



Health care is decentralized so that it reaches people in their homes or work-places. Neighborhood clinics like this one in Peking where the children are receiving pills against infantile paralysis are run by residents who have received training at a nearby hospital. The health workers educate families in hygiene and family planning, give inoculations, and treat minor injuries and complaints.

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635 South Westlake  
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# "THEY<sup>ALL</sup> LOOK SO HEALTHY!"

An Introduction to Health Care  
in the People's Republic of China

China Series,  
Number 6

50c



US-CHINA PEOPLES FRIENDSHIP ASSOCIATION

US-CHINA PEOPLES  
FRIENDSHIP ASSOCIATION  
National Publications

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"THEY<sup>ALL</sup> LOOK  
SO HEALTHY!"

An Introduction to Health Care  
in the People's Republic of China

## USCPFA Statement of Principles

**Goal: To build active and lasting friendship based on mutual understanding between the people of the United States and the people of China.**

Toward that end we urge the establishment of full diplomatic, trade, and cultural relations between the two governments according to the principles agreed upon in the joint U.S.-China communique of February 28, 1972, and that U.S. foreign policy with respect to China be guided by these same principles: respect for sovereignty and territorial integrity; non-aggression; non-interference in the internal affairs of other states; equality and mutual benefit; and peaceful co-existence.

We call for the removal of all barriers to the growing friendship and exchange between our two peoples. We recognize that a major barrier is the U.S. diplomatic recognition of and military presence in Taiwan. As the Joint Communique signed by the governments of the United States and the People's Republic of China states, Taiwan is an inseparable part of China and the resolution of the Taiwan question is the internal affair of China. We recognize that the People's Republic of China is the sole legal government of China.

Our educational activities include production and distribution of literature, films, and photo exhibits; sponsoring speakers and study classes; speaking out against distortions and misconceptions about the People's Republic of China; publishing newsletters and pamphlets; promoting the exchange of visitors as well as technical, cultural, and social experiences.

It is our intention in each activity to pay special attention to those subjects of particular interest to the people of the United States.

Everyone is invited to participate in our activities and anyone who agrees with our Statement of Principles is welcome to join.

*Acknowledgement is gratefully extended to:*

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China Features, Peking, and S. Monica for photographs.

*All photos from China Features, Peking, unless otherwise noted.*

*Cover Design: David Ruechelle*

*Visitors returning from China almost invariably comment, "They all look so healthy!" What a change from 30 years ago when the Chinese were among the most unhealthy peoples of the world. How did such a dramatic reversal come about?*

*This pamphlet, one of a series published by the US-China Peoples Friendship Association, tells how. It is intended for the general public as a brief introduction to the Chinese medical system and its unique contributions to worldwide health care. We hope that those whose interest is aroused by what they read here, especially persons in the health care professions, will be prompted to seek further information. A good start would be to read the books cited in the footnotes. Members of the USCPFA, which has chapters all over the United States, will be glad to give advice on other sources of information.*

*Many persons were involved in the preparation of this pamphlet. We wish to thank all of them but especially Martin Liebowitz, who wrote the original manuscript.*

National Publications Committee  
US-China Peoples Friendship Association

Many people in China greet the day with “taichichuan”—a traditional exercise associated with the martial arts. This 83-year-old man draws a monthly pension and receives free medical attention from the rolling stock plant where he worked before retirement.



Before 1949, China was called “The Sick Man of Asia.” Ma Hai-teh (George Hatem), an American doctor who has worked in China for many years, says he was appalled by the conditions when he arrived in 1933.

“Nothing I had read prepared me for what I found,” he said. “Poverty, disease wherever you looked. Nothing a doctor could do about it. You could diagnose, write prescriptions, but the people you wanted to help had no means to pay for the medicine. Getting enough to eat was their main problem. Buying medicine was beyond their dreams.” [1]

Another doctor, British surgeon Joshua Horn, observed that because of poor sanitation, “diseases such as typhoid, cholera and dysentery took a heavy toll. Worm infestation was practically universal. . . . The people lived on the fringe of starvation and this so lowered their resistance that epidemics carried off

thousands every year. The average life expectancy in China in 1935 was about 28 years . . . and the infant mortality rate was between 160 and 170 per 1000 live births. The plight of women was beyond description. The men had to have what grain there was, to give them strength to work in the fields. The women . . . ate only thin gruel, grass and leaves. . . . Babies were breast-fed for three or four years, for no other food was available. This threw a heavy strain on the mothers, and also resulted in child malnutrition. . . ." [2]

"The big problem facing the peasants over the years," said William Hinton, an American writer who served as a tractor technician for the United Nations Relief and Rehabilitation Administration in China, "was not to obtain some variety in their diet, but to find anything to eat at all. They often had to piece out their meager harvest of grain with bran, chaff, wild herbs or even the leaves from the trees or tree bark as the ch'un huang (spring hunger) set in. Each day that one survived was a day to

**LIFE EXPECTANCY**

China, 1935    28 Years



China, 1973    73 Years



be thankful for and so, throughout the region, in fat years and in lean, the common greeting came to be not "Hello" or "How are you?" but a simple, heartfelt "Have you eaten?" [3]

That kind of hunger, hunger that killed, posed a constant threat to the Chinese people. In famine years, millions died and tens of millions were driven from their homes in search of food.

China's monumental health problems were, in the truest sense of the word, social diseases—the product of appalling social conditions.

It would have taken enormous medical resources to maintain the health of the Chinese people under these conditions, but China's medical resources were woefully inadequate. According to various estimates, in 1949 there was only one *modern* doctor (trained in modern medical techniques) for every 13,000 to 50,000 Chinese, while in the U.S., the ratio was 1 to 750. Just to reach America's 1949 level, China would have needed at least 20 times as many doctors and 50 times as many hospital beds as it had. [4]

The presence of *traditional* doctors (versed in the use of herbal medicines and acupuncture) in the rural area primarily benefitted rich peasants and landlords who could afford their services. The poor peasants had almost no medical care.

Yet by 1973, what Dr. Michael DeBakey, the noted American heart surgeon, saw as he toured hospitals, rural dispensaries and other health facilities in China, was "truly astonishing."

13,000  
persons



CHINA 1949



one  
doctor

750  
persons



U.S. 1949

“In a single generation,” he wrote, “China has advanced from an undernourished, disease-ridden society to a robust one with perhaps the largest and most efficient health care system in the world.” [5]

In 1972, the average life expectancy in Shanghai was 73.3 years—two and a half times longer than in China as a whole before 1949 and three years longer than in America. [6]

An infant born in Shanghai in 1972 had a 50 percent better chance to survive the first year of life than a white infant born in New York City, and more than twice the chance of a non-white infant. The chance that an infant in Shanghai would survive the first month of life was four times better than for a white infant in New York, almost six times better than for a non-white infant in New York, and thirteen times better than for an infant born in China before 1949. [7]

Most of the health problems that had plagued the Chinese people for generations—cholera, typhoid, typhus, malaria, dysentery, malnutrition and other nutritional diseases, venereal



In order to combat the deadly disease schistosomiasis, the snails that transmit it to people have to be wiped out. Millions of Chinese work together with teams of medical workers to drain infected waterways and bury the snail-infested dirt.

disease, opium addiction, schistosomiasis (snail fever), and parasitic worm infestations—either have been eliminated or are well on the way to being controlled.

Significant medical problems remain, of course. Cancer, stroke, hypertension, hepatitis, upper respiratory infections and kidney ailments are still prevalent. But this doesn't alter the basic fact that in less than 30 years, China has changed itself from one of the world's most disease-ridden societies into one of the healthiest.

