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Sept. 6, 1944

The following report was brought back to the U.S. by James Burke. Please do not publish any of the material contained in it without consultation with China Aid Council of United China Relief.

I-- Report on the Work of the Bethune International Peace Hospital at Yen-an.

(A) History

The hospital, given the name of Bethune International Peace Hospital after it was organized, was started as a hospital belonging to the Eighth Route Army situated east of Yen-an in a place called Kwa Wan Tseng. It had an operating room, laboratory and X-ray room. The surgical section was run by the Indian Medical Unit to China. There was a total of 120 beds. Most of the patients came from the front, but a small number were drawn from Yen-an. The staff consisted of 122, including nine doctors, a matron and 45 dressers and nurses. In 1939 Bethune died of infection from an accidental wound while performing an operation in a hospital in Shansi.

Yen-an mourned the loss of a true friend who gave his life for a noble cause. At a public gathering it was decided to change the name of the above-mentioned Army hospital to Bethune I.P.H., and to move it to a new site at Liu Shu Tien. A new building was erected with wards, operating room, laboratory and X-ray room. It cost \$4,000,000. In addition to medical, surgical and obstetrics departments two extra departments were established, viz. children's and eye-nose-ear-and throat. Two hundred beds were provided with a staff of 260. The original hospital site became a branch hospital with 200 beds for patients requiring long-term treatment, and a staff of 100. For normal patients, soft and liquid food was provided. In 1942 a training class for dressers and nurses, costing \$50,000., was started and named after Bethune. The teaching staff was drawn from the I.P.H. and 60 students were enrolled.

In the spring of 1943 the main hospital again moved to a place called Liu Man Chia Kow. The second site became another branch hospital serving as a training centre for internes from the Medical College. A sum of \$2,600,000. was spent on the new site for building and furniture. Additional equipment including a Kahn Sedimentation Test Set, costing \$1,000,000. was acquired. At the time of writing the main hospital has wards for medical, surgical and obstetrical cases, and for children and those with infectious diseases. There are also departments for out-patients and babies. To commemorate November 23, 1943, the 4th Anniversary of Bethune's death, a Bethune's Rule of Conduct for Hospital Workers was drawn up, consisting of 16 articles, the fulfillment of which qualifies a member to be a model Bethune worker. This has proved to be effective and quite a few qualified as Bethune workers.

(B) Organization

1. Besides the main hospital there are two branch hospitals, one at Wu Tai with 1,000 beds and the other in South East Shansi with 800 beds. A report was sent on the South East Shansi Branch at the same time that this report was sent. There are also three branch sections around Yen-an, viz. at Lee Ka Wan, Pei Ka Pin and Liu Shu Tien.

2. To facilitate management the three sections around Yen-an are placed under the direction of the General Health Administration, the Shensi-Kansu-Ningsia Health Administration, and the Medical College. Technically each unit can look after itself, but consultations on difficult cases are often held when senior doctors from all hospitals participate. A monthly meeting is held to hear medical reports from the different units, during which discussions on cases, drugs and other matters are held, decisions arrived at and later carried out.

3. Table below shows the organization of the Yen-an I.P.H.

Production Dept.	Bean Milk Barber Shop Carpentry Consumers Co-op Agriculture
General Affairs Dept.	Grooms Orderlies Kitchen Laundry Milk
Superintendent Assistant Supt. Committee	
Laboratory	
Dispensary	
Convalescing Ward	
Children's Ward	Treatment Diet
Obstetrics	Mothers' Ward Babies' Ward
Medical Ward	
Surgical	Out-Patient Dep't. Dressing
Nursing Dept.	Sanitation Dressers and Nurses Classes Dressers Unit

Office

Messengers
Accounts

Each ward has three doctors. The dispensary employs two dispensers, the Laboratory two workers, the convalescing ward has one doctor. The nursing section has one matron with a staff of 47 which includes 38 qualified dressers and nurses. The other departments employ from 4 to 9 persons.

(C) Record of Work

The Bethune spirit permeates the I.P.H. workers to such an extent that many difficulties and obstacles have been overcome and progress made in all directions. Where imported medical apparatus is not available the hospital staff members improvise their own, as for example, dressing carts, saline injection apparatus, filter vessels, eye cups, disinfecting baths and electric treatment apparatus. Bethune also set the excellent example by giving his own blood to the seriously wounded soldiers. The hospital staff followed his lead, and then seven non-medical staff members. So far over 30 cases of blood donations have been recorded.

1. Table below shows the number of cases handled over three years.

Year	Patients <u>Loft Over</u>	Number <u>Admitted</u>	Number <u>Cured</u>	Per Cent <u>Cured</u>	Number <u>Died</u>	Per Cent <u>Died</u>	Number <u>Left</u>
1941		696	511	73.4	54	4.8	151
1942	151	733	725	82.01	31	3.5	128
1943	128	1056	1052	88.8	32	2.7	100

It will be noted that the number of patients admitted has increased, so has the per cent of patients cured. The percentage of deaths has decreased.

2. Table below shows the number of surgical cases handled and the type of anaesthetics given.

Year	No. of Cases	Type of Anaesthetics	No. of Times Given	Per Cent of Total
1940	114	Spinal	458	45.3
1941	379	Local	413	40.8
1942	324	General	85	8.4
1943	195	Mixed	6	0.6
		None	50	4.9
Total	1012		1012	

3. The Outpatient Department has only been established a year. Its work is recorded below.

Type of Cases	No. of Patients	No. of Visits
Surgical	50	360
Gynaecological	35	60

Children's diseases	100	260
Medical	<u>140</u>	<u>1180</u>
Total	325	1860

In this department an attempt is made to combine the theory and practice of medicine. Consultations on difficult cases are held by the doctors and hospital employees, and methods regarding them are commonly agreed upon. This procedure has reaped good results. Records show that diseases commonly met with in the Outpatient Department are tuberculosis, colds, gastric troubles, malaria, piles, appendicitis, whooping cough, pneumonia, indigestion; typhoid is common among infectious diseases. X-rays have been used to diagnose diseases in 102 cases.

4. The Laboratory has performed over 2,000 tests on blood, phlegm, urine, stools and all forms of bodily secretions. On the average 7 to 8 tests are made a day. Table below shows a classification of tests for the year 1943.

Type of Test	Number of Tests	Type of Test	Number of Tests
Blood Smear	105	Fus E.	29
Platelet E.	672	Spinal Fluid	23
Haemoglobin	491	Mouth Secretion	14
Differential Count		Eye Secretion	8
of W. B. C.	318	Blood Grouping	64
Urine	413	Coagulation Rate	69
Stool	503	Kahn Test	17
Phlegm	62	Paracentesis	5
Vaginal Smear	101		

5. Ward Management --Patients applying for admission to a ward are examined by the doctor on duty, who admits or rejects them. On admission they are told the rules and regulations governing residence in the wards. The doctor inspects the ward twice a day. The nursing staff is on seven-hours duty. Routine operations are performed three times a week, emergency cases excepted. Patients are given a bath once a week, when clothes and bedding are changed. Once a fortnight they are given a haircut. The ward is cleaned once a day.

