

INTER-REGIONAL SEMINAR ON
PRIMARY HEALTH CARE¹

Yexian County, Shandong Province
The People's Republic of China
13-26 June 1982



INFORMATION DOCUMENT

1. THE NATIONAL HEALTH SERVICE SYSTEM IN THE PEOPLE'S REPUBLIC OF CHINA
AND THE THREE-LEVEL MEDICAL AND HEALTH NETWORK

Because the inter-regional seminar will deal only with the "three-level medical and health network" (see below), it is important to refer briefly to the other levels of the Chinese national health service system. Primary health care activities in the community must be supported by successive levels of referral facilities. Each level should be staffed with more highly trained personnel capable of dealing with a progressively wider range of specialized health interventions that require more sophisticated technology, as well as of providing policies, and technical and general guidelines which have to be translated into concrete action adapted to local conditions. The three-level network, therefore, cannot be seen in isolation.

Health services in China are highly decentralized. A single example suffices as an illustration: for a country, almost three times the size of western Europe and with one fourth of the world's population, the total professional and administrative staff of the national, central State Ministry of Public Health is only some 450. In a very schematic way it is possible to consider six levels in the health service system: (a) national, central or State, (b) provincial (including autonomous regions and municipalities of a few big cities), (c) prefectural (i.e. an administrative region with delegation of authority from the provincial government), (d) county, (e) commune and (f) production brigade. The last three levels constitute the three-level health network on the rural side.

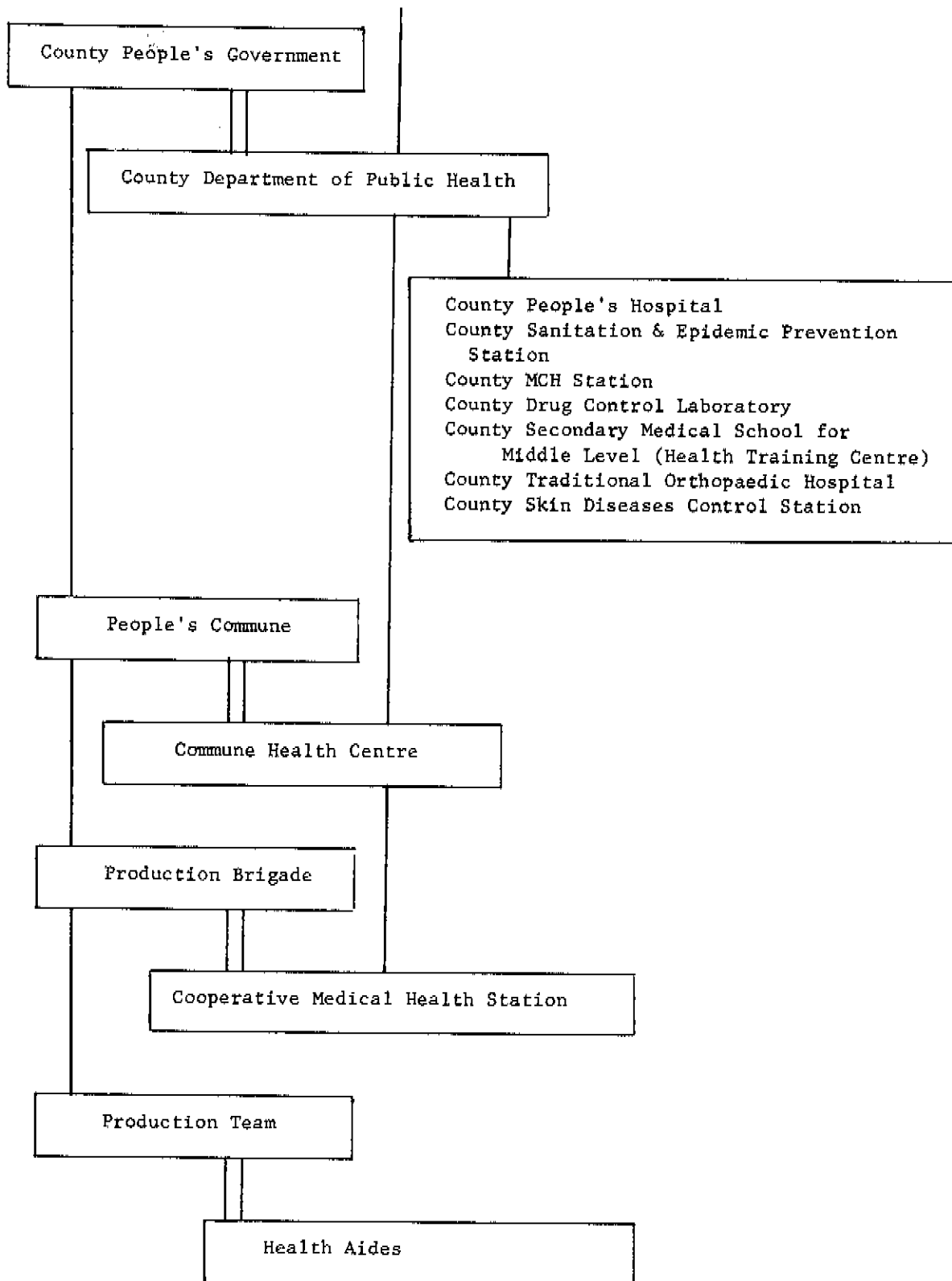
There is a correspondence between the health service system and the overall administration of the governmental system, there being a double relationship at each level, one of administrative leadership, the other of technical guidance and supervision. The line of authority and accountability is only to the respective governmental administrative level, while the line of technical support, technical supervision and referral is open to all the levels in a two-way manner. This is sketched in the table.

