

INTERREGIONAL SEMINAR ON PRIMARY HEALTH CARE¹

Yexian County, Shandong Province,
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A BRIEF INTRODUCTION ON
CHINA'S MEDICAL AND HEALTH SERVICES
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1. BACKGROUND INFORMATION

China is one of the largest countries situated in the east of Asia continent. Her territory is 9.6 million km², being about the size of the whole of Europe. There are 22 provinces, three central-administrated municipalities, and five autonomous regions. China is a multi-national country with a total population of 982.55 million composed of 56 nationalities. 94% of her inhabitants belong to the Han Nationality. In this vast territory, there are vast areas of fertile land, rivers and mountains range across its length and breadth with rich natural resources.

China has one of the oldest civilizations in the world; she has a recorded history of nearly 4000 years, and has a very rich store of culture civilization. Chinese society remained feudal for about 3000 years. It was not until the Opium War in 1840 and henceforth the penetration of foreign imperialism, that China was changed into a semi-colonial and semi-feudal society. Scarcely a day passed after that the Chinese people did not wage a revolutionary struggle against imperialism and feudalism. In 1911, revolutionaries under the leadership of Dr Sun Yat-sen initiated a revolution that overthrew the Qing Dynasty and thus put an end to the feudalistic monarchy. Then, 38 years after the 1911 revolution, the Communist Party of China headed by Comrade Mao Zedong and other revolutionary leaders led the people throughout the country in bringing the new democratic revolution to victory and founded the People's Republic of China in 1949. With the success of the transformation of the private ownership of the means of production into public ownership in 1956, a victory of socialist nature has been won.

During the past 32 years since the founding of the People's Republic, under the leadership of the Communist Party of China and the People's Government, the Chinese people have scored signal successes in its national construction. A backward and poverty-stricken country has been turned into independent industrial-agricultural country with an integrated economy and fairly complete industrial network. There are several hundred thousand industrial enterprises in the whole country. If to compare with 1952 when China's economic rehabilitation was completed, the fixed industrial assets, calculated on the basis of their original price, were more than 27 times greater in 1980, exceeding 410 000 million yuan; the annual output of cotton yarn was 4.5 times greater, reaching 2.93 million tonnes; that of coal was 9.4 times greater, reaching 620 million tonnes; that of electricity was 41 times greater, exceeding 300 600 million kwh; that of crude oil exceeded 105.95 million tonnes and that of steel 37.12 million tonnes. The output value of the engineering industry was 54 times greater, exceeding 127 000 million yuan. The conditions prevailing in agricultural production have experienced a remarkable change, giving rise to big increase in its production. Irrigated farmland has

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increased to 670 million mu from 300 million mu of 1952. Before 1949 when the People's Republic was founded, farm machinery, chemical fertilizer and electricity for farm use were non-existent practically. However, there is now a big increase in the number of agriculture-related tractors and irrigation and drainage equipment and in the quantity of chemical fertilizer applied. The amount of electricity consumed is 7.5 times that generated in the whole country in the early years of the founding of the People's Republic. The 1980 annual output of grain was nearly double that in 1952, and that of cotton more than double. Despite the excessive rate of our population growth, by relying, however, on its own efforts, China has assured the basic food and clothing requirements for its people.

With the development of her national economic construction, notable progress has also been scored in education, culture, science and technology, and medical and health services.

Before the founding of the People's Republic, over 80% of China's population were illiterate. Only 20% of the schooling age children could attend school, while by now it is 93%. There were only, in the peak year in term of its enrolment, 155 000 students in universities and colleges, 1.879 million in middle school, and 23.68 million in primary schools. By 1980, students in universities and colleges were 1.144 million, 6.4 times greater than that of pre-1949 years; those in middle schools were 56.32 million; 29.9 times greater; and in primary schools 146.27 million, 5.2 times greater. In the past 32 years since 1949, the universities and colleges and vocational schools of higher education in China have turned out nearly 9 million graduates with specialized knowledge and skills becoming the mainstay in various fields. There were only some 600 research workers in this country before 1949, however, the number has increased to over 310 000 working in research institutions of various disciplines established during the past 32 years.