(D) Finances

Apart from funds received from the China Defence League, the main income of the I.P.H. comes from the Shensi-Kansu-Ningsia Border Region Government; some funds come from the Production Department of the I.P.H. In 1943 The China Defence League donated \$2,600,000.00, half of which was used in the main hospital and the rest in the branch sections at Yen-an.

The table below shows a statement of accounts. The Border Region dollar unit is half of a National dollar unit. Both units are used in the table. Since drugs and medical equipment are given by the Border Region Government Health Administration they are not shown in the accounts.

Current Expenditure (Border Region Dollar Unit)

Item	1941	1942	1943
Food	73,125.00	185,251.25	9,039,081.00
Living Allowance	35,240.50	84,595.35	2,305,700.00
General Expenses	16,247.00	24,038.50	3,503,401.00
Staffs' Clothing & Food	84,000.00	250,000.00	11,002,000.00
TOTAL	208,612.50	543,885.10	25,848,382.00

Special Expenditure 1942-43 (National Dollar Unit)

Item	1942	1943	Total	Remarks
Building Repairs & Construction	115,000	1,650,000	1,765,000	For the Operating Room,
Furniture	40,000	200,000	240,000	infectious
Living Allowance	65,000	310,000	375,000	diseases ward,
Medical Supply	17,000	100,000	117,000	80 beds, 100 stools, gauze, absorbent cotton and other materials.
TOTAL	237,000	2,260,000	2,497,000	

Special Income Received from China Defence League

1942	1943	Total	Remarks
\$68,980.85	\$1,300,000.00	\$1,368,980.85	The difference between special income & expenditure is made up by the Border Region Government.

Table below shows the quantity and cost of goods as required per person per month. Estimates are based on prices current in the latter half of 1943. The Unit used is the Border Region Dollar.

Item	Staff (Quantity in catties)	Cost
Vegetables	30	\$600.00
Oil	1	600.00
Salt	1	150.00
Meat	2	1,000.00
Coal for preparation	30	600.00
Rice	35.1	1,900.00
TOTAL COST		4,850.00

Item	Soft		Patients		Liquid	
	Quantity	Cost	Item	Quantity	Cost	
Vegetable	30	\$600.00	Sugar	1	\$3,800.00	
Oil	1	600.00	Lotus root	1	1,500.00	
Salt	1	120.00	Eggs	60 pcs	3,000.00	
Flour	15	3,000.00	Chicken	3 "	1,500.00	
Meat	4	2,000.00	Meat	2.3	1,300.00	
Rice	21	1,400.00	Flour	4	1,400.00	

Coal for preparation	60	1,200.00	Rice	1	300.00
			Charcoal for		
			preparation	60	1,200.00
			Mixed Food		<u>1,200.00</u>
TOTAL COST		<u>\$8,920.00</u>	TOTAL COST		<u>\$15,200.00</u>

(E) Conclusion

The past three years have been a struggle both for progress and for existence. Two factors have however sustained the struggle--good government and the spirit of Bethune.

The need for drugs is still acute: for example, urea stibamine, antimony, emetin, prontosil, digitalin, antitoxin, tetanus and typhoid vaccine, and sulfanilamide. Surgical apparatus, such as clips, pincers, rubber tubes and gloves are needed. Local anaesthetics such as novocaine, saline injection apparatus and rubber tape are not up to minimum requirements.

The only X-ray set in our possession has a life of only ten hours. It is kept in a branch hospital in Yen-an, and is moved only when absolutely necessary for use in other I.P.H. Doctors therefore have to grope in the dark to diagnose many difficult cases. Laboratory chemicals, particularly stains, are being exhausted very fast.

Most of the drugs and equipment previously acquired came from Free China; a small proportion came from Occupied China, but bad means of transportation and lack of funds have made replenishment extremely difficult. Added to this is the blockade exercised against the Border Region by the Central Government.

(F) Plans for the Future

1. Contributions from Chinese and foreign sources plus subsidy from the Border Region Government are not sufficient to maintain the I.P.H. By paying more attention to production it is planned to meet vegetable and meat requirements both of the staff and patients. By drawing ten per cent of the bonus(?) it is hoped that furniture for the wards and some apparatus can be added. By cutting less urgent items perhaps \$1,000,000.00 can be saved.

2. Better Diet, Study of Local Diseases
Although soft and liquid foods are available for patients, the diet is still inadequate in that specific foods are wanting, as for example non-albumen food for liver trouble, non-saline food for heart ailment, pure milk for the seriously sick, and soup for patients after an operation.

Doctors of the I.P.H. are at a loss to diagnose the cause and cure of one of the many typical local diseases called in Chinese Liu Yang Tse. It is felt that intensive study on a greater number of patients suffering from the disease may reveal some light on the subject.

3. Service for the People
For 20 li (one li is 1/3 of a mile) around the I.P.H. the village population numbers 2,000 odd. These people look to the I.P.H. not only to cure them when they are sick but also to guard them against epidemics. It is planned to build

wards for them, to organize units to tour the district to study sanitation problems, to devise methods of epidemic prevention and to educate the people in sanitation and to give vaccines and injections.

4. Planting Trees and Flowers

Patients from the I.P.H. can take strolls in a near-by orchard run by the Production Section, but within the I.P.H. compound no trees or flowers are found. It is estimated that 250 trees are required, some of which have been acquired and planted. Flower seeds have also been bought to cover 23 plots.

5. The bedding of the main I.P.H. has been in use since 1939 and is badly worn. When wounded soldiers have to disguise themselves while crossing Japanese lines on their way to the I.P.H. they come without bedding. The high cost of textile materials has forbidden replenishments, but this year the spinning and weaving industry is flourishing in the Border Region and the problem of bedding and clothes will be solved.

6. Physical Treatment

Since physical treatment relieves pain and strengthens bodily resistance it is planned to have a steam bath room, artificial sun-light and massage room. This treatment will incidentally aid the hospital to economize on drugs, so difficult to obtain.

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II REPORT ON THE CENTRAL HOSPITAL

INTERNATIONAL PEACE HOSPITAL SECTION I

(A) History

In 1939 Yen-an was raided and bombed by Japanese planes. In June, Japanese troops attempted to cross the Yellow River and attack the Border Region. In order to take care of sick and wounded fighters, the Central Medical Department of the Border Region set up this hospital. Administratively, the hospital is attached to the Central Medical Department, and thus given the name of Central Hospital. After four months of construction in 1939, the hospital was ready to receive patients in September of that year. It was formally inaugurated November 7. In memory of the international friend and well-known doctor of the Canadian-American Medical Mission to China Dr. Norman Bethune who sacrificed his life for the Chinese people, the hospital became what is now known as Section 1 of the I.P.H.