1.1 National, central or state level

The Ministry of Public Health is an administrative body responsible for the formulation of health policies, for overall guidance in terms of medical and health research, and technical supervision and support for the whole national health service system. In addition to it there are other organs at the central level, namely: (a) the National Patriotic Health Campaigns Committee, (b) the Leading Group of Family Planning (which is to become the National Family Planning Commission), and (c) the National General Bureau of Drug Policy and Management. These three bodies were established as health-related administrative organs directly under the State Council of the People's Republic of China, but in close collaboration and coordination with the Ministry of Public Health.

¹ Organized by WHO, UNDP, UNICEF and the World Bank, with the special support of the Ministry of Public Health of The People's Republic of China.

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= Line of authority and accountability.
= Line of technical guidance and supervision.

The Ministry of Public Health has fourteen bureaux and departments. In addition, under the Ministry of Public Health, there are institutions such as the Chinese Academy of Medical Sciences, the Academy of Traditional Chinese Medicine, the Institute for the Control of Pharmaceutical and Biological Products and the Institute of Serum and Vaccines, as well as the national hospitals, the major colleges of medicine and pharmacy and the national research institutions. Two other institutions also fall under the Ministry of Public Health: the People's Health Publishing House and the Health Newspaper (Jian Kang Bao). The Ministry of Public Health is a component of the State Council of the People's Republic of China.

1.2 Provincial level

The provincial bureau of public health is part of the provincial people's government and therefore administratively accountable to it. The bureau receives technical support and guidance from the State Ministry of Public Health. National policies, and technical and general national guidelines are translated by the bureau according to the particular conditions in the province. In addition to the provincial bureau of public health, there are two other organs at the provincial level: the provincial bureau of drug policy and management and the provincial bureau for family planning. These organs are under the technical support and guidance of the National General Bureau of Drug Policy and Management and the National Family Planning Commission, respectively.

The provincial bureau of public health is organized into divisions and offices. Furthermore, the bureau has under its direct control many health institutions, such as general provincial hospitals, specialized hospitals, sanatoria, a MCH centre, medical colleges (universities), secondary medical schools, an epidemic prevention centre, drug control laboratories, blood banks and research institutes. The provincial bureau provides technical guidance to health institutions located in the province, such as hospitals affiliated to medical schools (both Western and traditional medicine), colleges of medicine and pharmacy and secondary medical schools.

1.3 Prefectural level

As mentioned above, the prefecture is an administrative region of a province (or autonomous region or municipality), with authority delegated by the Provincial People's Government. Thus, a prefecture covers a certain number of counties within the province, thus constituting an intermediate level between the provincial and the county governments.

