "Senior Citizens Center Act of the Philippines." An act establishing a senior citizens center in all cities and municipalities of the Philippines and appropriating funds therefore. (Feb. 14, 1995)
- * R.A 8172 - "An Act for Salt Iodization Nationwide (ASIN)." An act providing for salt iodization nationwide. Approved 1996 or FIDEL, Fortified for Iodine Elimination.

These legislations lent sustainability to the above discussed initiatives but the intense and widespread response and enthusiasm of the people (different sectors, GOs and NGOs were not sustained.

The fervor with which the programs was carried out antagonized some sectors, particularly the church and the Pro-Life as exemplified by the resistance to family planning and the rejection of the tetanus toxoid for pregnant women, allegedly an abortifacient and the practice of safe sex through condom use for STD/HIV-AIDS prevention.

One of the issues the marred the enchantment with the Flavier administration, in so far as the health personnel were concerned, was the implementation of the Local Government Code or the devolution of the DOH. In 1993, nearly all health personnel, 596 hospitals, and 12,580 health centers and barangay health stations were devolved

to local government units. The central DOH office was cut off from the peripheral level and the official link among the health services network became loose. The IPHOs and district health offices and hospitals are now administratively under the provincial governors, while the RHUs are under the mayors. What created furor was the fact that some offices are retained and enjoy the salaries and fringe benefits as dictated by the salary standardization and the Magna Carta for Public Health Workers whereas those devolved were deprived of these benefits. This demoralized the devolved personnel plus the fact that security of their position was at stake. The reporting of health events was disrupted and supervision of health personnel was greatly reduced. While, theoretically, the move to devolve was sound, it appeared that the field people were not prepared for its proper implementation resulting in many disgruntled personnel. The transitional problems cover organizational, fiscal and operational issues which may adversely impact on the coverage utilization and effectiveness of public health programs.

When the Flavier administration ceased, the aura he had created simmered down and the public image of the DOH became hazy. The short lived Ramiro administration somehow destroyed the credibility of the DOH in the eyes of DOH staff and the people it served. The solid foundation on which public health services had been built was shaken and almost collapsed and the Reodica administration had to wrestle with this problem upon her assumption to office.

The Reodica Administration's first task was to clean up the mess and resurrect the DOH from the graveyard of scandals. It has waged a plethora of information campaign focused on seven major health concerns and has adopted the health slogan "Five for Life in '95"; "Health for all Filipinos by 2000" and "health in the Hands of Filipinos by 2020" continued to be its guide posts.

Her seven strategy program focuses on.

- Expanded program on immunization (*Oplan Alis Disease*) to eradicate polio, eliminate measles and neonatal tetanus.
- Nutrition - Vitamin A, iron, and iodine utilization (*Araw ng Sangkap Pinoy*).
- Family Planning (Kung Sila'y Mahal mo, magplano).
- Tuberculosis prevention (Target, stop TB)
- Environmental Sanitation (Tubig, Kubeta, Oresol)
- STD-AIDS awareness and prevention
- Healthy Life style program.

AFP'S CONTRIBUTION TO PUBLIC HEALTH

After the foregoing discussions on the public health developments, it would be folly to ignore the contributions of the Armed Forces of the Philippines to public health as part of the health system.

The broad functions of the AFP Medical Services include: care of the sick and injured; education of physicians, nurses, medical technicians and paramedical personnel; conduct basic and advanced courses for medical corps, nurses corps, medical administrative corps, veterinary corps and enlisted personnel; prevention of diseases and promotion of public health; advancement in medical research and maintenance of medical equipment.

In addition to the usual medical services being provided at the AFP Hospitals and Dispensaries, wherein the military personnel, their relatives and some civilians are provided such services, the AFP services are also felt in the community through the Civil Relations Services (CRS) and various out-reach undertakings. More specifically, the AFP has greatly contributed to public health through the following activities.

1. *Alay sa Barangay Project* – the concept of this project involves adopting a specific barangay, where local residents benefit from people-oriented activities like medical/dental services, lecture on cooperativism, activities which prevent drug abuse, conduct of values education, vaccination and peace rallies and the like.