Before its establishment (1938) Dr. Maxwell, Chairman of the International Red Cross of Central China, Miss Ralf Sues Mr. Higgins of the American Mission of Hankow, Miss Agnes Smedley and other foreign friends extended a great deal of help. They not only contributed drugs and equipment enough to take care of 100 patients for six months, but also a fund of CN\$20,600.00.

At that time, the hospital had several caves with a capacity of 40 or 50 patients. After gradual development, it now has a capacity of 150 beds plus 20 cribs for infants.

(B) Hospital Growth

Year	Construction fund	No. of beds	Personnel	Trainees	Patients Admitted
1939	\$ 6,200	50	12	14	164
1940	7,500	98	23	29	900
1941	133,000	110	37	55	1303
1942	43,000	132	42	92	1691
1943	8,812,500	150	72	71	2485
1944	28,735,600(budget)	190 (planned)	71	78	

Note: In the 1944 budget \$14,400,000. is to be used for the new operating room and \$8,300,000. for new wards, pathology and anatomy rooms, and equipment for the operating room; \$6,000,000. for new and additional ward equipment.

In 1939, the hospital had only three departments: medicine, surgery and obstetrics, plus a small operating room. In 1941, two departments: infectious

diseases, and pediatrics, and a laboratory were added. In 1942, the X-Ray department was established. In 1943, a dressing room was added, and also a special tuberculosis ward which is gradually being separated from the medical service.

(C) Organization

Technically, being a part of the I.P.H., the personnel and medical staff are regularly added and supplemented through the I.P.H. head hospital which also helps to regulate the number of admissions and aids in medical matters. Drugs, equipment and expenses are partially handled by the head hospital. Reports are made quarterly and yearly to the head hospital.

The medical administrative department is composed of the Superintendent, two Assistant Superintendents, and the heads of different departments. It takes care of matters relating to medical and administrative work. Each department has one chief, doctors and internes. The nursing staff has a head nurse, and ten or more nurses to each department.

The technical staff, which is purely medical, includes doctors, nurses, internes and technicians numbering 149. All the Chiefs of Departments: the doctors, head nurses, midwives and pharmacists, are graduates of different colleges and training schools both in China and abroad. The rest of the personnel is under training and is from the China Medical College of Yen-an or has received training in the hospital itself.

The staff as a whole works 6 to 8 hours a day with 1 to 3 hours for a study period; in addition they have to participate personally in production. Because of this intensive work, study, production, and medical treatment are equally well carried on.

In order to attain the objective of self-sufficiency, the hospital has organized a Production Committee which superintends vegetable farm, cooperative and handicraft work. Last year 10,000 catties of vegetables and 7 piculs of beans and buckwheat were grown. It ensured sufficient vegetables for hospital needs. This year, hospital authorities are planning to grow their own vegetables and raise half of the livestock necessary for the meat requirement. The Border Region Government will furnish two-thirds of the hospital expenses and the main I.P.H. will provide a part of the other third. The rest of the expenses will be met as a result of the profit the hospital makes; it guarantees that everything needed can be had in ample amount and quality and will even supplement any shortage of funds. Without exception, every department of the hospital is taking part in production.

(D) Field of Work

This hospital was established as an institution free to the public. Any patient who has a doctor's certificate calling for medical treatment in a hospital, is admitted without charge. Thus the hospital not only receives as patients soldiers, government workers, and students but also local peasants. All are treated equally without charge of any sort. Recently it has been receiving civilians and members of the local population in increasing numbers. This is a result of the "Support the Government and Love the People" movement. According to recent statistics from October, 1942, to September, 1943, the admittances of

patients from the local population amounted to only 6 per cent of the total. From October 1943 to March 1944, the number increased to 10 per cent and in March, 1944 the total number of patients numbered 246 of whom 49 were from the local population, making a percentage of 20 per cent. From October 1943 to March 1944, 1,099 patients have been treated in the hospital, among them five international friends.

The increase in the number of patients from the population shows an increasing confidence in the newer medical treatment. For example, one peasant woman from Ho Gia Gor, near Yen-an, had delivered three babies in the past, all of whom died at birth. Last year during her fourth pregnancy, she came to the hospital for delivery, and a normal healthy baby was born. Following this event, five other pregnant women from the same village came to the hospital for delivery, and returned with normal fat babies. This year the hospital has organized mobile medical units to visit the villages in the vicinity. The hospital this year is planning to set aside 30 beds for the local population.

The number of patients has been increasing yearly due to an increase in the birth rate of the local population and the policy of giving early treatment when certain diseases appear.

(E) Conditions of Medical Work

From September, 1939, to December, 1943, this hospital has received altogether 6,543 patients of whom 1,156 are medical cases, 1,736 surgical cases, 689 gynecology cases, 1,537 obstetrical cases, 575 pediatric cases, and 850 infectious disease cases. Six thousand two hundred and seventy-three patients out of 6,543 were cured completely. See table below.

PATIENTS ADMITTED AND CURED

<u>YEAR</u>	<u>ADMITTANCE</u>	<u>CURED</u>	<u>%</u>	<u>DEATHS</u>	<u>‰</u>	<u>REMAINING IN HOSPITAL</u>
1939 (Sept-Dec)	164	106	99	1	1.0	57
1940	900	847	98.5	13	1.5	97
1941	1,303	1,258	97.4	33	2.6	109
1942	1,691	1,645	97.7	38	2.3	117
1943	<u>2,485</u>	<u>2,417</u>	<u>97</u>	<u>74</u>	<u>3.0</u>	<u>111</u>
TOTAL	6,543	6,273	97.5	159	2.5	

In the years 1939 and 1940, our hospital equipment was so insufficient that we could not take care of the more serious and chronic cases. Since then, with improvement in equipment, we have been able to take in all acute and serious cases. This accounts for the slight increase in the death rate in recent years.

It must be noted that with the new sulfa drugs (especially sulfapyridine) a number of acute diseases, such as bronchitis and pneumonia, (when adults have pneumonia, the usual mortality runs to almost 20 per cent) have been cut down approximately two-thirds in the past two years. In 1941, typhoid mortality was only 7 per cent; 1942 was 10.7 per cent and in 1943 was 3.9 per cent. On the average, this is lower than the usual hospital death rate for typhoid. This is attributed to early treatment, higher resistance of patients in the "well-fed and well-clad" movement and the extreme care given to nursing and diet.