This dramatic achievement isn't the result only of improvements in the health system, but is rooted in the basic social and economic changes that have transformed people's lives. It comes just as much from increased food production, mass education, improved sanitation and the general elimination of health-destroying poverty as it does from tremendous increases in the availability of medical workers, hospitals, clinics and medicine.

The question, when China was liberated in 1949, was how to proceed in the face of critical medical problems and a severe shortage of medical resources. A system that could meet immediate as well as long-term needs had to be built from the ground up.

In 1950, the First National Health Congress established four basic principles:

- 1) Health care should primarily serve the masses of the laboring people, the workers, peasants and soldiers.
- 2) The main emphasis should be on preventive medicine.
- 3) Close unity should be fostered between traditional and modern doctors.
- 4) Wherever possible, health work should be conducted by mass campaigns with active participation of medical workers.

Like everything else in China, the health care system is still developing. There are continuing differences over methods. But despite different emphases at different times, these basic principles, so different from those of most other countries, still guide health care in China today.

## Serve The People

But what do these principles mean?

Joshua Horn provides a telling example of the first principle in action:

“A message had come asking if I was prepared to leave Peking at once to see a patient. Half an hour later, feeling flattered and self-important, I was being driven to a military airport. The machine was waiting, its engines already warmed up. Two other surgeons were at the airport. We were to fly together. None of us knew our destination—or what kind of patient we were going to see. But we assumed it must be someone important.” [8]

They were right. It was someone important—a peasant’s 14-year-old daughter, who had been seriously burned while rescuing a shepherd and 200 sheep from a fire.

Later, Dr. Horn recalled the care lavished on this peasant’s daughter and concluded that “in New China the common people are the VIPs, and nothing is too good for them.” [9]

Dr. Horn gives another insight as to the “re-education” of China’s doctors. A medical team had saved a peasant’s life by operating on a hernia in his cottage. Before Liberation, undoubtedly the peasant would have died. The team, of which Dr. Horn was a member, was pleased with itself. But a few weeks later, when the health workers told the peasant he could begin to do light work, he snorted:

“Light work! The autumn harvest is in and all the work from now until the spring sowing is heavy work. We have to plow the land, spread fertilizer, dig ditches, level terraces and such. And our ox, doctor, seems to be heading for the stewpot. Please come and see him too. You fixed me and you might be able to cure him too.”

The doctors made light of it, saying they couldn’t talk ox language, had no experience operating on oxen, and had no instruments for ox surgery. This made the peasant angry.

“You can joke,” he said, “but if the ox doesn’t pull the plow next spring, then we shall have to pull it ourselves. Believe me, that’s not light work!”

What he said made the doctors think about their attitude.

“There is nothing so wonderful about operating on his hernia,” one of them said. “That’s what we’ve been trained to do, trained for many years at the expense of people like this plowman.”

“That’s right,” another added. “We overestimate ourselves and underestimate others. We think that peasants merely use their muscle and don’t use their brains. But just look . . . at the scientific achievements of the peasants round here. Look how ingeniously they lead water up the mountain sides to irrigate the high terraces.” [10]

As they talked, they saw that healing the ox was an important part of post-operative care for the peasant, and that until their attitudes changed, their ability to serve the people would be severely limited.

What new attitude did they need to develop? They had to learn to see themselves as workers who use their skills to serve other workers in whatever way they can. They had to understand the important contribution workers make to society and respect them for it.

Dr. Horn tells of another doctor who learned this lesson. He was stationed in a village where many children had impetigo of the scalp. The doctor gave the mothers ointment and told them to apply it three times a day. But the disease spread; the mothers were working in the fields and couldn’t apply the ointment regularly.

“So I applied it myself,” he said, “and they soon got better.

“Before I came to the countryside I would have considered it beneath my dignity to spend my time rubbing ointment into children’s heads. But here it is just a division of labor. The mothers work in the fields to produce food for us all, and I, if I am to be fully responsible, should personally make sure that their children are properly treated.” [11]

While it was essential for the attitudes of medical workers to change, it was just as important for the thinking of the people they served to change as well. People had to realize that they couldn’t sit back and wait for medical workers to do things for them, that they had to learn to work cooperatively, and take initiative in doing things for themselves.

Attitudes change when social conditions change. Doctors can see themselves as workers when they become workers, when they are paid what other workers make, and when they live with and see as equals the working people they serve. For medical workers to develop new attitudes toward physical labor and working people, they, too, should participate in manual labor.

In Chinese hospitals, everyone, including doctors and administrators, does some manual labor like sweeping floors and ser-

ving food. Wards are often run by committees composed of nurses, doctors, orderlies or other hospital workers. In some cases they meet every day to review the previous day's work and plan the next day's work.

Meetings, big and small, play an important part in the life of the hospital staff. Dr. Horn writes, "We sometimes discussed local matters such as why an operation had failed to achieve the expected results, how a complaint by a patient should be dealt with, how we could increase the efficiency of the out-patient department. . . . Sometimes we discussed national or international questions such as why agriculture should be regarded as the foundation of the national economy and . . . what role the health service should play in supporting agriculture.

"At first I was impatient of these incessant meetings (but) gradually I understood their value. Many of the problems we discussed could have been quickly settled by a decision from above and, if this had been done, we might have got through more work. But the policy of the Chinese Communist Party is that long-term interests must always take precedence over short-term interests." [12]

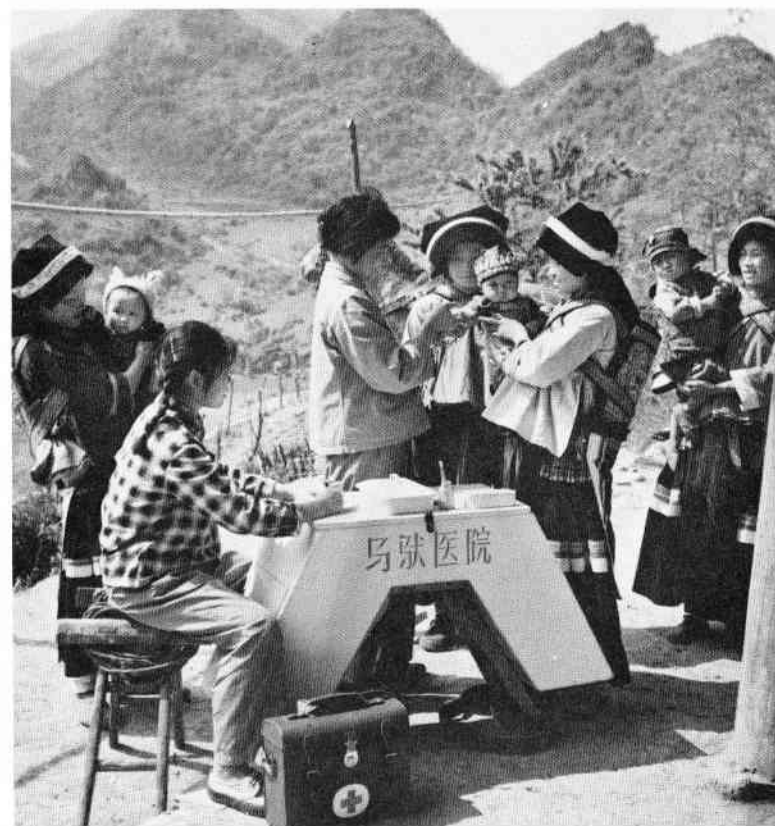
Dr. Horn noted that some people feel it is inefficient for doctors and administrators to spend time cleaning wards or digging wells and latrines when doctors are in short supply. But the shortage of trained personnel is temporary, while there is a permanent need for medical workers who see themselves as working people, who work to serve the people rather than to become rich or famous, and who have close ties to the people they serve.