Important achievements in scientific research have been made. The success in nuclear bomb tests, the successful launching and recovery of satellites, and the successful synthesizing of bovine insulin, etc. are examples.

The prime tasks and objectives that the Chinese people are confronting and are marching confidently towards are to turn China, step by step, into a powerful socialist state with modernized agriculture, industry, national defence, and science and technology, and with a high degree of democracy and material and moral culture.

2. GENERAL INFORMATION ON CHINA'S MEDICAL AND HEALTH WORK

Before the founding of the People's Republic of China in 1949, there were only a few medical and health institutions in China. People's health was extremely poor as a result of long-term poverty and pestilential diseases prevalent rampantly. After 1949, China has launched with vast efforts the Patriotic Health Campaign; strengthened her work on the control of diseases; and started the building of her medical and health services. The health features have thus taken on a new look, and people's health improved. Infectious diseases such as plague, smallpox, venereal diseases, Kala-azar, relapsing fever, typhus, etc. have either been eradicated or largely eradicated. Much has been done on the control of schistosomiasis which had once affected over 10 million inhabitants in 347 counties of 13 provinces/autonomous regions to the south of the country. With the efforts in the past two decades or so, the total size of areas where snails have been eradicated, the accumulated number of patients cured, and number of city and county turned to be schistosomiasis-free, have been cut low by two-thirds respectively to each original total. Malaria patients before 1949 were over 30 million and have decreased to 3.30 million. Again take endemic goitre for instance. Over 10 million patients have been cured, and over 95% of the inhabitants in endemic areas adequately supplied with iodine salt. Filariasis, Kaschin-Beck disease and fluorosis, which had been widely prevalent, have been put under control to various extents.

Thanks to the introduction and application of planned immunization programmes and modern scientific midwifery, the incidence of polio, measles, whooping cough and tetanus has been dropped drastically. The death-rate of the whole population has declined to 6.2/1000 from 25/1000 of the pre-1949 years, while average life expectancy increased to 68 from 35. Vast efforts have also been put in the field of occupational health, food hygiene, school health, radiation protection, etc.

There has been a substantial growth in China's medical and health undertakings and manpower. If to make a comparison between 1949 and 1980, medical and health institutions have increased from 3670 to 180 553 at both the central- and local-level, of which, 65 450 are hospitals; 3105 epidemic prevention centres/stations; and 2610 MCH centres/stations. A medicare network that covers both the rural and urban areas has, in the main, taken shape. Doctors have increased from 363 000 to 1.153 million, i.e. 1.17 for each 1000 population; while hospital beds increased from 80 000 to 1.982 million, i.e. 2.02 for each 1000 population. Health professionals increased from 541 000 to 3.535 million, of which technicians and laboratory workers have increased from 505 000 to 2.798 million indicating a ratio of 2.85 per 1000 population.

Medical education and medical scientific research have too, produced notable results. Up to the end of 1980, there were 109 medical colleges with 140 000 students, an increase of 9.2 fold if to compare with that of 1949; and 555 intermediate medical schools with 245 000 students, an increase of 15.9 fold against 1949.

Old China has left us with a very feeble foundation to develop our medical scientific research. There were by then only four medical institutions with less than 300 scientists. It has been increased to 282 institutions of various disciplinaries with over 18 000 scientists and technologists. In addition to that, there are over 300 research institutions and laboratories affiliated to medical colleges and staffed with several thousand research workers. Medical scientific research has propelled China's medical science and technology forward, and has yielded with inspiring achievements, among which, 335 items have been given with awards from the state, and 802 from the Ministry of Public Health. Examples that represent substantial advances which have reached or approached nearer to world advanced level are the treatment of extensive burns; the re-attachment of severed limbs; acupuncture anaesthesia; the treatment of bone injuries, and acute abdominal and renal cases through the combination of traditional Chinese medicine and Western medicine; etc., as well as the studies on the basic medical sciences; clinical medicine; preventive medicine and traditional Chinese medicine.