The obstetrical field also shows quite a remarkable improvement over the early years of the war. Among the 1,537 cases admitted, with the exception of two cases of puerperal sepsis on arrival to the hospital (1941), there have been no infection or deaths. This situation denotes a definite improvement in medical work and better health-conditions under the policy of the "well-fed, well-clad" movement. The weight of new-born babies on the average shows a higher count than before the movement. In the past years the average weight of the babies was six pounds, and since the movement in 1943, the average has been seven pounds while weights higher than this are increasing.

Every year we sum up our experiences by inspecting our work. We try to improve on our good points and at the same time make every effort to overcome our weaknesses. Since 1943 with the arrival of the international friend Dr. Orloff, who took charge of the surgical and gynecological department, the organization and medical work of the hospital have been improved and systematized.

Sterilization has been perfected and strictly carried out. A new dressing room has been established. Re-organization was carried out and the system strengthened; the duration of operations was shortened, more efficiency was instituted; local anaesthesia (Percaïne) is now used on a large scale; new methods for treating burns, fractures and wounds have been introduced. Local salt refined in solution has been used with good effect in dressing wounds, and locally made plaster of Paris is now used in fracture work. These innovations have not only proved valuable in treatment but have given great aid in educating the medical field regarding newer and improved methods.

FIVE YEAR OPERATION RECORD

<u>YEAR</u>	<u>SURGERY</u>	<u>GYNECOLOGY</u>
1939 (4 months)	20	8
1940	260	113
1941	309	109
1942	386	189
1943	<u>505</u>	<u>158</u>
TOTAL	1,480	577
Percentage	71.9	28.1

ANAESTHESIA RECORD

<u>YEAR</u>	<u>LOCAL</u>	<u>SPINAL</u>	<u>GENERAL</u>	<u>WITHOUT ANAESTHESIA</u>
1939	11	7	10	0
1940	120	227	25	1
1941	135	225	54	4
1942	321	200	61	13
1943	<u>417</u>	<u>107</u>	<u>68</u>	<u>71</u>
TOTAL	984	766	218	89
Percentage	47.9	37.2	10.6	4.3

Because operating facilities and the operating room have been too small, the Border Region Government is planning to build a new operating room to facilitate the work and meet new requirements.

The majority of the nursing staff have been trained in our hospital. Among the 42 who can now work independently, 14 have been assigned to different clinics. Under the nursing department, there is a nursing class for training personnel. Nurses work eight hours a day, giving one hour to production of goods. They have a rest day weekly and a day weekly for technical studies. The nursing service is run on a 24-hour basis, including the care of the diet kitchen and the hospital creche.

The X-ray unit (donated by the Indian Medical Unit to China) has almost been exhausted (tube gradually weakening in rays) so that it is fit only for fluoroscopy. Films cannot be made because of weak rays and a lack of films. See table below:

X-RAY STATISTICS

<u>YEAR</u>	<u>LUNG EXAMINATION</u>	<u>HEART</u>	<u>GASTRO-INTESTINAL</u>	<u>TRACTION</u>	<u>MISC.</u>
1942	276	6	1	1	4
1943	<u>309</u>	<u>17</u>	<u>1</u>	<u>4</u>	<u>7</u>
TOTAL:	585	23	2	5	11

The laboratory was established in 1941. In the beginning, owing to the lack of apparatus the work was limited in scope. In 1942 a part of the apparatus was bought, and a part locally made (Kahns Antigen for example), but even so we are still handicapped by a lack of supplies and equipment such as the Widal test and bacteriological apparatus. We have only one set of blood counting pipettes for the whole hospital.

LABORATORY STATISTICS

<u>KIND OF EXAMINATION</u>	<u>OCT. 1941-SEPT. 1942</u>	<u>OCT. 1942-SEPT. 1943</u>	<u>TOTAL</u>
Stool	629	995	1,624
Urine	766	1,854	2,620
Sputum	135	136	271
Blood Exam. Routine	1,650	5,464	7,114
Blood Parasites	230	252	482
Kahn's Test	410	30	440
Widal's Test	148	0	148
Smears	224	303	527
Blood Sedimentation	9	92	101
Blood Proteins	23	41	64
Coagulation time	11	7	18
Spinal fluid	0	75	75
Miscellaneous	<u>43</u>	<u>16</u>	<u>59</u>
TOTAL	4,278	9,265	13,543

In the beginning some supplies and equipment were donated by the International Red Cross, and some in past years given by the Central Medical Department and the IPH head hospital. The China Defence League and friends in America, England, and the Soviet Union contributed a large amount of supplies and equipment, but most of these have been prevented from reaching us by the Kuomintang authorities in Lanchow and Sanyuan. It has been reported that the greater part has now been sold by them. It is not surprising that this should influence our medical work and the handicaps we are working under. In spite of such obstacles we are looking for local substitutes and are producing different kinds of drugs from local materials. We have already prepared artificial pneumothorax apparatus, several tinctures and ampoules, rectoscopes and cedar oil for oil immersion lens. The total sum expended on medicines in the past year was \$15,000,000 Border Region Currency. On the average \$6,000 are spent on medicines for each patient admitted to the wards. Medicines are used equally on the basis of the necessities of the disease.

TRAINING

There are 21 training internes, the majority coming from the China Medical College, Yen-an, and the remainder from the different out-patient clinics and units for further training. The hospital combines treatment and education.

OPD

The Out-Patient Department of the hospital is combined with the OPD of the Central Medical Department. The clinic is open daily, the staff consisting of the hospital doctors and internes. The hospital itself, provides on its premises a special pediatrics out-patient department. In the past two years, the pediatrics department received for the first visit 2,187 patients (mostly from the south and northwestern districts of Yen-an).

All patients referred for the OPD for admittance are given appointments while acute cases are admitted at all times. The heads of the different departments carry out ward rounds twice daily, while one doctor is specially detailed on duty for acute and serious cases. The hospital always has one doctor daily on call for the whole hospital.

(F) Expenditure

Source of funds: The funds from the head IPH and CDL are used to help defray expenses but the largest part of the funds are given by the Border Region Government. Expenses over and above the budget are filled from the "Production Committee" of the Hospital. The staff's living expenses in part come from production described above.