There had been a continuing conflict about whether working people could better be served by distributing medical resources throughout the countryside—where 85 percent of the people live—or by concentrating them in the cities.

From 1953 to 1957, while China followed the example of the Soviet Union, significant progress did occur in rural areas, but priority was given to building up health services in urban and industrial areas. So much so that in 1965 Mao Tse-tung felt that the emphasis on the cities had become a serious error.

"Tell the Ministry of Public Health," he said, "that the Ministry works for only 15 percent of the nation's population. . . . The broad masses of peasants do not get medical treatment, and they are provided neither with doctors nor with medicine. The Ministry of Public Health is not that of the people and it is better to rename it the Ministry of Urban Public Health. . . .

"A vast amount of manpower and material supply," he continued, "has been diverted from mass work to carrying out research in diseases that are not easy to understand and difficult to cure—so-called pinnacles of medicine. But no attention is paid or less manpower is devoted to the prevention and improved treatment of common diseases, recurrent diseases, and diseases that are often encountered. It is not that we should ignore pioneering problems," he said, "but less manpower and material supply should be devoted to them, while the bulk of manpower and material supply should be devoted to solving the most urgent problems of the masses." [13]



A mobile medical team gives immunization shots to babies of the Miao national minority. Medicine and medical equipment are kept inside the inverted V-shaped wooden structure. It is carried on horseback when the team moves from one village to another across the rugged terrain of Kwangsi Chuang Autonomous Region in southern China.



Many health workers had long felt that emphasis should be placed on the countryside, and Mao's call, *In medical and health work, put the stress on the rural areas* struck a responsive chord.

Before 1965, 70 to 80 percent of national health expenditures had gone to urban areas. In 1965 the emphasis shifted, with 60 percent going to the countryside. Urban hospitals began to organize mobile medical teams to provide health care for peasants and help build a rural medical system.

One Peking hospital, for example, organized a team of volunteers "consisting of a slice down the hospital staff. From directors, surgeons, professors, physicians, residents, junior doctors, nurses, cooks, bottle-washers, lavatory workers, administrators, gardeners, boilermen, laundry men, the lot." [14]

Many other hospitals maintained one-third of their staffs and workers as mobile teams on a rotating basis.

The pace quickened in 1966 with the start of the Cultural Revolution—a major political struggle to determine what kind of socialist society to build and how to build it.

More than a million urban medical workers have gone to the countryside since 1966. Team assignments are usually of 6 months duration, being made when needed to meet a specific health situation. Medical priorities are guided by the formulation *Rural areas first, factories and mines second, and urban areas third.*

These medical workers quickly discovered the truth of the other three guiding principles: The countryside's medical problems could be solved only by emphasizing prevention; by training large numbers of rural medical workers immediately, using both traditional and modern methods; and organizing the people to participate in their own health care.

### Emphasize Preventive Health Care

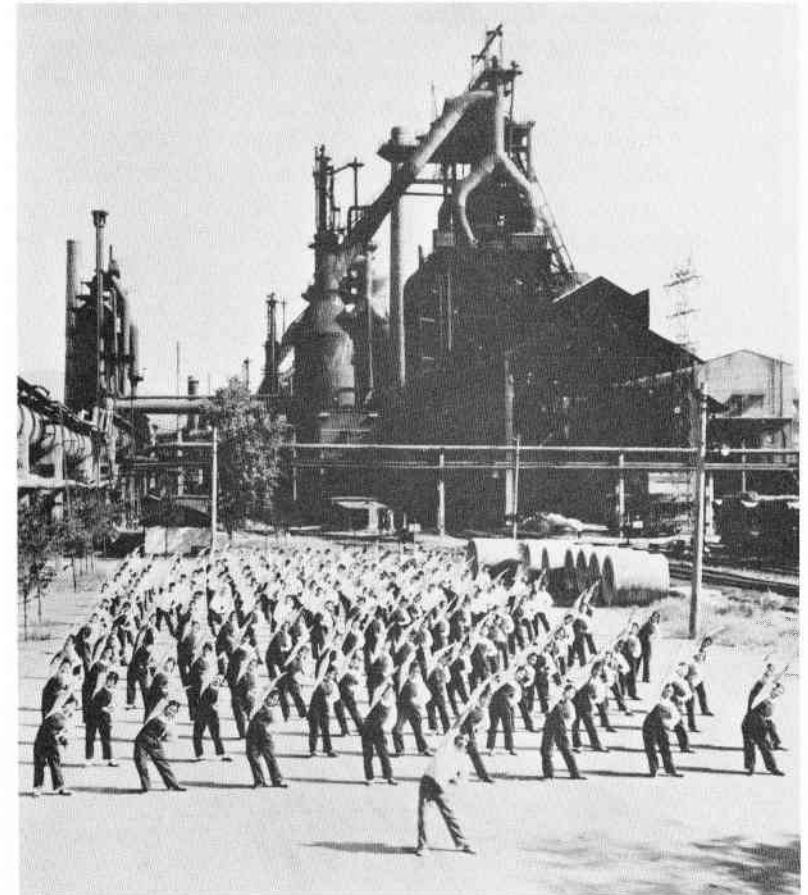
To strike at the root causes of disease in the countryside, it was necessary to change the basic conditions of rural life—to provide adequate food and to improve sanitation and personal hygiene.

By working cooperatively and through improved farming methods, the peasants themselves had taken enormous strides toward wiping out hunger and malnutrition. And with the leadership of the medical workers, the peasants began mass campaigns to eliminate flies, mosquitos and lice, to clean up wayside

litter, cover open sewers, build new sanitary latrines, and clean up polluted water.

Preventive medicine required completely different skills from those the medical workers had learned or used in the cities. It meant doing work generally considered beneath doctors, as well as encouraging millions of ordinary people to take on tasks that had been reserved for physicians.

To win the active support of the people, the medical workers set up microscopes at contaminated wells and streams so the



Exercises done by these workers at the Capital Iron and Steel Company were specially designed by the Peking Physical Culture Institute. Teachers and students from the Institute lived with the workers, shared their jobs, and devised the exercises to ease tensions or strains caused by movements or positions related to that kind of work.

peasants could see the germs swimming in their drinking water. And they worked with the peasants to find simple ways to make the water safe.

Medical workers developed prototypes of leak-proof, covered latrines and then, alongside the peasants, they dug wells and built the latrines. [15]

Now that many of China's urgent health problems have been met, the stress is on keeping healthy.

Exercise, in groups and individually, is widespread as part of a continuing national campaign for physical fitness. In schools, group calisthenics together with random play are a daily routine for 20-30 minutes. School children also go through regular eye exercises, finger-tip massage at points around the eyes to improve blood circulation and alleviate eye fatigue. In middle (high) schools and universities, almost all students participate in sports. Workers frequently use rest breaks for group exercises.

Visitors to China who venture out before breakfast see dozens of middle-aged and elderly people doing individual exercises in the parks. Workers sometimes are seen jogging to their jobs. And millions ride bicycles to and from work in large cities.

There are few better indications of a commitment to serve the working people than the emphasis placed on preventing and treating occupational accidents and diseases. However, China's view of the problem differs from that of Western nations.

Because China is a socialist society, says Wang Hsing, the vice-chairman of Nanking's Municipal Construction Organization, its "industrial enterprises exist not to make profits but to serve the people" and workers participate actively in designing and organizing their own work.