3. MEDICAL AND HEALTH SERVICES AT THE BASIC LEVEL OF RURAL AREAS IN CHINA

By combining the initiatives from the state, the collective and the community, and the efforts from professionals and the part-time health workers, the rural medical and health services have been developing rapidly thanks to the constant importance attached to it by the Communist Party of China and the People's Government since the founding of the People's Republic. A three tier medicare network embracing county, people's commune and production brigade has been, in the main, shaped and experiences suitable to the existing conditions of this country accumulated.

There are 2137 counties in the whole country. At the county level, there are 2337 general hospitals, 2093 epidemic prevention centres, 1885 MCH centres/stations. A number of counties have established their hospitals of traditional Chinese medicine, intermediate medical schools, laboratories for drug control, as well as specialized institutions as deemed necessary for the control of local diseases. The county medical and health institutions have played a significant role in the control of diseases, in the training of health personnel, and in the strengthening of medical and health services at the commune and brigade level by giving technical guidance.

There are some 54 000 people's communes in the whole country. At the commune level, there are 55 413 health centres (one-third under the state ownership, while the remaining two-thirds are under the collective ownership). The commune health centre is a multi-functional health institution taking care of health administration and management, medical care, prevention and control of diseases, as well as family planning. The commune health centres have a total bed number of some 775 000 averaging on 14 for each, and some 1.038 million personnel averaging on 18.7 each. A number of commune health centres with better technology and equipment, appropriately situated and with easy communication and transportation have been chosen and further reinforced in order to make them into a central health centre for a given locality. There are 11 267 central health centres constituting 20% of the total and each with an average bed number of 28.1 and personnel number of 32.2.

Over 90% of the production brigades have set up the cooperative medical station/health station mostly run by the collectivity taking care of medical care, prevention and control of diseases, MCH care services, technical advice in relation to family planning and community health mainly performed by "barefoot doctors" which number in 1.46 million, i.e. 2.1 on average for each brigade.

The production brigade is subdivided into production teams. Working at this level are 2.99 million health aids and midwives, who, under the guidance of "barefoot doctors", engage themselves in prevention work, treatment of minor illness and injuries, midwifery and family planning.

The cooperative medical care system has been introduced and gradually spread since the cooperative transformation of agriculture in this country, and has contributed significantly to the development of rural medical and health services.

4. THE PRESENT PRINCIPLES AND TASKS OF CHINA'S HEALTH WORK

Medical and health work is an important component to the national socialist construction of this country. The strengthening of our medical and health work and the modernization of our medical sciences is to be attained in the course of the four modernizations of the country. China is, at present, undergoing the process of restructuring her national economy. Hence the present priority in the building of her medical and health work is laid on the restructuring, readjusting, consolidating and raising of standards of the existing medical and health institutions; further raising its professional and managerial level; bringing into full play the initiatives of all institutions and professionals so as to better serve the people and the four modernizations.

The present principles and tasks of China's medical and health works are:

(1) To continue to implement the principle of "putting prevention first", to continue to launch with effort the Patriotic Health Campaign, and to further strengthen the work for the control of diseases. China is large both in territory and in population, and diseases varified. Hence the work for the control of diseases has been kept constantly in sight. It is imperative to further probe and sum up experiences, to further strengthen medical scientific research, and to concentrate to a greater extent human and material resources for the control of diseases in a planned way with the aim to control or to eliminate those diseases with its pathogeny known and means of treatment available.

The Patriotic Health Campaign shall be consistently and energetically carried out. The Campaign has, in the past two decades or so, played an important role in the control of diseases and has helped people preserve hygiene customs and habits, and foster socialist culture. In order to carry out the Campaign continuously and in a deep thoroughgoing way, it is important to have a good integration of the Campaign with, as its importance to, production; to combine the bringing about of temporary solution with radical control; and to link efforts of the community with technical guidance of the professionals.