1943 ACCOUNTS

<u>MAIN ITEMS</u>	<u>RECEIPTS</u>	<u>EXPENSES</u>
Border Region Govt. Running Exp.	\$15,841,753.16	
Supplementary Expenditure	9,019,500.00	
Production	913,165.00	

<u>MAIN ITEMS</u>	<u>RECEIPTS</u>	<u>EXPENSES</u>
Food		\$ 9,623,849.63
Bedding and clothing		3,212,640.00
Transportation and Miscellaneous Allowance		1,195,762.95
Hygienic work		947,227.00
Working Expenses (Stationery, etc.)		835,935.50
Cultural and Recreation		526,338.08
		413,165.00
TOTAL	\$25,774,418.16	\$16,754,918.16

NOTE: Among the supplementary expenses \$9,019,500.00 Border Region Currency was used for construction, this is equivalent to \$4,295,000.00 National Currency (\$1 National Currency equals \$2.10 Border Region Currency)

SUPPLEMENTARY EXPENDITURE OF IPH SECT. 1 (ALL IN \$NC)

<u>ITEMS</u>	<u>EXPENSES</u>		<u>TOTAL</u>
	<u>1942</u>	<u>1943</u>	
Construction	21,000	4,400,000	4,421,000
Purchasing Equipment	26,000	120,000	146,000
Additional Living Exp.	35,000	290,000	325,000
Printing Expenses	14,000	85,000	99,000
	<u>96,000</u>	<u>4,895,000</u>	<u>4,991,000</u>

	<u>RECEIPTS</u>		<u>TOTAL</u>
	<u>1942</u>	<u>1943</u>	
From China Defence League and China Aid Council	90,000	600,000	690,000

NOTE: The running expenses of the hospital are provided wholly by the Border Region Government except for funds received abroad as recorded above.

Construction expenses: Building X-ray Room, Dressing Room, TB wards and Infectious diseases wards; Caves 26, rooms 26.

Purchasing equipment: 40 beds, 80 sheets, tables, chairs, bedpans, lamps.

Additional Living expenses: Milk, eggs, fruits, biscuits, etc., for serious cases; towels and stockings for the staff.

Printing expenses: such as temperature charts, history and other records.

Food for the patients is divided into two kinds: Soft and Liquid.

(G) 1943 Standard Diet Supplied

<u>ITEMS</u>	<u>AMT. PER PERSON PER MONTH</u>	<u>BORDER REGION CURRENCY</u>	<u>REMARKS</u>
<u>Soft Diet</u>			
Vegetables	30 cattles	600	The soft diet is divided into ordinary and special. In certain cases a supplement and rearrangement of the diet can be carried out.
Fat	15 oz.	600	
Salt	15 oz.	120	
Flour	15 cattles	3,000	
Millet	21 "	1,400	
Meat	4 "	2,000	
Coal for cooking	60 "	1,200	
		<u>\$8,920</u>	
<u>Liquid Diet</u>			
Brown sugar	15 oz.	3,800	Milk and fruits are additional. They are provided for certain cases and are not included in the list.
Eggs	60	3,000	
Chickens	3	1,500	
Ou Fen (?)	1 catty	1,500	
Noodles	4 "	1,400	
Meat	2.3 "	1,300	
Rice	1 "	300	
Flavorings		1,200	
Coal for cooking	60 cattles	1,200	
		<u>\$15,200</u>	
<u>Staff Diet</u>			
Vegetables	39 cattles	600	Vegetables are all grown by hospital employees. Rice is provided by the Govt.
Fat	15 oz.	600	
Salt	1 catty	150	
Meat	2 "	1,000	
Rice	35.10 "	1,900	
Coal for cooking	30 "	600	
		<u>\$4,850</u>	

Drugs and equipment are provided mainly by the Central Medical Department and a part by the WPH. This amounted to \$15,000,000 in Border Region Currency in 1943.

<u>ITEMS</u>	<u>AMOUNT</u>
Total for Medicine	\$15,000,000 (1943)
Running Expenses	16,754,918
Supplementary Expenses	<u>10,279,500</u>
TOTAL	\$42,034,418 Border Region Currency

Each patient admitted last year (1943) cost on the average \$16,915.

(H) Progress and Plans

From the above it is quite apparent that no expense has been spared by the government to insure the health of the people, and the hospital work is only a part of the burden that the government carries. With the aid of friends in America, England and the Soviet Union the work has been made easier and has made progress.

In 1944, plans are being put into effect for the enlargement of the wards in the Surgical and Pediatrics service by 20 beds to cope with the increase in admittances and to facilitate treatment of patients and the training of personnel. More important however is the building of new operating rooms which will cost \$14,405,000 Border Region Currency. The new operating room equipment will amount to \$4,801,000, the ten wards to \$2,300,000, and two anatomy rooms to \$340,000. The infectious diseases department sterilizing room will cost \$160,000. Together with other equipment, repairs, construction, and instruments, the total amount will come to \$28,735,000.

The present plans also include the formation of a midwifery and child health nurses' training class to reduce infant mortality still further. Provisions are to be made for a more intensive study of the prevailing causes of infant mortality.

(I) Conclusion

In the past five years with the coordinated and willing efforts of the hospital staff together with the leadership, help, and suggestions from the Border Region Government, the Central Medical Department, and the International Peace Hospital, we have succeeded in improving our work, and enlarging the scope of our efforts. Despite the difficult conditions of blockade, and the lack of proper and sufficient supplies and equipment, we have succeeded in keeping down the mortality rate to 2.5 percent.

Under present war-time conditions, many people among the troops and the population have become ill, thus making heavier demands on the facilities of the Hospital. The 150 beds of the hospital are already overcrowded and at times up to 180 patients are accommodated. The Border Region Government has decided this year to help us increase our wards by another 40 beds. This will help to solve the question of room, but we still are laboring under the handicap of lacking medical supplies such as Urea-stibamine for the treatment of Kala-Azar, Salvarsan for the treatment of relapsing fever, the 'Sulfa' group of drugs against bacterial infections (the Sulfapyridine and other drugs of the same group contributed by Soviet, American, and English friends have been used up), different vaccines and sera (Scarlet fever, Whooping cough, Rabies, etc.), digitalis, glucose, cod liver oil, calcium lactate for children and TB cases. We lack an X-ray and motor, films, chemicals for blood analysis as well as apparatus necessary for bacteriological laboratory and animal inoculation work. Diagnosis is thus handicapped as well as treatment from lack of drugs. Since the local population is turning more and more to us for modern treatment, the shortage of supplies and equipment is making itself felt to an acute degree.

Lack of medical books, magazines, and periodicals are an acute problem not only preventing us from keeping up with the new progress made in the medical field but also hampering the work of training and education.

In spite of all these difficulties our whole working personnel is, however, confident. The members feel that they can carry on and improve their work successfully.