"We cannot tolerate a situation," he continues, "in which industrial production prejudices the people's health. . . . The workers at every level are concerned if there is any risk that production at their factory could harm the people's interests, so they display all sorts of initiatives to eliminate this harm, but in such a way that the over-all economy suffers as little as possible. . . . Cost is not a consideration," he adds, "when it is a question of people's health." [16]

The kind of society Wang describes does not yet fully exist. It is a long-term goal, rather than a present reality. In China, there are still many basic necessities that people lack. Increasing production is as important to working people as eliminating health

hazards. However, both are very real needs and neither can be met to the total exclusion of the other.

Efforts to control occupational health hazards take many forms in China. Workers take regular exercise breaks during the day and special exercises have been designed to help prevent muscle strains on some specific jobs. Factory canteens provide meals at very low cost with special high-calorie diets for workers who do particularly heavy labor or work in intense heat.

"Many accidents in Western factories occur when workers are forced to keep up with a fast-moving line or to maintain a high daily production rate; speed results in taking chances. Not so," Janet Goldwasser and Stuart Dowty found, "in today's China. There the pace of work was itself a factor promoting safety. Workers controlled the speed and rate of work, which was reasonable rather than hectic, productive but not back-breaking." [17]

Sylvia Sandroff, an American trade unionist who visited Chinese workplaces, found that workers have the right "to refuse to work if they feel that conditions are unsafe and may endanger their lives. We were told," she said, "of a miner in Tangshan who reported to his team leader that a pipe was leaking and might be dangerous. The team leader, in his eagerness to meet the production quota, told the workers it wasn't really risky—to go ahead and work. The workers discussed the possible danger among themselves and voted not to work. The team leader then had no choice but to call the maintenance department. Workers can't be fired in China, and he couldn't have gotten a court injunction against their work stoppage even if he had wanted to, because in China the people are the owners of the mine." [18]

Coal miners who show signs of respiratory problems are transferred to work above ground, and most workers get regular physicals to spot occupational diseases early.

Another American visitor to China, Linda Nelson, found upon her return home that her father, who is a coal miner, was "especially impressed" by the fact that "there's a clinic right at every mine to attend to accidents and treat diseases. . . . The nearest medical service to where he used to work before getting black lung, and where my brother works now (West Virginia), is ten to fifteen miles away, and that's just a small clinic; it's another hour's drive to a real hospital. Anyone who's had a major accident or something like a heart attack wouldn't have a good

chance of getting there alive. If you want to save lives, having a doctor right at the mine, the way the Chinese do, or at least in the community, seems practical." [19]

To a large extent, the Chinese workers can control the decisions that determine how safe or dangerous their work will be. They participate in technical innovations, decide how different jobs should be done, how fast they should work, and what safety equipment they should use. Together with scientists and medical workers they participate in research on how to prevent and treat the health problems they face at work. They choose from their own ranks those to be trained as part-time medical workers. Doctors from nearby hospitals work in factories regularly to better understand the workers and their health problems.

Despite these gains, many shortcomings remain. Safety equipment is notably lacking in some factories, and workers in other factories refuse to use it even when available. Workers often set fast work paces for themselves in their desire to increase production. Many factories are old, with outdated equipment that can be dangerous.

These problems reflect China's relatively backward technological level, and can be solved as socialist development continues.



On-the-job safety conditions are an important part of health in China. These coal miners have installed ventilation facilities and developed innovative drilling equipment which have almost eliminated job-related lung diseases.

## Combine Traditional and Modern Medicine

China's main medical resource in 1949 was an estimated 500,000 traditional doctors, compared with only 20,000 to 40,000 modern doctors. Traditional doctors, using acupuncture and herbal medicines, were virtually the only source of health care for people living in the countryside, and generally only landlords and rich peasants could afford them.

In many cases, there is not yet any scientific explanation of why traditional treatments work. Nevertheless, their effectiveness in many instances is indisputable. And China's decision to unite the traditional and modern doctors has made available a type of care that the West is only beginning to learn about.

In the old days, traditional doctors had no schools. They learned from their parents or other doctors or studied on their own. Soon after the founding of the People's Republic, they were invited to see their patients in the hospitals. Then schools were set up to train them. Today these schools have taken on the added job of training modern doctors in traditional techniques and of conducting research both to improve traditional treatments and to learn why they work.

A U.S. group that visited the College of Traditional Medicine at Shenyang in 1976 describes its tour of the attached clinic in an as-yet-unpublished manuscript:

With great glee we don medical gowns and caps before visiting a number of treatment rooms.

First, oral surgery—teeth removed with only acupuncture (no, not puncture—pressure) as the anesthesia.

The room is large and brightly lighted from the uncurtained windows. But there is nothing fancy about it, cement floor, stains on the light-colored walls, medical attendants wearing masks and rubber gloves, a young boy (13?) in one of a row of dental chairs, patients waiting their turn on benches along one wall.

The boy, who has a tooth crowding his mouth, sits quietly while a woman doctor first sterilizes his face, then presses with her hand extending from near his nose to beside

his ear, then hard inside his mouth. She reaches in with a tool and out comes the tooth so fast and easily you could miss it if you blink. The boy leans over to spit; he knows what to do because he has seen others while waiting his turn. The blood he spits matches the bright red scarf around his neck, but he smiles broadly before the attendants reach in to pack the wound.

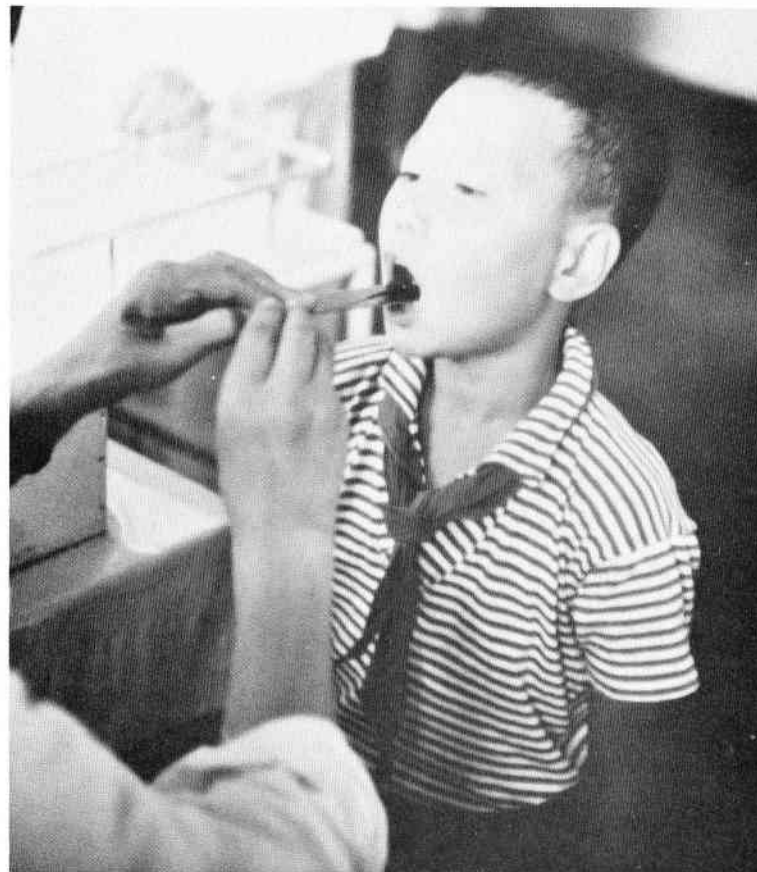
We ask questions. How do they know when the acupressure has taken? The patient reports he can feel swelling. How long will the numbness last? Twenty minutes to three hours. And no, they don't give any painkillers for later. Do the patients pay? Yes. Thirty fen (roughly 15 cents U.S.) for up to six teeth.