The prefecture bureau of public health is part of the prefectural administration and accountable to it. At the same time, it receives technical support and guidance from the provincial bureau of public health. The structure of the prefecture bureau consists of, in general, three technical divisions: medical administration, drug administration and epidemic prevention. As for other levels, however, the prefecture bureau controls many health institutions such as general hospitals, specialized hospitals, the epidemic prevention centre, and the MCH centre, and drug control laboratories, as well as prefectural secondary medical schools. Special mention should be made of the prefectural sanitation and epidemic prevention station and the prefectural maternal and child health station because of their technical links with the rural three-level network.

1.4 The rural three-level medical and health network

County, people's commune and production brigade constitute the three-level network. But the network in fact operates through three parallel systems: the medical and health system, the epidemic prevention system and the maternal and child health system. At each level, these three systems are interrelated.

1.4.1 County level

At county level, the key institution is the county department of public health, which is part of the county people's government and therefore accountable to it. The county department of public health operates under the technical guidance, supervision and support of the

prefectural and provincial bureaux of public health and it is, in turn responsible for the health services of the county, providing technical guidance, supervision and support to the commune and brigade levels.

In this way, within the context of the general health policies decided upon by the central government and translated and adapted by the provincial and prefectural levels, the county department of public health formulates county programmes and the corresponding budgets for both county activities performed by state-run medical and health institutions, and support to the commune and brigade levels. These programmes and budgets are then approved by the county people's government.

In the case of Yexian County, and this is more or less a general pattern for other counties in Shandong Province and in the rest of China, the County Department of Public Health operates through seven county level health institutions. They are: (a) the County People's Hospital, (b) the County Sanitation and Epidemic Prevention Station, (c) the County Maternal and Child Health Station, (d) the County Drug Control Laboratory, (e) the County Middle Level Medical School (health training centre), (f) the County Traditional Orthopaedic Hospital and (g) the County Skin Diseases Control Station. As mentioned above, the three first institutions form the basis of the three independent yet coordinated systems embracing the three-level network of county, commune and production brigade.

The following summary will refer only to the health institutions involved in the three systems: medical and health care, sanitation and epidemic prevention, and maternal and child health.¹

The county people's hospital serves both as the county referral centre and the county base for support and guidance to the commune health centres in all aspects of medical and health care. In addition, the hospital provides technical support to the preventive medical services of local factories and mines and carries out research work on both Western and Chinese traditional medicine.

The county sanitation and epidemic prevention station is the county health institution responsible for the technical guidance and supervision of the health services and activities in the field of sanitation and prevention of epidemics. It also has responsibility for manpower training in these areas. It conducts scientific research and collaborates with the county patriotic sanitation committee in the launching of patriotic sanitation campaigns.

The county maternal and child health station is the county health institution responsible for the technical guidance and supervision of the health service and activities related to maternal and child health. In collaboration with the department of gynaecology and obstetrics of the county people's hospital, the station is responsible for giving technical guidance to family planning work carried out in the county. It takes care of manpower training for communes and brigade maternal and child health workers.

The County Middle Level Medical School is responsible for the training and upgrading of "barefoot doctors" and health workers at the basic level.

1.4.2 People's commune level

At the commune level the three systems work within a single health institution: the commune health centre. From the point of view of the rural three-level network, the centre acts as a pivot responsible for health activities in the whole commune area, such as medical administration, technical guidance in relation to prevention, treatment of diseases, family planning, and technical guidance to brigade medical health station, and clinics in factories, mines and in schools.

¹ Information sheets, to be distributed during the Seminar, will provide detailed information on the services to be visited in the county, and in the two communes and two brigades that have been selected for the field work. Further details on the County People's Hospital, the County Sanitation and Epidemic Prevention Station and the County Maternal and Child Health Station will be given in the respective information sheets.

The commune health centre is under the control of the people's commune committee and therefore accountable to it. From the point of view of financing, however, some centres are under the ownership of the collectivity with the capital investment coming from the welfare funds of the collective system.