(J) Hospital Organization

- Superintendent (First & Second Superintendent)
 - (--Vegetable Farms
 - (--Mills
 - (--Bean curd Mills
 - (--Production Committee--(---Transportation Squad
 - (---Productive Cooperatives
 - (---South P'an Lung Farm
 - (--Club
 - (---Orderlies' Squad
 - (---Washing Squad
 - (---Construction Squad
 - (Managing Section--(---Water supply Squad
 - (---Cooks' Squad
 - (---Store Room
 - (--General Affairs Dept.--(---Store Room
 - (Property Office--Store Room
- (--Interns Class
 - (--Nursery
 - (--Nurses Training Class
 - (--Dressing Room
 - (Nurses (---Medical Store Room
 - (Dept. --(---Liquid Diet Kitchen
 - (---Clinic Record & Statistics Section
 - (---Patients Registration Section
 - (---Reception Room
 - (---Infectious Diseases Department
 - (--Medical Adminis- (---Pharmacy
 - trative Dept.--(---Laboratory
 - (---Pediatrics Department
 - (Infants Room
 - (---Obstetrics Department--(---(---Delivery Room
 - (---Dressing Room
 - (---Surgery & Gynecological--(---(---Operating Room
 - Department
 - (---TB Department--X-ray Room
 - (---Medical Department
 - (---Library
 - (---Administrative Office--(---(---Registration Department

The following report was brought
back to the U. S. by James Burke

Sept. 6, 1944

PLEASE DO NOT PUBLISH ANY OF THE MATERIAL CONTAINED
HEREIN WITHOUT CONSULTATION WITH CHINA AID COUNCIL
OF UNITED CHINA RELIEF

REPORT ON THE WORK OF THE BETHUNE I P H
SECTION NO. 3

A. History

When the main IPH moved to Man Ka Koa in the Spring of 1943 the old site at Liu Shu Tien was converted into a branch section called the Bethune IPH Section No. 3, to be used chiefly for internes from the Medical College. Fifty beds were left. The staff consists of one resident physician and one surgeon, a matron, twelve dressers and nurses, a dispenser, four sanitary officers, a clerk and two grooms. Doctors from the Medical College are responsible for the most part for this section of the IPH, which includes wards for medicines, surgery and eye diseases, an operating room, a laboratory and a dispensary.

B. Record of Work

Following the example set by Bethune in giving his own blood to the seriously wounded, the hospital staff in the course of one year has given 14 transfusions. Consultations among doctors on difficult cases are a general rule.

Common diseases met with are coughs, gastral troubles, colds, piles, appendicitis, nasal troubles and trachoma.

The table below gives records of patients treated for the year 1943.

<u>No. Entered</u>	<u>No. Cured</u>	<u>Per cent Cured</u>	<u>No. of Deaths</u>	<u>Percentage Deaths</u>	<u>No. Left</u>
564	483	86	12	2	69

Types of Surgical Cases

<u>Types of Anaesthetics Given</u>	<u>No. of Applications</u>	<u>Per cent</u>
Local	129	60
General	7	3.25
Spinal	68	31.6
Mixed	1	.5
None	10	4.65
TOTAL	215	100.

Table below shows the work of the Outpatient Department.

<u>Types of Sickness</u>	<u>No. of Patients</u>	<u>No. of Calls</u>
Medical	140	640
Surgical	80	440
Eye Disease	237	900
TOTAL	457	1,980

C. Rules and Practices

Patients are examined upon entrance by a doctor. After admittance they have to observe regulations. Doctors make two inspection rounds every day; nurses attend in seven-hour shifts. Operations are carried out twice every week, emergency cases excepted. Patients are bathed and changed once every week, have hair-cuts every half month; bedclothes are washed every week, and ward rooms are tidied daily.

The hospital is subordinated to the Medical College and provides specimens for their clinical and research work. Medical students make diagnoses and practice regularly in surgery.

Besides assistance from the College the hospital receives direct help and supervision from the main IPH. Medical debates, consultations among doctors and exchange in the use of instruments have been arranged. The main IPH issues monthly directions and checks upon our work. We send in periodical reports.

D. Funds

Chief source of funds is from the Shensi-Ningshia-Kansu Border Region Government. Part results from our own production efforts. Donations from the Chinese Defence League go half to the main IPH and the rest is distributed among the 3 branches of the IPH. The main IPH allotted \$300,000 to us this year, which solved many of our equipment problems.

Table 1 Income & Expenditure from Extraordinary Fund, 1943 (In N. C.)

<u>Item</u>	<u>Income</u>	<u>Exp.</u>	<u>Notes</u>
Total Donations from the U. S. (China Aid Council)	\$300,000	\$724,000	1. Regular funds are provided by the Border Govt. and are not included in this list. 2. A balance of \$424,000 deficit has been supplied by the Border Govt.
Buildings & Repairs		\$400,000	A disinfecting room for eye diseases, 18 dormitories, and repair of 40 ward rooms.

Equipment	\$119,000	Tables, filter vessels, spitoons
Living Allowances	\$120,000	Milk, eggs, fruit for serious cases; towels, shoes and stockings for the staff
Medical Supplies	85,000	Gauze, surgical cotton, alcohol

Table 2 Expenditure for 1943 (In Border Currency)

<u>Item</u>	<u>Sum</u>
Food Allowances	\$3,012,360.53
Office Expenses	666,666.66
Food & Clothing for Staff	1,000,000.00
	<u>3,666,666.66</u>
TOTAL	\$8,345,693.85

Table 3 Food Expenditure for Staff (per month per person)

<u>Item</u>	<u>Quantity</u>	<u>Exp.</u>
Vegetable	30 cattles	\$ 300
Oil	1	600
Salt	1	150
Coal for cooking	2	1,000
Rice	30	600
	<u>30</u>	<u>1,900</u>
TOTAL		\$4,850

Table 4 Food Exp. for Patients (Soft Food)

<u>Item</u>	<u>Quantity</u>	<u>Exp.</u>
Vegetable	30 cattles	\$ 600
Oil	1	600
Salt	1	120
Flour	15	3,000
Meat	4	2,000
Rice	21	1,400
Coal for cooking	60	1,200
TOTAL		<u>1,200</u>
		\$8,920

Table 5 Food Exp. for Patients (Liquid Food)

<u>Item</u>	<u>Quantity</u>	<u>Exp.</u>
Brown Sugar	1	\$ 3,800
Lotus Flour	1	1,500
Egg	60 pcs.	3,000
Chicken	3	1,500
Meat	2.3	1,300
Flour	4	1,400
Rice	1	300

Coal for cooking	60	\$1,200
Mixed Food		<u>1,200</u>
TOTAL		\$15,200

E. Plans for the Future

- (1) Addition of a maternity and children's department, internal medicine, convalescing ward and a kitchen.
- (2) Plans for self-support; home spinning and agriculture for staff members after office hours; manufacture of daily commodities, substitution of local products for imported drugs on an extended basis.
- (3) Preventive measures and sanitation service for the public: regular calls, injections and vaccinations.
- (4) Improvement of hospital grounds.