The next in line has taken his place in the chair—a man being prepared to receive a plate. The doctor will remove three teeth at once; she can pull as many as six at once. She reaches in, gives a quick tug and holds up the three teeth triumphantly. The gap in his mouth dominates his smile as the man leans over to spit.

We move on through hallways crowded with patients waiting on benches. We enter the nose-ear-throat department—a room not unlike the one we had left except that the furniture is simpler; no dental chairs. Two doctors, one young, one old, are treating a boy for chronic tonsilitis. They are using a 700-year-old technique that had been abandoned until 17 years ago. The tonsils are cauterized by numerous applications of heated instruments (some of which had been devised here at the college) dipped in sesame oil. The boy will have to return 20 times to have his tonsils excised completely. But he will suffer no discomfort. Since the technique puts no stress on the patients, it is particularly recommended for persons with heart trouble. There is a sizzling sound as the doctor works,

but the boy smiles between applications and gives us the thumbs-up sign.

We visit a room filled with patients undergoing acupuncture and another full of moxibustion patients. It is like trying to catch everything at a three-ring circus as we pass down the rows, snatching at bits of information. Acupuncture, we are told, is effective for all kinds of illnesses. Needles range from one



China's health system combines both traditional and modern medicine. At the College of Traditional Medicine in Shenyang, this young boy is being treated for chronic tonsilitis using a 700-year-old technique. The tonsils are cauterized by numerous applications of heated instruments dipped in sesame oil. He will return 20 times to excise his tonsils completely, but he will suffer no discomfort.

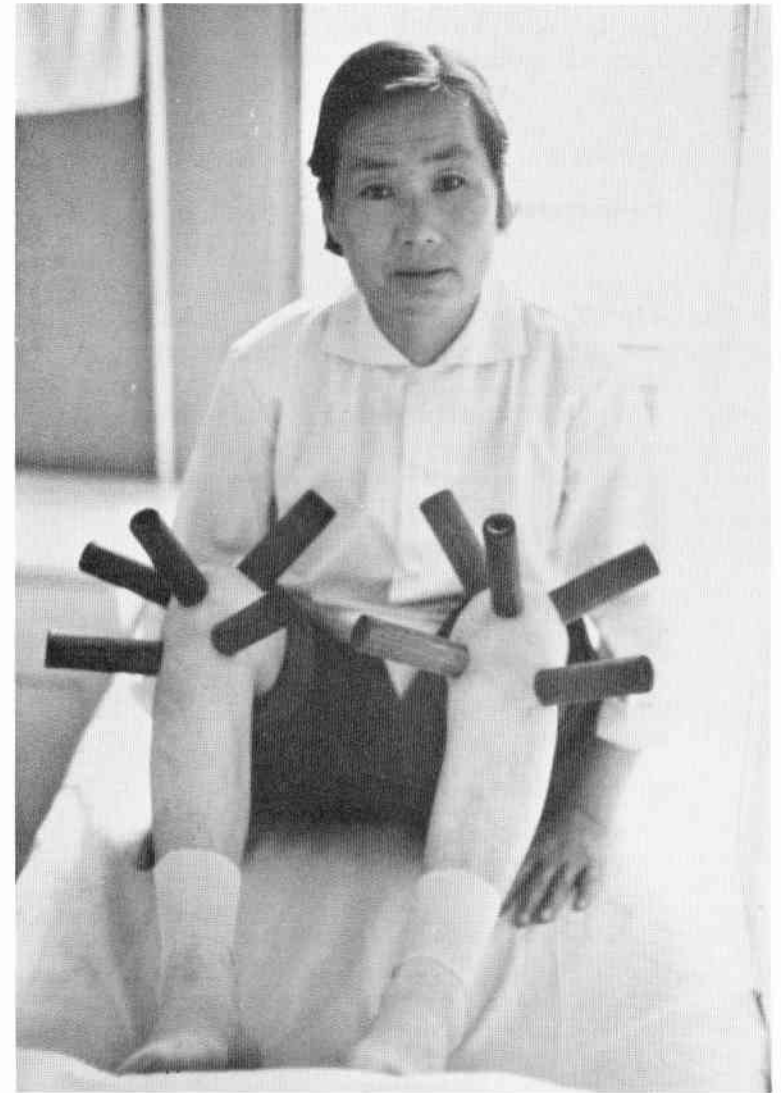
*(photo courtesy S. Monica)*

inch to 12 inches long. They differ according to their use; for instance, pricking or picking. Some are three-sided, some pronged. We see a thick one invented by a barefoot doctor, but it isn't made clear what it is used for. Another new one is specially designed for use on the face. Some are activated electrically.

The patients seem remarkably little disturbed by the invasion of two dozen foreigners plus their retinue of guides and hosts. One patient is being treated for migraine, the needles in his scalp being twirled 180 times a minute. Here are persons suffering from rapid heartbeat, numbness of the face, earache. A woman with high blood pressure has needles in her back; we are told she has responded well to treatment, her blood pressure now near normal after several visits. Another new invention, the *plum blossom needle*, a small hammer with numerous prickly points, is being used up and down the spine of a man with lower back pain. Needles protrude from the forehead of a 7-year-old boy who is suffering from tunnel vision after an accident. His name is Lu Tsin and he, too, is recovering after 10 visits. He is quite pleased with the Polaroid picture we give him of his being treated.

A faint odor of burning herbs fills the moxibustion room. Wisps of smoke rise from small containers on the flesh of some patients. A man lies bare-backed on a table while small glass globes (looking somewhat like tiny fish-bowls) are run over his skin. They have been heated and as they cool the flesh is pulled up and into them. This is called cupping and we see another variation of it where a man is being treated for arthritis. Circles of bamboo that have been heated in some kind of herbal bath are patterned around his knee cap. They are so hot that the medical attendants handle them with tongs and juggle them in towels

until they cool enough to be used. We are told that such problems as rheumatism and stomach pains are also treated by the techniques in use in this room.



**In cupping, a variation of acupuncture, bamboo is heated in medicine and applied to the body, where the capillary action of the bamboo draws the medication to the skin. This woman is being treated for arthritis at the Shenyang College of Traditional Medicine in northern China. (photo courtesy of S. Monica)**

We see a broken leg set under acupuncture. The patient is a young boy who has broken both large bones in his right leg while playing soccer. He lies on an operating table under a fluoroscope. Three doctors are in attendance. The boy smiles bravely, but he is obviously nervous and one of the doctors strokes his hand and touches his hair repeatedly to reassure him. On one wall is a lighted panel against which is an x-ray photo showing the breaks. Drawings illustrate the techniques of bone-setting.

The boy has drunk an herbal potion, just what we don't know. The acupuncture needles in his body are connected to wires; they are vibrated electronically, a comparatively new technique.

The lights are turned off and while watching the image on the fluoroscope a doctor pulls the bones into position. The boy whimpers softly in the dark. The lights come up. A doctor slathers the leg with an herbal preparation, then applies a splint, very small and light, made of paper, cotton and tape. It can be tightened or loosened to compensate for swelling. The boy's joints will not be immobilized; we are told he will move around much earlier and recover in about half the time required with a plaster cast. Loss of muscle tone and *withering* will be reduced. He will undergo therapy three or four times a day, and will be off his feet no more than six weeks.

Other visitors have reported seeing tumors removed—even brain surgery—with the patients fully conscious but anaesthetized by acupuncture, sometimes in combination with other anaesthetics. Acupuncture anaesthesia was developed beginning in 1958. And in 1967 acupuncture began to be used to treat deafness in children who had acquired it from a disease. Some success is reported.