2. *AFP Oplan "Iwas Tigdas"* – this project was launched to check the spread of measles in the barangay. This is a yearly operation of the Task Force KANDILI a team composed of medical and dental staff. They provide medical services, medical supplies and vehicles for the team composed of staff from DOH, and NGOs in reaching for flung areas

3. *Bloodletting* with mostly civilians and soldiers as blood donors. This is regularly conducted in collaboration with GMA Channel 7, Phil. National Red Cross and DOH.

4. *CRS-REACT* – This Regional Emergency Assistance Team (REACT) assist and support the people in times of emergencies and calamities. This team is consistently sought after in times of various calamities that require prompt and adequate services that readily alleviate suffering.

The AFP also participates in environmental and livelihood endeavors like tree planing, forest conservation, and livelihood and skills training on cooperative establishment. They also provide Human Courses on Maintenance and Operation of Medical Equipment. The Human Resource Development primarily aims to support peace process and support the implementation of "Unlad Bayad" - where personnel are trained to train the community folks to be always prepared and be vigilant in times of calamities and to respond and to attend to peculiarities of their region with consideration of environmental factors. Secondary objective of the HRD program is to enhance skills on cardio-pulmonary resuscitation, disaster management and mitigation techniques.

In summary, after the Post War years, there was:

- A rapid decline in mortality and morbidity, but health improvements were stalled during the late 1970s to mid 80s due to severe economic contraction during the period. Infant mortality, an important health indicator,

declined but was stalled in the late 1970s and mid 80s but recovered modestly by late 1980s. However, it had the slowest decline in the Asian region.

- Steady progress has been made towards the control of infectious diseases, through the introduction of chemotherapy such as the multi-drug therapy (MDT) introduced in 1985 for leprosy, short course chemotherapy, for TB since 1986; praziquantil for schistosomiasis since 1978, the adoption of rehydration for management of diarrheal diseases, to name a few. However, important causes of illness and deaths still include pneumonia, TB, diarrhea, nutrition-related diseases, and measles, with deaths among infants constituting 15 percent of all reported diseases. Diseases of the heart and vascular system and malignant neoplasms also emerged as among the top causes of death. AIDS and HIV infection pose a potential serious health problem.
- The current status of service delivery infrastructure indicates that preventive and promotive health programs have not sufficiently covered the population. The consequences of the recent devolution are still unfolding and there are many recognized deficiencies in the health system. The proportion of medically attended deaths show that 60% do not have reliable access to medical care. There are still pockets of rural/urban areas unserved or underserved.
- On health programs from the 1980 primary health care strategy focused on the delivery of maternal and child care services (EPI, CDD, CARI, breast feeding promotion and maternal care), control of prevalent diseases (Schisto, malaria, and TB), nutrition and family planning. To these were added access to water, household sanitation, reduced risk to air and water pollution, and chronic degenerative diseases.

The Expanded Program for immunization is the most successful public health program. High level of coverage of 90% has been sustained. However, with devolution, this high coverage may not be sustained unless LGUs will have the political will to make the necessary investments for cold chain facilities, replacement and distribution of vaccines.

The pursuit of disease control facilities has had some degree of success - malaria, schistosomiasis and TB. Coordination of various facets of the program would have to be arranged between the DOH and LGUs.

As regards CDD and CARI, technical infrastructure for delivering case of effective management interventions have been established across the nation. Clinical protocols, trained health personnel, drug distribution and monitoring and supervisory systems have been installed. The challenge after devolution is to sustain all these activities.

Women's health and safe motherhood (family planning, breast feeding and maternal care) have been addressed through training, service delivery policies, innovative approaches.

The current health situation creates tremendous burden to households and the economy in terms of infant and maternal deaths from preventable and curable diseases, disabilities and ineffective health care services.

Future Challenges

In the National Health Plan 1995-2020, the DOH vision is that “All Filipinos will be able to attain a level of health that will enable them to lead a progressively improved socially and economically productive life following the momentum of socio-economic development generated over the years.”

Correspondingly, the Philippines will face many challenges that will have an impact on health.