F. Conclusion

- (1) Despite various difficulties arising from limitations of size, equipment, and transport facilities, we have made progress in efficiency and compactness. We are collaborating in the training of technical workers and in research. In the year under review, wards laboratories and much new equipment have been added.
- (2) Owing to financial restrictions the number of staff members in every department has been reduced to a minimum, but every member possesses a high degree of initiative and a sense of responsibility. The unselfish devotion of Dr. Bethune has in particular provided inspiration and a spur to our efforts.
- (3) Defects and difficulties are still present which retard considerably the effectiveness of our work. The lack of X-ray equipment makes the treatment of many cases impossible. Deficiencies in instruments and medicines are acute. For instance we have only 914 ampoules of quinine, sulfanilamide, urbastibamine, antimony, digitalis and glucose, so that we have often to resort to the use of native medicinal herbs. We have only two or three stethoscopes, hyperdermic needles and thermometers in the whole hospital. From this fact alone the general condition of deprivation may be inferred. Although these hardships are occasionally lifted by purchase of very limited quantities from outside the Border Region area the close blockade exercised by the Central Government troops makes the infiltration of these articles extremely difficult.

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Sept. 6, 1944

PLEASE DO NOT PUBLISH ANY OF THE MATERIAL CONTAINED
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SOUTHEAST SHANSI I. P. H.
by Dr. Mueller

I arrived in Southeast Shansi in December 1939, just a month after the death of Dr. Bethune in the Wutaishan area. At that time there were two medical organizations there, one belonging to the headquarters of the Eighth Route-Army and one to the 129th Division. I began work in the Headquarters organization which included three branches of a field hospital, accommodating about 200 patients in each branch, or 600 patients altogether. Another hospital under the headquarters--the Military Station Hospital with about 300 beds--had just been handed over to the 129th Division which needed medical facilities. This was in preparation for the coming big battles.

I began work in both institutions, doing surgery and seeing the more difficult cases. This was possible because the hospitals were not very far apart. Then it was decided that I should help in the training of students of the Headquarters Medical School and for this purpose a small hospital of 10 beds was set up. But there were so many demands on us that we expanded it first into a hospital for wounded commanders, and then into a general hospital which became known as the Third Station Field Hospital, with myself in charge.

In March 1940 the Japanese launched a campaign and came so close we had to move. But we could not find a village with enough undamaged houses to accommodate us. Finally we managed to organize a Fourth Station Field Hospital. Shortly afterwards I was requested to join the 129th Division as Medical Adviser

needed
Orders were now issued to establish urgently field hospitals and to mobilize surgeons for the forthcoming 100 Regiments battle. I was ill at this time with malaria and intestinal trouble. We put up a surgical unit and I worked with it at the front, doing many operations. The abdominal cases, however, all died because we were always on the move.

The first part of the battle was fought along the Japanese lines of communication, behind their fortified lines. Operations were done by the unit at the front, and cases were sent to the rear immediately for a distance of 100 to 200 miles along devious paths to avoid enemy positions.

The second part of the battle took place after we had destroyed enemy communications and the object was now to capture their fortifications. Japanese counter-attacks also started at this time. The first one was pushed back but they launched new ones. At this time our Divisional hospital with about

300 beds had to take in over 800 wounded. The Division had then three hospitals--the Model Hospital--now the main Bethune International Peace Hospital--with 200 beds, the Auxiliary Hospital--with six stations of 200 beds each, the Military Station Hospital--with two stations, also of 200 beds each. Each of these units was overloaded with 500 to 800 men, and once the head hospital had over 1,000. So the guerrillas were mobilized to create new units.

On my way back to headquarters I did surgery in a number of stations; then came back to Divisional HQ and put up a new station there. This later became the first branch of the Southeast Shansi IPH, starting with 100 beds, which immediately had to accommodate 250 patients. I worked here until 1941.

At the end of 1940, the Eighth Route Army Headquarters and 129th Division Headquarters medical organizations were merged to form a general Medical Department for all the troops in the area, as well as all other areas of operations of the 129thD. I was recalled to headquarters and put in charge of a medical-surgical group that went from hospital to hospital taking care of cases the hospitals themselves could not deal with. As a result of the expansion during the 100 Regiments Battle the number of hospitals was now very high--ten hospitals of three stations each, each station with 100 to 200 beds in Southeast Shansi alone. (It must be explained here that the name of 129th Division does not really represent one division at all. The Central Government allotted only three divisional numbers to the Eighth Route Army and did not increase them when the army grew. As a result, the present "129D" has about 200,000 men operating not only in Southeast Shansi but also in South Hopei and in Shantung. Southeast Shansi alone has nine full brigades as well as many independent detachments. The militia are not counted in this figure.)

In the spring of 1942 the number of hospitals was cut down. The old wounded of the 100 Regiments Battle had for the most part recovered, and had no longer to be accommodated. The hospitals were therefore reduced first to eight, then to seven, still with three stations each. In place of the demobilized hospitals, homes for the disabled soldiers were set up. But later in the year, with new operations, the number of hospitals was once more increased to nine. The branches also increased in size, and one hospital now has four branches instead of three.

Now I will explain the place of the International Peace Hospital in the general organization. The original International Peace Hospital established by Dr. Bethune and Dr. Brown in 1938 at Liaohsien was captured by the Japanese almost immediately afterwards. Dr. Brown unfortunately did not understand the purpose of the hospital but followed the missionary hospital procedure at that time and refused to evacuate with the Eighth Route Army, giving the army only a small box of medicine. The equipment and main medicine stores were thus ~~completely~~ lost, and some of them are now being used by the enemy in their hospital in the town. The present International Peace Hospital, which inherited the name, but nothing else, from Dr. Brown's hospital in Liaohsien, was established entirely by the Eighth Route Army which financed it and equipped it as best it could.

The work and finally the name of the IPH were first taken over by the 129th Division Model Hospital. The expansion of the IPH took place through the selection of the best stations of different military hospitals and the inclusion of them in the system. In this way the Second Station of the

Auxiliary Hospital, the second station of the Model Hospital and a combined unit of several stations of the Field Hospital were included. Altogether the IPH units now accommodate 600 to 800 patients, but are capable of expansion during military operations to accommodate over 1,000.

The medical personnel situation in Southeast Shansi is very difficult. There are probably not ten doctors with outside diplomas, only two of them from foreign universities, the Japanese doctor, and myself. Training in the medical school is very elementary, as there are practically no qualified teachers. The people who do surgery at the front have learned by long practice, and have no theory. Abdominal surgery is practically impossible. Gunshot wounds of the extremities and various fractures are handled quite well, but it is seldom possible to do extensions as patients have to be moved so often. As a result leg fractures above the knee invariably result in crippling. We have no plaster of Paris as, unlike other bases, Southeast Shansi has no gypsum. We have no X-ray. Medical work is also extremely difficult. We have microscopes but no stains, and almost no laboratory work can be undertaken. There is much malaria but no quinine. Chinese drugs are used, but without much success. Peasants go out for us to buy medicines in the Japanese-held towns but the choice is limited. Morphine is easy to get because the Japanese distribute ampoules far and wide among the people to make addicts of them. Emetine in ampoules is fairly plentiful, but we can never be sure, despite the label, whether they contain emetine or morphine. There are plenty of useless patent medicines. Japanese salvarsan is sometimes obtainable, as are antipyrine, aspirin, phenacetin and pyramidon. Sulfa drugs cannot be bought. Quinine is difficult. With more money we could buy more. It is impossible to buy instruments fit for use.