In Yexian County there are two different types of commune health centres. Some of them are more developed, better staffed and equipped and are able to diagnose and treat more complex cases as well as to perform more specialized surgery. They act as referral centres for a group of two to four commune health centres to which they provide technical support. They are therefore designated major commune health centres.

The commune health centre is organized into sections. Besides the clinical sections, two are important: the social medicine section (a component of the sanitation and epidemic prevention system) and the maternal and child health section (a component of the maternal and child health system).

1.4.3 Production brigade level

As at the commune level, the three systems at the production brigade level work within a single health institution: the brigade cooperative medical health station (or brigade health centre). From the point of view of the three-level network, the health station acts as the basic centre responsible for health activities in the brigade. It is the basis of the three-level health network and is staffed by the so-called barefoot doctors. The health station is established by the production brigade as one of its collective efforts. It is under the direct control, and therefore accountable to, the production brigade. It receives technical support and supervision from the commune health centre.

The main functions of the station are:

- to promote participation in the Patriotic Health Campaign against communicable diseases, and in the improvement of sanitation;
- to play an important role in planned immunization, in prevention of communicable diseases, and in maternal and child health care;
- to treat common diseases and injuries;
- to collect, plant and process Chinese medicinal herbs, and to make the best use of local resources of medicinal herbs in preventing and treating diseases;
- to propagate the benefit of late marriage and family planning;
- to disseminate and implement the national policies and guidelines on health services;
- in the field of hygiene and epidemic prevention, the cooperative medical health station functions in the following manner;
- implementation of the plans of action formulated by the social medicine section of the commune health centre;
- mobilization and organization of the masses for the Patriotic Sanitation Campaign and the rural "two-controls and five-improvements" movement;
- giving initial training in public health to health aides and midwives at the production brigade level;
- registration and notification of cases;
- health education.

Maternal and child health work at brigade level is mainly undertaken by the female barefoot doctor(s). They work under the guidance of the maternal and child health section of the commune health centre. They are equipped with common instruments and apparatus and with a delivery kit for the carrying out of the following functions:

- conducting perinatal health and scientific baby delivery;
- health education related to maternal and child health, the propagation of breast-feeding, proper hygiene during menstruation, pregnancy and lactation;
- disseminating the knowledge of, and giving technical guidance on family planning;
- diagnosis and treatment of diseases commonly occurring among women and children, and periodic physical check-ups of infants and children.

2. COMMUNITY PARTICIPATION

Perhaps the most important aspect of health care delivery policy in China is the mobilization and participation of the entire population in carrying out health care tasks. In China, community participation is not merely a process limited to the delivery of health care but a way of life covering nearly all the activities in the community.

Community participation is closely linked with and integrated into the political and administrative systems of the country and in particular to the three-level health care delivery system.

2.1 The decision-making process

The people participate directly or indirectly in the decision-making process through the following committees:

2.1.1 At brigade level

A brigade management committee is established at brigade level for the overall administration and management of the brigade. Members of the committee are as follows: secretary of the Chinese Communist Party, leader of the production brigade (elected by the members), accountant (appointed or elected), some leaders of production teams, some elected representatives of the members, elected women's organization representative, barefoot doctor (in some brigades).

A special sub-committee, the leading group for the cooperative medical and health services, is established at the brigade level, usually consisting of five members, with representatives of the members and barefoot doctors (elected), chaired by the deputy leader of the brigade. Its goals are: improvement of the cooperative medical and health services, supervision and training of barefoot doctors, fund raising and auditing the expenditures of the insurance scheme, determination of the minimum charges and reimbursement of medical fees for members, and supervision of and reporting on the funds' utilization.

2.1.2 At commune level

For each commune, there is a commune management committee with the following members: secretary of the Chinese Communist Party, leader and deputy leader of the commune (elected by the members of the commune or through an electoral assembly), representatives of mass organizations (e.g., youth league, women's organization), some brigade leaders (some elected), accountants (appointed), representatives of the members (elected), sometimes the director of the commune health centre, either by election or by invitation.

In addition, there is also a leading group for the cooperative medical and health services at the commune level, to assist the medical cooperative insurance scheme in its collaboration with the commune health centre.