(2) To continue to give priority to the rural health services while the urban health services are not to be overlooked. 80% of China's population are at the rural side where most of the infectious diseases, parasitic diseases and endemic diseases occurred. The control of diseases for 800 million rural population remain therefore the priority in her medical and health work. However, this work cannot be fulfilled at the negligence of urban health services, which, after improved, can better help and improve rural health services and raise its level. Medical and health institutions at basic level, both urban and rural, must be further perfected and equipped with adequate medical supplies and professionals. "Barefoot doctors" are to be given with continuous training, and certificates of "rural doctor" are to give to those "barefoot doctors" whose professional expertise has been proven, after examination, equivalent to an intermediate medical school graduate. County medical and health institutions shall, in a phased manner, be further consolidated and primarily the consolidation of county hospital with the hope to turn it

into a centre for giving professional guidance and training of paramedical and health workers for the county. This work was initiated in 1979 and has been going on in the first group of some 300 odd counties.

(3) There have been long existent in this country with three contingents in her medical profession, i.e. that of the traditional Chinese medicine, of the western medicine, and of the integrated medicine of the both. All these three are to be further developed. The traditional Chinese medicine has a long history for thousands of years and has rich theoretical content and practical experience. Doctors of the integrated medicine are a contingent emerged after the founding of the People's Republic. Much has been obtained in its theoretical research and clinical practice, and much remains to study on. Research is to be further strengthened under the policy of "letting a hundred flowers blossom and a hundred schools of thought contend". The emphasis of research is laid on the basic theoretical and technological issues of key importance to the control of diseases that seriously threaten the people's health.

(4) Bringing every positive factor into full play for the further development, with diverse approach, of medical and health services. Medical and health institutions in China, both rural and urban, are mostly under the state ownership while some are under the collective ownership. It has been proved unfavourable if to practise restrictions to the collective-owned institutions. A flexible policy is important so as to invigorate further our medical and health work and arouse enthusiasm of all sectors. While improving the state-owned institutions, support must be given to the collective-owned institutions. Under the overall policy and rules and regulations of the state, the collective-owned institutions shall be encouraged to develop in a way that suits the local conditions. Some individuals, if proved to be competent professionally, are allowed to practise individually.

(5) In order to control the population growth, both the Communist Party of China and the People's Government call on the Chinese people to have one child per couple. The weighty responsibilities of the departments of Public Health at all levels are therefore to intensify technical guidance in family planning emphasizing on contraception, and to train professionals and raise their expertise. Efforts must be given on the study of eugenics, on the improvement of perinatal care and MCH work, and on the better running, in coordination with concerned sectors, of nurseries and kindergartens.

(6) Major efforts must be devoted to the health manpower training both in line of medical and health technology and of management. Training of health manpower is the immediate and long-term needs of crucial importance to the further development of our medical and health science and technology. It is of utmost importance to further improve and raise its standards in both higher and intermediate medical education so as to provide competent professionals to medical and health institutions at all levels. Attention shall be also given to the in-service training, of which, the accumulated number of attendance surpassed 400 000 in the period of 1978-1980.

(7) Administrative, technological and economic management must be further strengthened. It is imperative to form a capable and vigorous leading group and to strengthen the system under which the director of institution assumes full responsibility under the leadership of the Party Committee. Rules and regulations centring on the system of personal responsibility for one's post must be formulated and applied, and work discipline enforced. Every attempt shall be made to increase income, practise economy and seek for economic effectiveness. Taking all these as a basis, it is expected to develop, in the context of the actual condition of China, a system of modern and rational way of management.