Medical workers in Nantung developed an herbal medicine for burns that has made it possible to treat most patients "in or-

dinary clinics with far fewer dressings. . . . The chances of complications . . . are reduced." Since the herbal treatment was begun, "the death rate has declined 12.9 percent, the average hospital stay has been shortened by 14.5 days, and the average medical expense cut 57.5 percent. . . ." [20]

Many communes grow their own herbal medicines, helping to keep costs low.

Combining traditional with modern medicine was not achieved without a struggle. It required a change in the attitude of medical workers. Since there was no scientific explanation for many traditional techniques, they often were linked to mysticism and religion, and most modern doctors viewed them with contempt, regardless of whether they worked.

But as China's doctors changed their minds about their own role, so did they change their views of the *folk* medicine that had only one thing going for it—it worked. Today many regional hospitals are conducting research to find what it is in various herbal medicines that is effective. And the results of that research is being shared, with new herbs being introduced into areas where they had not grown before.

China's success in the health field is not limited to the traditional techniques. Close integration of traditional and modern medicine is emphasized at all levels, and China has produced major breakthroughs in modern medical science.

In 1958, a Shanghai steelworker named Chiu Tsai-kang was splashed with molten steel. Burns covered 89 percent of his body and statistics from the world's leading burn centers would imply that he had almost no chance to live.

But a nationwide campaign was begun to save his life. Not only doctors and nurses, but cooks, cleaners and maintenance workers offered suggestions for treatment. Medical experts from all over China flew to Shanghai. The hospital issued daily bulletins on his condition.

His life was saved and he is now back working in the steel mill. This massive effort to save the life of one ordinary worker became the first step in a nationwide campaign to improve treatment of severe burns. New methods were evolved to treat the shock that is the first problem in burn cases, then to stabilize the huge fluid losses that occur, and finally to avoid infection and to get the body to accept skin grafts—even grafts from donors other than the burned person.

It was a mass campaign, however, that led to all these achievements.

Dr. Horn provides an example of how such a campaign works. His hospital had received its first major burn victim. It needed a way to turn the patient without touching him; the hospital's maintenance workers were told of the problem and in 12 hours had built a special turning bed.

But the patient's condition worsened. The medical team felt it would help if he had an air mattress that could be inflated or deflated in sections.

"No such mattress existed," Dr. Horn said. "It was nearly midnight and the patient was desperately ill. A colleague and I went to a tiny back-street factory which made plastic raincoats and explained our idea to the few workers who were on night shift. They summoned the day shift workers, with them drew a sketch of the proposed mattress, modified it according to suggestions and, as dawn was breaking, produced a twelve-section plastic air mattress, each section independently inflatable and deflatable. None of the men had ever seen or heard of such a mattress before." But, for a moment, these ordinary workers were an important part of a medical team.

By 1964, the survival rate for patients with serious burns was significantly better in Shanghai's Kwangtzu Hospital than in leading American burn centers. [21]

Burn centers have been established in city and county hospitals throughout China since then.

"China is a poor country," Dr. Horn said, "but when I showed the case records of a severe burn treated in my hospital in Peking to a leading British burn expert, he said no other country in the world could afford to devote so many human and material resources to save an ordinary worker." [22]

As with serious burns, so with severed limbs. In 1963, a worker named Wang Cung-po caught his arm in a machine, severing his hand above the wrist. It would have been a simple operation to fit him with an artificial hand. But the surgeon on duty, having recently worked in a factory where he had developed a respect for workers, decided to try to reattach the hand. The operation was a complete success.

"The successful reattachment of a completely severed limb is undoubtedly a triumph of surgery," Dr. Horn remarked, "but if only one patient benefits from this triumph, then it cannot have much social significance. The next task, therefore, was to popu-

larize this advance, to place it at the service of all people with limbs exposed to the risk of injury."

Medical workers from all over China came to Shanghai to learn the technique and then returned home to spread and improve it.

Sophisticated medical equipment is still scarce in China. As agriculture and industry advance, the health system can also modernize. Production and importation of complex equipment is expanding, and research is improving in prevention and treatment of cancer, lung diseases and cardiovascular conditions.

## Mass Health Campaigns

Medical work in China, with its emphasis on prevention, is based on what China calls the mass line—a "confidence that the mass of . . . ordinary people, given the right inspiration, drive, motivation and leadership, can accomplish miracles. . . ." [23]

That is what the last of China's guiding principles of health care is all about.

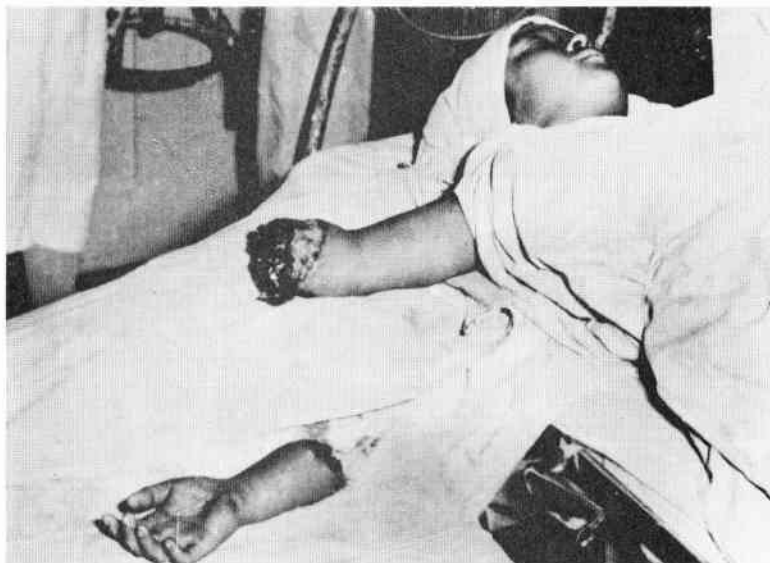
Medical workers have an important role to play. There are times when only skilled medical workers can provide the knowledge and care needed. But the people themselves, working in cooperation with trained medical workers, have overcome many of their own medical problems.

An outstanding example was the people's war on schistosomiasis (snail fever). This is a deadly water-borne disease that afflicts 250 million people throughout Asia, Africa and Latin America. Until 1955, when China launched a massive campaign to control it, ten million Chinese peasants had snail fever. Whole families and even villages were wiped out. [24]

By organizing the people, emphasizing prevention, and teaching large numbers of medical workers how to detect and treat victims of snail fever, China has become the first country in the world to move toward controlling this "unconquerable disease."

Schistosomiasis can best be controlled by eliminating the snails that transmit it to people. To do this, it is necessary to drain infected waterways and bury the snail-infested dirt. This job could be done only with the active participation of millions of people working together under a common plan coordinated by teams of medical workers. But it was done.

Hundreds of thousands of miles of streams, rivers, ponds and canals were drained and re-routed—thus eliminating the disease-carrying snails—and as a side benefit increasing agricultural



The Chinese health care system pays special attention to workers involved in industrial accidents, including the reattachment of severed limbs. This young machinist was able to return to her work after the reattachment of her right arm. (Arrow in picture points to scar.)



production by controlling floods and improving irrigation. The Chinese predict the complete eradication of schistosomiasis by 1985.

The same principle of mass cooperation was used to eliminate widespread drug addiction and venereal disease.

Venereal disease was spread in China by foreign armies and large numbers of prostitutes. As a disease with a social cause, it could be eliminated only by combining social, political, and economic action with mass medical care. Preventive medicine, in this case, meant getting foreign armies out of China and eliminating the economic conditions that had forced millions of women into prostitution.