We ourselves make a lot of Chinese drugs, some of which are useful. Besides this, from local raw materials, we can manufacture sodium bicarbonate, castor oil, magnesium oxide and a few other simple things. Our arsenal makes some surgical equipment but this rusts quickly and has to be discarded.

No outside drugs reached us from 1939 until the present.

Captured drugs are usually retained by the medical units of the troops which capture them, which have even less supplies than the main hospitals.

We have no gauze fordressings and have to use cloth or paper.

For disinfection we still have supplies of carbolic acid. Soap we produce ourselves.

In spite of this our hospitals do a great deal for the wounded. The most important work is the evacuation system which prevents the wounded from being captured and killed by the Japanese (I have never heard of a case of the Japanese not killing wounded who fall into their hands, but the puppet troops are a little better). When the Japanese are mopping up, branch hospitals accommodating 200 patients are sometimes divided into as many as thirty or forty evacuation groups hidden in huts and prepared places in the mountains, where the doctors and nurses visit them. Many of our doctors and nurses have been killed in the course of this work. The general system is to evacuate to hiding places where water and dried foods have been provided immediately before the

enemy's arrival. Patients who can walk are evacuated to the more or less distant rear. Those who cannot walk, stay close to the original location of the hospital, with doctors and nurses. It is obvious that such work cannot be done without the complete cooperation of the peasants, which is always forthcoming. Many peasants have been tortured or killed by the enemy in an effort to make them reveal where our wounded were, but I have never heard of one who has given them away.

Getting the wounded to hospitals is also very difficult. Except in attacks to capture Japanese strongholds, the fighting is scattered in small engagements. Each brigade fights small skirmishes once or twice a day, with 15 to 40 soldiers participating. These are fought in the immediate vicinity of Japanese posts or even behind them. The peasants are organized to take the wounded back in relays, after the army stretcher bearers have picked them up on the actual battlefield and delivered them to the first peasant post. I was put in charge of an investigation of this work and found that it was done extremely well. There are very few cases of one of our wounded being captured by the enemy. Removal from the battlefield is done in the course of the actual fighting, often by young boy nurses of 15-19 years old. The record is remarkable because these engagements are mobile and of very short duration, often in the shape of hit and run attacks. In bigger engagements the medical department of the brigade organizes relays and puts up nursing stations along the route of evacuation. In major battles the divisional headquarters takes charge of the organization directly.

In the absence of facilities for treatment, very great stress is laid on hygiene and sanitation. One problem we have not been able to lick, however, is lice. Whenever our troops stop anywhere for any length of time, lice are killed by boiling, but they always come back. We have had no big epidemics but there are sporadic outbreaks of typhoid, typhus, malaria, relapsing fever, amoebic and bacillary dysentery. There is little kala azar. Wounds are almost invariably infected when they reach the hospital. Because our troops respond very quickly to teaching, it would probably be possible to cut down the incidence of infection to a very low figure if we could provide fighters with individual sulfanilamide packets such as American troops carry.

The percentage of deaths in hospital was formerly about 10 percent of those entering, whether sick or wounded. This was a terrifically high percentage when it is considered that most of the heavily wounded die in transit. But we have cut the death rate down to 3 per cent, and even, in some hospitals, to 1 per cent. We cannot now cut down the death rate due to lack of facilities for treatment. One can get an idea of this condition from the fact that hospitals with 200 or more patients have sometimes worked for months without a single doctor. The most horrible story is one of a guerilla area which grew up without connections with our main base and organized a hospital without any trained medical personnel. In the course of one summer, 500 of the 800 wounded in this hospital died of an epidemic of dysentery which the people in charge did not know how to handle. But now these things are ancient history. We have fought, and are fighting, against deaths due to inefficiency of staff, bad nutrition and so forth. The personnel we have trained is now very numerous and they know and apply the elements of sanitation and good management. Our doctors do what they can under better conditions than formerly.

Patients get three meals a day in summer and two in winter. Standard diets are fixed for all hospitals. Patients requiring it are given special nutrition. The basic food is millet or corn, with occasional wheat. Supplementary dishes are usually turnips or potatoes, and in good times we can give patients 1/2 catty to a catty of meat a month. The daily ration includes 1/2 ounce of oil and 1/3 ounce of salt. Very few green vegetables are grown in the region, as there is a shortage of soil in this mountainous area and every square foot is put under grain. The grain ration is about 1 1/2 lbs., but last year we had a famine and we could issue only 1/2 lb. of grain and had to make up the rest by cooking tree leaves.

Our army in Southeast Shansi cannot cultivate its own crops, as the army around Yen-an does, one reason being there is generally not enough land. Then the army is constantly moving and fighting, so that even where land is available, the troops cannot stay in one place long enough to grow anything, and almost every time this was attempted we lost our crop. So the system adopted here is for the army and militia to help the people cultivate their land wherever they are, so that there will be more for both people and army.

One remarkable development of the past years is the growth of the People's Militia which now does more and more military work and fights just as often as the regular army. This is reflected in the growing number of militia wounded. Our hospitals treat militia and peasants wounded in exactly the same way as regular wounded. Sick peasants are also treated free, but they must bring their own food as our hospitals could not possibly feed everyone under the very difficult conditions here.

The most urgent needs now are sulfa drugs, quinine and money. We must have instruments and an X-ray. Our personnel situation is now much improved. The Medical School is better and turns out more people. Untrained medical personnel is sent back for retraining. With much more equipment we will of course need more personnel who can utilize it. But this is not the immediate problem, as it will be a long time before we have enough drugs and equipment for the existing personnel to use. It must also be kept in mind that there are certain types of work that, in circumstances of mobile and guerilla warfare, we cannot now undertake. Most peace surgery falls into this category. For instance, we have many hernias but I did not dare operate on them because of the necessity of moving patients at a moment's notice. Several times I performed peace operations of a simple nature and the patients were doing well when a mopping up campaign caught them and they were killed by the enemy because they could not get away fast enough. Several nurses accompanying these patients were also killed, one by having his head split open with a grass cutter.

These conditions were at their worst in 1942 during the great enemy mopping up campaigns. Non-military conditions were worst in 1943 when we had famine. In that year, however, there was great progress militarily, the base increasing its area almost twice. This year's news is that these gains are being consolidated and the army has increased its numbers greatly. Two new hospitals have been established since my departure to take care of this increase.

Last year the locusts ate the crop and we had to eat the locusts to keep alive. This year there has already been one good crop of wheat, and the situation will be much better. Also a greater number of troops and militia are fighting to prevent the burning and looting of crops by the enemy which was as great a factor as natural calamities in causing starvation.

7/6/44