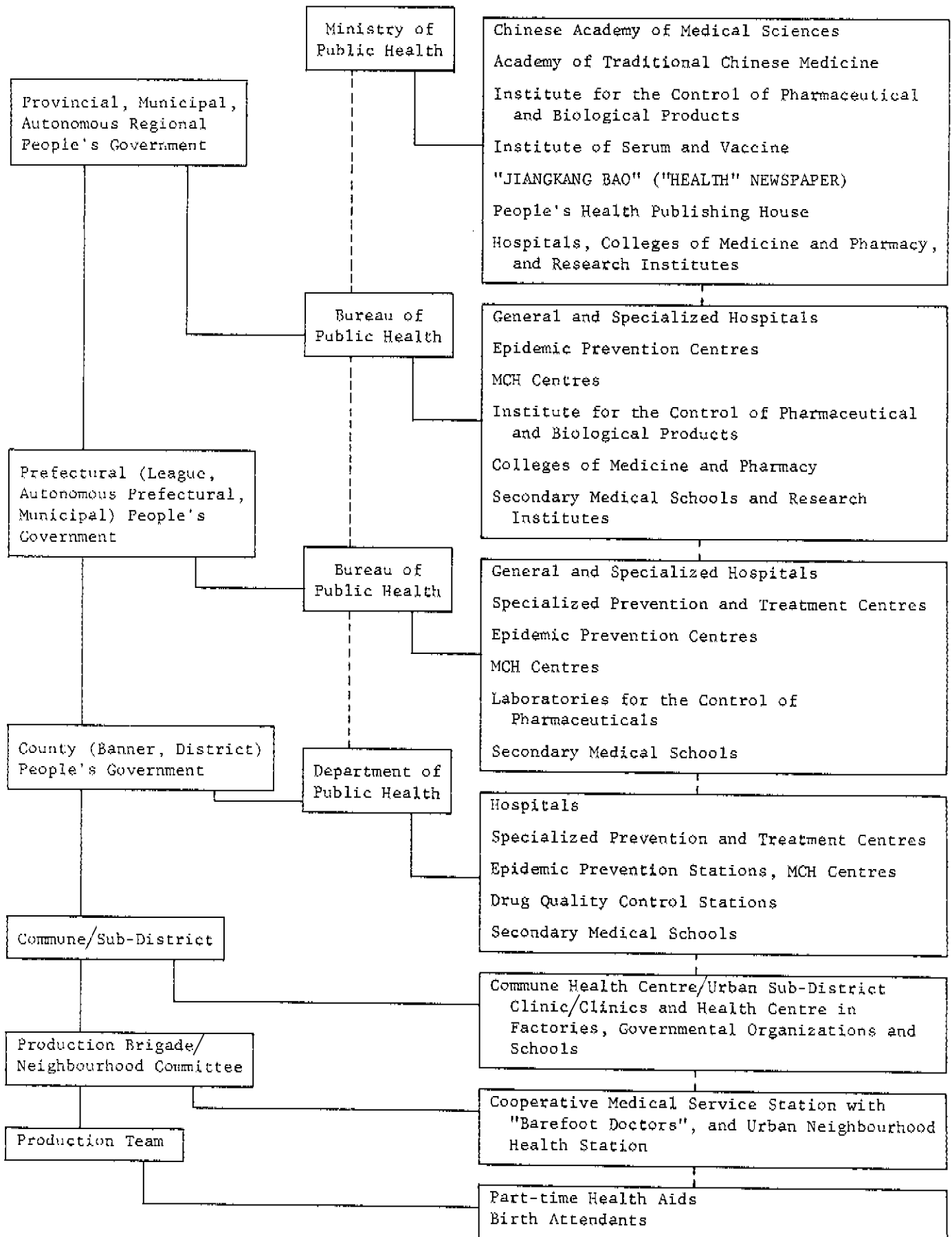
(8) To promote energetically cooperative relationships and scientific exchange with the World Health Organization and with all friendly countries.

The technical cooperative activities between China and the World Health Organization in recent years have been constantly improving. China has involved herself actively and co-sponsored a number of activities with the World Health Organization in the form of

training courses and workshop, etc. China has developed bilateral cooperative relationships with a number of friendly countries. For instance, China has sent, since 1963, over 5500 medical workers in the form of medical teams working in 33 countries.

The modernization of China's medical and health services is in full conformity with the goal of Health for All by the Year 2000 put forward by the World Health Organization. We shall exert all our efforts and make due contribution for its attainment.