After Liberation all brothels were closed. Women who had been compelled by economic necessity to become prostitutes were given treatment, education and jobs. But that was only a beginning. Millions of victims still had to be located and treated, or the disease would continue to spread. Dr. Horn reports how China did it:

“In every town, in every village, in every county of China, small groups of ordinary people . . . were organized to tackle this job. They were given two or three weeks’ training in which venereal disease was explained to them.” [25]

Then these millions of newly-trained medical workers went among the people, explaining that the disease was part of the old society, that there was no shame attached to it, and that it was important to locate and treat everyone with the disease.

But again there was resistance from some doctors. Mass education, diagnosis and prevention was one thing, but when it came to treatment, the orthodox medical profession felt that was its own province.

“Giving injections,” they said, “that’s our job and it’s not ethical if non-qualified people do it. Also it might be dangerous — they don’t really know how to do it.” [26]

There was an easy way to determine who was right—try it. A pilot campaign was set up in a county with two million people. The new medical workers, with limited but effective skills, proved themselves. They won the cooperation of the people and located and treated 95 percent of those with venereal disease.

A new generation of medical workers is growing up in China today with no direct experience with syphilis because there are no active cases to demonstrate to students. [27]



Rehabilitation of opium addicts followed the same principle of mass campaigns. Crops of opium plants were destroyed by the people themselves. With the source of their drugs gone, addicts were given treatment if they wished and then provided with jobs. Only drug dealers were punished—and then only if they refused to reform.

Whether it be venereal disease, drug addiction, schistosomiasis, or diseases caused by malnutrition or poor sanitation, China tackles the problem in part by raising the political consciousness of its people.

Current cancer research, too, relies on the barefoot doctors and worker doctors to collect data, and on the peasants to aid in case detection. Peasants also survey conditions of farm animals and collect and categorize herbal medicines.

### Paying for Health Care

Who pays for health care, and how are medical costs kept within the reach of all?

To a large extent, medical costs are borne collectively rather than individually. Even for those few who pay individually, costs are kept extremely low. It is said that China is the only place in the world where it costs less for a heart operation (about \$20 U.S.) than for a bicycle.

Costs are kept low by emphasis on prevention and inexpensive treatments wherever possible and by the people participating in their own medical care. Thus when Roger Howard, a young Canadian teaching English at the Kwangchow Foreign Language Institute contracted appendicitis, his wife went along to live at the hospital and help look after him.

Salaries of medical workers are relatively low. Worker doctors and barefoot doctors spend roughly half of their time doing medical work and half in manual labor, and are paid the same for their medical work as for their regular jobs. Highly-trained doctors do receive more than the average, but not so much as in other countries. Thus in 1972 doctors at the People's Hospital in Peking earned 46 to 155 yuan a month, while nurses and administrators made 40 to 70 yuan. [28] By comparison, wages in state-owned factories in Peking and Shanghai ranged from a low of 35-40 yuan to 90-115 yuan. [29]

While wage differences still exist, they are narrowing as higher wages remaining from the pre-Liberation society (such as those paid older physicians) are frozen and lower salaries are

raised. Most workers making less than 45 yuan a month received a raise in 1977. Seniority is usually a more important factor in determining what people earn than their occupation, and it is not unusual for a veteran worker to earn more than a beginning doctor. As older workers in all walks of life retire, wages in China will become more nearly equal.

Even more important, the differences that exist are not large enough to prevent working people from getting needed medical care, and the salaries of doctors do not make medical costs prohibitively high.

*Examples:* Patients at the neighborhood health station in Peking's Wu Ting Lane never pay more for a visit than about 8 cents.[30] Even at higher levels costs are relatively low. The daily cost at Shanghai's largest hospital is roughly 40 cents a day. And the cost of medicine has been reduced 80 percent since the early 1950s. [31]

Roughly 12 percent of the people receive medical care free or at half cost at the expense of the state. (The long-range goal is to make it free for all.) The remaining 88 percent of the people,



Doctors in the Shanghai No. 12 Cotton Mill give regular health checkups to the workers. Most of China's textile workers are women, and mills like this one give special attention to the needs of working women. Rooms are provided for pregnant women to rest and every woman worker can claim a 56-day paid maternity leave.

most of whom live in the countryside, pay for their own health care. The vast majority pay through cooperative health programs, making the fear that a major illness will wipe out a lifetime of savings a nightmare of the past. Fully 90 percent of the people living and working in People's Communes belong to medical cooperatives.

The particular form the cooperative takes varies since people make such decisions themselves and are encouraged to experiment. Generally commune members pay yearly dues worth roughly two and a half day's earnings. The cooperative builds the commune's health care facilities, pays the full-time medical workers and bears the costs of care that can't be provided at the local level. When people get sick, they pay a small registration fee; in some cases there is no such fee.

Commune overhead costs include a welfare fund that is used, in part, to pay for elderly persons who have no families, or for families with unusual financial burdens.

### How It Works in China

In its effort to make medical care readily available to all, China is relying on a decentralized, multi-level health system that reaches people near their homes or workplaces. The care is provided by paramedics, health workers with limited training, and highly-trained doctors.

Many of the most common illnesses can be treated at this grass-roots level by medical workers with limited training, who refer cases they can't handle to fully trained doctors. This not only makes care available to the greatest number in the shortest time, it also makes the most efficient use of doctors and hospitals.

As a rule, in the countryside, there is a clinic in every production brigade, serving 1,000 to 2,000 persons, and a hospital in every People's Commune, serving 25,000 to 50,000 persons. Every county has a hospital for people who can't be treated at the brigade or commune level.

In the cities, every residents' lane, with roughly 2,000 persons, has a clinic. And every neighborhood—some 20,000 persons—has a hospital. Every factory has a clinic, and larger factories have their own hospitals. People who can't be treated in their factories are referred to neighborhood hospitals, and people who can't be treated at the neighborhood level are sent to city-wide hospitals.

Mobile medical teams serve nomadic groups in sparsely-settled areas.

A unique and most important contribution of China's health system is the idea of health workers chosen by their fellow workers and neighbors to receive paramedical training. In the countryside they are called *barefoot doctors*; in factories, *worker doctors*; and in city neighborhoods, *Red Medical Workers*. They all receive training that prepares them to emphasize prevention, give immunization inoculations, supply contraceptives, treat common illnesses and identify serious illnesses to be referred to higher levels. They remain part of the community they serve, continuing to work at their old jobs. Each year their skill improves as they receive more formal training, gain experience on the job, and work with university-trained doctors.

It is estimated that these medical workers can competently treat 80 percent of the medical problems that arise in the rural areas. There are now more than 1.8 million barefoot doctors, along with another 2.4 million public health workers and midwives. As basic health needs are met, time spent in initial training and continuing medical education may increase. Already some barefoot doctors receive as much as two years formal training, and worker doctors' training has doubled, from approximately 3 months to 6 months.

Since 20 to 30 medical workers can be trained for the same cost as one doctor and in less than one-tenth the time, the equivalent of 200 to 300 medical workers can be on the job while one doctor is still in medical school.

The training of paramedical personnel is well suited to meet the medical needs of China's countryside—with the emphasis on prevention, treating common illnesses, mass campaigns, and providing education and leadership for people to participate in their own health care—since they are less likely to spend their lives treating a relatively small number of exciting and challenging cases than doctors might.

None of this means that doctors are unimportant. Higher medical education is rapidly expanding in China. There is a vital role that only highly-trained physicians and medical researchers can play. But millions of new medical workers make it possible for the relatively small number of doctors to do the work that only they can do.

In Hangchow's Silvery Lane neighborhood, 50 residents work in the health center that serves the neighborhood's 702 families.