- **Urbanization** – It is forecast that by the Year 2020, the urban population will comprise 65% to 75% of the total population. The chaotic growth of cities will result in a multitude of economic and social problems. The rise of slums, of criminality, of disease, of unemployment - all will pose a major health risk to the population. Overcrowding, inadequate housing facilities, poor environmental sanitation, a different life style and values all breed infections as well as non-communicable diseases.

The increase in transportation due to urbanization will result in air pollution, traffic accidents, traffic problems, stress and unhealthy life styles such as smoking, promiscuity, alcohol and drug dependence, sedentary habits, and poor eating habits.

- **Industrialization** would mean more women joining the working force. This may or may not have an adverse effect on the family. Care of children will be entrusted to caretakers. On the other hand, industrialization may result in family limitation. Occupational hazards becomes a major concern. Corollary to this are air, soil and water pollution and the management of toxic and hazardous waste. Industrialization and urbanization will affect agricultural production as more lands will be used for subdivisions, industrial and recreational centers and for malls or “trade palaces”. More people will work in factories, reducing the number who work in the farms. Mechanized farming will display many farm hands.
- **Environmental Concern.** While the Philippine now boasts of having perked up its economy, this has its tradeoffs. Environmental degradation caused by deforestation, deterioration of seas and rivers due to industrial waste, dynamite fishing, siltation on-site toilets, domestic waste waters, indiscriminate garbage disposal and other destructive practices are problems to be reckoned with. Radical population growth, industrialization and urbanization all contribute to environmental degradation. No place is too remote or difficult/hazardous for intrepid adventurers, tourists or developers in search of exotic locales for golf courses, plush subdivisions or tourist resorts. All these lead to ecological imbalance

which leads to the emergence of new types of micro-organisms as the Ebola and the HIV virus.

- ***“The Revenge of the Germs”*** – The indiscriminate and over use of antibiotics has resulted in drug-resistant, bacteria, viruses and parasites, Staphylococcus and streptococcus have accomplished the feat of penicillin resistance. Super strains of staph that were resistant to huge numbers of potential drugs existed by 1990. Switching from inexpensive penicillins to other drugs increases drug treatment costs which is beyond the reach of the poor. The same patterns of resistance seen in staphylococcus and streptococcus were mimicked by other dangerous microbes; microbacterium leprae, gonococcus, shigella dysentery, salmonella, resistance of P. falciparum to chloroquine, etc.

What will be the future scenario?

The Philippines, will emerge from its image as the ‘sick man’ of Asia into the newest economic tiger. It will be one of the significant economic players in the international arena. It will make a quantum leap forward, it will “poll vault”. There will be a rapid pace of technological advancement, especially in telecommunications and information technology. It will become a “wired world”, an “internet society”. This will be paralleled by advances in bio-medical technology. With more and better information in their hands, people will be empowered; will have more confidence in decision-making about their health. Health providers will have to keep pace with the new developments in the health field lest the people make demands with which they cannot cope. With advances in the bio-medical field (in molecular biology and genetic engineering) transplants, cloning, test tube babies will increase. New treatment technologies will be discovered.

Breakthroughs in the health and medical field will take place. Vaccines against communicable diseases like influenza, schistosomiasis, malaria etc. may be discovered. Correspondingly many ethical and moral issues will have to be resolved.

People will be more mobile due to faster and more efficient transport technologies. This will allow for more opportunities to gain greater access to health facilities. The DOH will have to be ready to meet increasing demands on its services. The new government health insurance scheme will be set in place; health demands would multiply. The private sector will take a greater role in meeting such demands. HMOs will further sprout; Privatization of the health sector will take place in consonance with the recent Asia Pacific Economic Conference’s recognition of the role of the private sector as the “engine of growth and the source of innovation”. The DOH then, in addition to its regulatory roles will have to act as a facilitator of private health initiatives. The shift in emphasis of HMOs for example, to promotive and preventive rather than curative roles will have to be encouraged and care will need to be taken to assure that HMOs do not dictate their terms to the medical profession.

There will be problems galore but knowledge will be the key to success of whatever health program is undertaken. As Toffler has said in his War and Anti-War, success in future wars will hinge on three factors - lethality, speed and range. Applied to public health, this means that public health programs must be effective (lethal), timely and comprehensive/farsighted. If young men have vision and knowledge, then the dreams of old people will come true!