ORGANIZATIONAL STRUCTURE OF MEDICAL AND HEALTH SERVICES IN THE PEOPLE'S REPUBLIC OF CHINA



Ministry of Public Health

Ministry of Public Health	General Administration	General Office Secretariat Division of Logistics Division of Correspondence and Visits Office for the Study of Health Policy
	Bureau of Personnel	Division No. 1 Division No. 2 Division in charge of Salaries
	Bureau of Planning and Finance	Division of Finance Division of Planning Division of Statistics Division of Capital Construction
	Bureau of Medical Education	Division of Higher Medical Education Division of Secondary Medical Education Division of Cadres' Training Division of Teaching Material
	Bureau of Medical Research and Technology	Division of Planning Division of Technological Exchange Division for the Appraisal of Scientific and Technological Results Division of Scientific Research in Family Planning
	Bureau of Medical Administration	Division of Urban Health Division of Rural Health Division of Nursing Services Division of Health Services for the Minority Nationalities
	Bureau of Epidemic Prevention	Division for the Control of Acute Infectious Diseases Division for the Control of Chronic Infectious Diseases Division for the Control of Parasitic Diseases Division of Quarantine Services Division of Biological Products
	Bureau of Traditional Chinese Medicine	Division of Scientific Research Division of Medical Education
	Bureau of MCH	Division of Women's Health Division of Children's Health Division for the Technical Guidance in Family Planning
	Bureau of Drug Administration	Division of Drug Policy and Management Division of Quality Control of Drugs
	Bureau of Health Inspection	Division of Industrial Health Division of School Health Division of Environmental Health Division of Food Hygiene Division of Radiation Protection Office of Technical Committee in charge of Health Criteria
	Bureau of Foreign Affairs	General Office Division of External Affairs Division of International Organizations Division of Technical Cooperation with Foreign Countries
	Office in Charge of Health Education	

NUMBER OF MEDICAL RESEARCH INSTITUTIONS, AND
MEDICAL COLLEGES AND SECONDARY MEDICAL SCHOOLS
(1980)

<u>Medical Research Institutions</u>	282	
Number of researchers, technological personnel		17 596
Number of administrators and others		7 511
<u>Medical Colleges</u>	109	
Number of students		139 569
Number of lecturers and those above		14 438
Number of teaching staff		16 370
Number of administrators and others		46 078
<u>Medical Secondary Schools</u>	555	
Number of students		244 695
Number of teachers		22 835
Number of administrators and others		21 751

NUMBER OF MEDICAL AND HEALTH INSTITUTIONS
(1980)

	Number	Number of beds
<u>Hospitals</u>	65 450	1 982 176
General hospitals	7 859	941 143
Hospitals of traditional Chinese medicine	678	49 977
Hospitals of infectious diseases	118	18 580
Hospitals of mental diseases	255	49 096
Maternity hospitals	135	11 013
Children's hospitals	24	5 407
Hospitals at people's commune level	55 413	775 413
<u>Sanitoriums</u>	470	
<u>Clinics</u>	102 474	
<u>Specialized centres for the control of diseases</u>	1 138	
<u>Epidemic prevention centre/stations</u>	3 105	
<u>MCH centre/stations</u>	2 610	
<u>Research institutions</u>	282	
 TOTAL	 180 553	 2 184 423

NUMBER OF MEDICAL AND HEALTH PERSONNEL
(1980)

	1949	1980
<u>Medical and health personnel</u>	505 040	2 798 241
Doctors of traditional Chinese medicine	276 000	262 185
Pharmacists of traditional Chinese medicine	-	106 963
Doctors	38 000	447 288
Pharmacists	484	25 241
Secondary medical doctors	49 400	443 761
Nurses	32 800	465 798
Midwives	13 900	70 843
<u>Part-time medical and health personnel in rural areas</u>		
"Barefoot doctors"		1 463 406
Health aids at production team level		2 537 370
Birth attendants		634 858

NUMBER OF CASES AND DEATHS OF INFECTIOUS DISEASES
(1980)

	NUMBER OF CASES	NUMBER OF DEATHS
Plague	30	20
Paracholera	88	-
Diphtheria	9 767	916
Epidemic cerebrospinal meningitis	108 774	4 590
Whooping cough	316 206	356
Scarlet fever	106 938	62
Influenza	2 937 931	556
Measles	570 037	3 862
Dysentery	2 874 255	4 231
Typhoid and paratyphoid	74 038	279
Viral hepatitis	474 601	1 153
Poliomyelitis	7 442	172
Epidemic encephalitis B	14 192	1 793
Malaria	3 300 349	64
Kala-azar	38	-
Forest encephalitis	140	16
Tsutsugamushi	704	1
Haemorrhagic fever	30 464	1 960
Leptospirosis	35 891	843

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