2.1.3 At county level

There is a People's Government at the county level, with a county assembly to elect the county governor as well as to take policy decisions. Again, there is a leading group for the Insurance Scheme at the county level. The county department of health supervises the daily operation of the medical cooperative insurance scheme in the county.

2.2 Control and horizontal supervision of the health care system

One significant feature of the health care system in China is the dual system of control and supervision; namely, technical guidance vertically and administrative supervision horizontally.

The three-level medical and health network in China is under the administrative control and supervision of the community organized bodies such as the brigade management committee and the leading group for the cooperative medical and health services. The brigade health station is accountable to the brigade management committee and to the leading group for the cooperative medical and health services at the brigade level, just as at commune level the commune health centre is responsible to the commune management committee and to the leading group for the cooperative medical and health services.

At the same time, technical supervision is provided by higher level health institutions: from national, provincial, prefectural and county levels down to commune and brigade levels.

Through this process, the people are involved in the management of the health care system, exercising their control and supervision directly or indirectly.

2.3 Individual participation in the delivery of health care

2.3.1 Family members

Family members actively participate in all health activities, especially in family planning, MCH care, control of communicable diseases, immunization, and sanitation, with guidance from the brigade health station, Patriotic Health Campaign committee, the leading group for family planning, etc.

2.3.2 Health aide

There is one health aide for each production team, a volunteer worker with minimal on-the-spot training, to provide first-aid services and health promotion activities for the team members. The health aide is an extension of the brigade health station for the delivery of primary health care.

2.3.3 Barefoot doctors

Barefoot doctors are the nucleus of the medical cooperative insurance scheme and primary health care at the brigade level. As noted below, in most cases barefoot doctors receive an initial training of one year, then after two years of service they receive another one year of re-training. They are responsible for clinical, anti-epidemic, maternal and child health care, drugs and financial management at the brigade health station under the direction and supervision of the director of the health station.

In addition to their health care activities, some barefoot doctors also perform farm work, including the collecting, planting and processing of traditional herbal medicines. They are not only providers of health care but also an integral part of brigade productivity.

Most of them receive payment from the brigade's collective income in the form of working points, like any other brigade member. A special allowance has recently been allocated to the barefoot doctors to compensate them for their work loads and loss in not having the opportunity to carry out side-production for their personal benefit.

2.4 Mass participation in the delivery of health care

The major instrument of mass participation in the delivery of health care is the Patriotic Health Campaign.

The Patriotic Health Campaign is a campaign of mass participation with intersectoral coordination and collaboration, with the basic concept that health care is part of socio-economic development.

The Patriotic Health Campaign is, in fact, a permanent programme and an integral part of the whole health care delivery system in China. The Campaign follows the basic health policy of emphasizing prevention, with mass participation to eliminate the "four pests" (flies, mosquitos, rats and bedbugs), control communicable diseases, and improve hygiene and health habits. In rural areas, the Campaign particularly focuses on "two controls" (safe water supply and proper excreta disposal) and "five improvements" (improvement of wells, latrines, kitchen ranges, stockpens and the environment) aimed at a fundamental change in rural life and the health picture.

Patriotic Health Campaign committees or leading groups are formed at county, commune and brigade levels, as well as in various factories. The committee or leading group consists of responsible officials from all sectors, such as education, health, public security, the youth league, the women's organization, the commercial sector, the industrial sector and the army, under the chairmanship of the local leader at various levels. An office is attached to the committee, with full-time staff members, for the daily operation of the various activities.

3. TRAINING OF MEDICAL AND HEALTH WORKERS

Health manpower development in China is oriented towards local needs and according to local conditions; stress is placed on the combination of theoretical teaching and practice; applying what has been learnt and summing up the experience accumulated; giving training in a gradual manner so as to upgrade steadily the knowledge and experience of the trainee; continuing education with initial training and re-training using the different levels of the health system; making training task-oriented and, when required, available on-the-spot; emphasizing self-teaching and mutual learning.

At the county level the main responsibility is the training of "barefoot doctors" and primary and middle-level health workers. A county medical school for middle level or, as it is also called, a health training centre is established in most of the countries. Training programmes are developed and regularly reviewed. The best known of these is the training of barefoot doctors.