"In other words," Victor and Ruth Sidel, a physician and psychologist who have visited China several times, point out, "one member out of every 14 families in the lane is directly responsible for health care." [32]

Yang Hsio-hua is a Red Medical Worker in Peking. After marrying at an early age, she worked as a saleswoman until the age of 19, when her first child was born. She stayed home with her children until she was 36, when she volunteered for a month of medical training in the neighborhood hospital. "During the training period she and her fellow housewives learned history-taking and simple physical examination techniques. . . . They were taught the uses of a number of Western and herb medicines, and techniques of acupuncture and inoculation. Preventive measures such as sanitation, immunization, and birth control procedures were an important part of the curriculum.

"But the most important element was that Comrade Yang and her colleagues were taught that there are no barriers to the acquisition of medical knowledge other than their own fears. Once these were overcome . . . a lifetime of continued learning is anticipated. Comrade Yang learns from the doctor at the neighborhood hospital who visits the residents' committee health station three times a week, from her own periodic visits to the hospital for instruction or to consult about a patient, and from the bi-weekly or monthly meetings of all the Red Medical Workers of the neighborhood."

Many paramedics and nurses are now being selected by the people they serve to receive further training and become doctors.

The Sidels were impressed by the high rate of immunization at a health station they visited—more than 94 percent for most diseases—which was possible because the health workers live in the neighborhood and know all the families. [34]

Being close to the people they serve helps medical workers educate families about the importance of family planning, "based upon the emancipation of the woman, her equality, her right to study and participate in all political decisions, and her heightened social consciousness." [35]

In Silvery Lane, health workers trained by Red Medical Workers go door to door, talking with women of child-bearing age about the number of children they want and describing various methods of birth control—all provided free. [36]

None of China's health gains was accomplished outside the continuing political struggle over what route the revolution should take. The large-scale training of barefoot doctors began during the Great Leap Forward, the gigantic effort from 1958 to 1960 to make China self-reliant. By 1960, there were 3,900 barefoot doctors in production brigades around Shanghai. From 1961 to 1965, however, they were told to drop their medical work and return to agriculture full time. Health care during that period relied upon the few available doctors, and by 1965 only 300 barefoot doctors were left around Shanghai. During the Cultural Revolution, which began in 1965, training of barefoot doctors resumed, and by 1968 there were 4,500 around Shanghai, and they in turn trained 29,000 auxiliary health workers. [37]

While "not belittling the importance of professional skill, and mastery of modern techniques," Dr. Horn said, "in my opinion the most important attribute that any doctor can possibly have is the determination to put the interests of his patients before everything else, to devote his whole life to the service of his patients. . . . If he has this drive, if he has this motivation, he's a good doctor. And if he doesn't have it, he falls short of being a good doctor no matter what his technical or professional level is."

China's health care system is still evolving, changing to meet the challenges of a rapidly-developing country. There are many ways to organize a medical system and meet a society's need for health care, but 30 years of socialist development in China have proved that astonishing medical progress can be made under very difficult conditions by following the principles of self-reliance, participation, cooperation and equality.

The Chinese have shown that a medical system based on serving the working people, organizing communities to meet their own medical needs whenever possible, emphasizing prevention and using medical workers who come from and remain part of the people they serve, can eventually provide quality health care for all, a goal that no society has yet been able to reach.

## NOTES

1. Wilfred Burchett and Rewi Alley, *China, the Quality of Life*, (Baltimore, Md., Penguin Books, 1976), p. 28.
2. Joshua S. Horn, *Away with All Pests*, (New York, Monthly Review Press, 1969), p. 125.
3. William Hinton, *Fanshen*, (New York, Vintage Books, 1968), pp. 24-5.
4. Victor W. Sidel and Ruth Sidel, *Serve the People*, (Boston, Beacon Press, 1973), p. 20.
5. *Readers Digest*, September, 1973.
6. Sidel, *op. cit.*, p. 265.
7. *Ibid.*, p. 257.
8. Horn, *op. cit.*, p. 38.
9. *Ibid.*, p. 40.
10. *Ibid.*, pp. 163-165.
11. *Ibid.*, pp. 145-146.
12. *Ibid.*, pp. 30-1.
13. Mao Tse-tung, *Instruction on Health Work*, June 26, 1965.
14. Joshua Horn, "The Mass Line," *Health Care in China*, (London, Anglo-Chinese Educational Institute, 1976), p. 2.
15. Horn, 1969, *op. cit.*, p. 131.
16. Burchett and Alley, *op. cit.*, pp. 247-248.
17. Janet Goldwasser and Stuart Dowty, *Huan Ying, Worker's China*, (New York, Monthly Review Press, 1975), p. 85.
18. Sylvia Sandroff, "Worker to Worker," *New China*, Vol. 2, No. 3, December, 1976, p. 34.
19. Linda Nelson, "Sixteen Tons, What Do You Get?" *New China*, October, 1974, p. 20.
20. Nantung Medical College Pharmacology Group, "Treating Burns with Herbal Medicine," *China Reconstructs*, Vol. XXVI, No. 5, May, 1977, pp. 33-34.
21. Horn, 1969, *op. cit.*, pp. 108-110.
22. *Ibid.*, p. 122.
23. Horn, 1976, *op. cit.*, pp. 1-2.
24. Horn, 1969, *op. cit.*, p. 103.
25. Horn, 1976, *op. cit.*, p. 6.
26. *Ibid.*, p. 7.
27. Horn, 1969, *op. cit.*, p. 86.
28. Sidel, *op. cit.*, p. 51.
29. Charles Bettelheim, *Cultural Revolution and Industrial Organization in China*, (New York, Monthly Review Press, 1974), pp. 15-16.
30. Sidel, *op. cit.*, p. 49.
31. *Ibid.*, p. 189.
32. *Ibid.*, p. 106.
33. *Ibid.*, p. 47.
34. *Ibid.*, p. 55.
35. Han Suyin, "Family Planning in China," in Phyllis T. Piotrow (ed.), *Population and Family Planning in the People's Republic of China*, (New York, Victoria Fund and Population Crisis Committee, 1971), pp. 16-21.
36. Sidel, *op. cit.*, p. 60.
37. *Ibid.*, p. 79.

## EYE EXERCISES

FROM THE PEOPLE'S REPUBLIC OF CHINA

1. Keep eyes closed while doing the exercises.
2. Fingernails should be short and hands clean.
3. Massage lightly and slowly until the area becomes a little bit sore; do not use excessive pressure.
4. Do eye exercises twice a day - once in the morning and once in the afternoon - while sitting with elbows resting on table.



EXERCISE I

Use thumbs to massage inside eyebrow corners with other fingers slightly curled against forehead. (8 times)



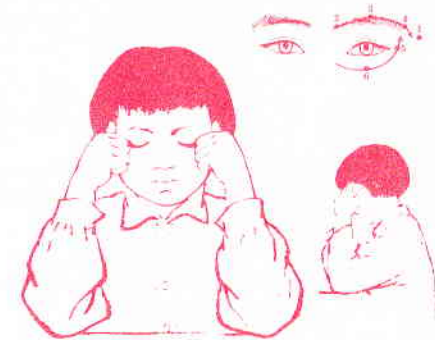
EXERCISE II

Use thumb and index finger to massage nose bridge. Press downward and then upward. (8 times)



EXERCISE III

With thumbs on lower jawbone, place index fingers and middle fingers together against both sides of nose near nostrils. Then lower middle fingers and massage the cheeks where the index fingers remain. (8 times)



EXERCISE IV

With fingers curled under and thumbs on each side of forehead, use the sides of the index fingers to rub outward following the diagram pattern: 2-3-4-6-5. (8 times)

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