3.1 Barefoot doctors

Potential barefoot doctors are those junior middle school graduates who are considered to be motivated to carry out social activities, to serve the people and to work collectively and who have a vocation for medical and health work. They have to be physically fit. Nominations are made by the production brigade members in discussion; approval by the brigade leaders is required.

The training of barefoot doctors can be divided into initial training, re-training and training in specific subjects.

3.1.1 Initial training

Initial training was formerly given at the commune health centre and lasted about 16-26 weeks. Nowadays, such training is given at the health training centre (county medical school for middle level) and lasts about 26-52 weeks. The content of the course may be divided into the following topics: prevention and treatment of common diseases (with about 43% of the total time available); basic medical science (28%); use of common drugs (16%) and rural sanitation and other techniques of diagnosis and treatment (13%). Both Chinese traditional medicine and Western medicine are taught throughout. Teaching tends to be oriented to providing knowledge, with only 20% of the total time allocated to practice. This ratio has, however, to be considered in the light of the total process: initial training, re-training and specific subject training.

The barefoot doctor being a peasant from a production brigade, he or she has to return to the same brigade to serve the peasants with whom he or she already has close links. The barefoot doctor works at the brigade health station under the supervision of experienced barefoot doctors and other health workers of higher levels within the three-level network.

3.1.2 Re-training

Re-training is only for those barefoot doctors who have practised for more than 2 years after their initial training. Re-training is conducted at the health training centre (county medical school for middle level) and lasts for about 52 weeks. Re-training may be divided into such areas as basic medical sciences (with about 33% of the total time); clinical medicine, including internal medicine, surgery, gynaecology, paediatrics and hygiene (33%); and traditional Chinese medicine, including herbal medicine and traditional pharmacy, acupuncture, moxibustion and massage, etc. (with roughly 30%).

3.1.3 Training in specific subjects

Training in specific subjects is organized as in-service training based on the actual needs experienced in the barefoot doctor's work. It is, hence, task-oriented and practical in nature. The training is often conducted at the county hospital, commune health centres and other health care institutions. The subjects include: epidemic prevention, maternal and child health, immunization, processing of medical herbs, diagnostic and therapeutic techniques and procedures, etc. Courses are comparatively short and course content is designed for immediate application of the knowledge or know-how given. Finally, in the continuous process of training for barefoot doctors (initial training, re-training, training in specific subjects) the county hospital and the commune health centres often send their medical personnel to the brigade health stations to give on-the-spot training to barefoot doctors. A number of commune health centres have established a system of periodic training courses for the training of "barefoot doctors".

3.2 Medical and other health workers

For other level health institutions (county hospital and commune health centres) in-service training is provided to the medical and other health workers. Among other things, this training programme includes: training courses (long-term, short-term and on specific subjects), conducted in a planned manner, on-the-spot teaching and demonstrations by medical and health workers of the county hospital designed for commune health centre staff to help them solve difficult and complex cases, and the periodical sending of county hospital medical and health workers to commune health centres to conduct case studies and help to provide clinical experience.

Measures taken to raise the professional expertise of the medical and health workers at county level include: senior medical doctors giving lectures during seminars sponsored by the hospital, self-teaching and mutual learning through periodical summing up of clinical experiences, inviting senior scientists or doctors from health institutions at a higher administrative level to lecture and sending medical and health workers or technicians for post-graduate training in health institutions or medical colleges at a higher administrative level.

4. FINANCING OF HEALTH CARE IN CHINA

While details vary throughout the country, a common pattern of health care financing may be observed in China. This pattern puts in evidence a very high degree of decentralization of decision-making and the importance of community participation in health care both in terms of control of the health care system as well as in the delivery of health care activities by the people individually and through mass participation.

Broad guidelines for health care are determined at the national or state level. Responsibility for implementation, however, rests with lower level authorities, especially those of the three-level system of health care. Most of the decisions regarding financial resources for health and health expenditures are therefore made at the lower levels. This accounts for the great variety to be found even from brigade to brigade within the same commune as regards actual patterns of expenditure and total and per capita costs.

Throughout the world, the definition of health care is ambiguous, since many activities contribute to improvement in health. The same may be said in relation to health expenditures. This ambiguity is more marked in the case of China because of the high degree of decentralization, and the full community participation in the decision-making process. Many sources of financing are not accounted for and many health expenditures are hidden at the level where they are supposed to be accounted.

Sources of financing are to be found at all levels, as shown below.

4.1 Individual contributions

Individuals have to contribute to the Cooperative Medical Care Insurance Scheme which is a brigade level system. This may be done in three ways:

- only the brigade contributes (indirect individual contribution);
- the brigade and the production team contribute (indirect individual contribution);
- the brigade, the production team and individuals contribute.

In some brigades this contribution is done through the brigade public welfare fund.

The insurance scheme covers not only the workers of the production brigade but also their family members, therefore the premiums are on a per capita basis. The insurance covers health care services provided at the brigade health station, the commune health centre and the county hospital as well as beyond the three-level network when needed. The insurance does not, however, necessarily cover 100% of the services provided. Individuals have to make direct payments for services when the type or the total cost of the health care provided to them goes beyond what is normally covered by the insurance. Indeed, insurance coverage varies from brigade to brigade.

When individuals break the normal referral procedure, for example, by-passing the health station and going directly to the health centre or the county hospital, they have to pay for the health care received but have the chance to claim a reimbursement. This claim is not always accepted, but when plainly justified and therefore accepted it cannot go beyond that covered by insurance.

Food for in-patients at the health centres and county hospital is not included in the cost analysis of health care. Meals have to be provided by the family. Therefore, there will always be a significant underestimation in the accounted cost of health care.

4.2 Brigade contributions

At the brigade level, part of the income of the brigade is allocated to the public welfare fund which complements the resources of the insurance scheme for the financing of the health care provided to the members of the brigade throughout the health system. Direct payment for services provided by the health station is another source of financing at the brigade level. In some cases, financial resources will come to the brigade level from the commune as well as from other higher levels (prefecture, province and especially from the state).

At the brigade level the sources of financing come from mainly the state level, through the province, prefecture and county administrations. The cost of training of barefoot doctors, the cost of technical supervision, the provision of vaccines and contraceptives and certain equipment and apparatus.

The bulk of expenditure at the brigade level is through the insurance scheme at the health station and for the payment, also through the insurance scheme, for services provided to the members of the brigade by other levels of the health care system.

4.3. Commune contributions

At the commune level there exists an accumulating fund, with financial resources coming from allocations of the income of the brigades, from commune enterprises and from other sources. This constitutes one of the important sources of financing health care at the commune level, together with payments for services provided by the health centre through the insurance scheme, the direct payment by individuals for services not covered by the insurance scheme and open subsidies from higher administrative levels (mainly state and province). The same hidden unaccounted sources mentioned above in relation to the brigade level are to be found at the commune level.

The bulk of expenditure is on the health centre and on payment for services provided by higher levels through the insurance scheme. Other expenditures are contributions to the brigade level, complementing the public welfare funds for the balancing of deficits, capital maintenance and extraordinary capital investments.

4.4 County contributions

At the county level the main sources for financing health care are payments for services provided by the county hospital through the insurance scheme or direct payments not covered by insurance; county financial resources; and open subsidies from higher administrative levels (mainly the state) through the province and prefectural administrations. The bulk of expenditure is on the county hospital, payment for services provided by higher levels of the health care system and contributions to lower levels both in financial terms as well as through unaccounted activities such as training and supervision.

4.5 State contribution

Beyond the three-level system, financial resources from the state are transferred through the province and the prefecture. This funding is for extraordinary capital investments, medical equipment and apparatus, staff salaries (in Yexian County 100% of the salary at the county level, 100% of the salary at some of the major health centres, 60% of the salary at the commune health centres) and other expenditures. Expenditures at these higher levels for patriotic health campaigns, family planning programmes, provision of vaccines, training of staff, technical supervision, etc., are unaccounted.

It should be noted that, beside the Cooperative Medical Care Insurance Scheme, there are other insurance schemes for factory workers and government employees.

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This document presents a brief overview of the Chinese health service system. The Inter-regional Seminar will provide an excellent opportunity to study the system in greater depth.

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