

# The Nurses' Contribution to American Victory

## *Facts and Figures from Pearl Harbor to V-J Day*

*The integration of the nursing profession in the postwar era with the broad American pattern, of which it is so important a part, demands the co-operation of every American nurse. The article presented here—which lays the foundation for other articles to follow in later issues of the magazine—tells objectively and realistically what nurses gave to American victory and evaluates the present status of the nursing profession in America.*

*The articles that follow will attempt to appraise, through use of fact-finding and public opinion measurement technics, the existing relationships between the nursing profession and the great social forces that make up America—the relationships of nursing with medicine, public health, government, community services, hospitals, public opinion and other important fields of our society. They will attempt to interpret these relationships and will make recommendations, that individual nurses or nursing societies may use to produce better adjustment.*

*These articles will be prepared with the co-operation of Edward L. Bernays, nationally known for his work in the field of health public relations. Your comments are cordially invited.*—THE EDITORS.

V-J DAY has come and gone. Following V-E Day, victory came much more rapidly than anticipated. It was both a great surprise and a great relief—a shock difficult to evaluate fully in terms of present and future consequences.

This was true for all fields of human endeavor. The nursing profession is outstanding among those that will be vitally affected by the victorious end of the war. It is fitting and proper at this time to re-examine facts and figures concerning the nursing profession in the war effort at home and abroad. On the basis of this re-examination, we can more effectively plot the course for future constructive action.

### RÔLE NURSES HAVE PLAYED IN THE WAR

Over 100,000 nurses—103,869—42.9 per cent of the estimated total of over 242,500 active professional nurses in the United States, have volunteered and have been certified to the Army and Navy for military service. Of those certified, 76,003, 31.3 per cent of all active professional nurses, have served with the armed forces. Approximately 27 per cent of all active professional nurses in this country, 65,216, were on duty with the armed services as of June 30, 1945.<sup>1</sup>

That the record shows fewer nurses now serving than volunteered and were originally certified is due to the fact that some were released for physical disability, marriage, and other reasons.

There has been a larger number of war-service volunteers from nursing than from any other American profession.

The facts and figures reveal the tremendous burden borne by the nursing profession in the care of both military and civilian sick. These outline the rôle which nurses have played in the war and on the home front and outline recent developments in planning for postwar America.

<sup>1</sup> The facts and figures in this article are from *Facts About Nursing—1945*, yearbook of the American Nurses' Association, just published. *Facts About Nursing* is issued by the Nursing Information Bureau of the ANA co-operating with the National League of Nursing Education and the National Organization for Public Health Nursing.

Army and Navy nurses are still on duty on land, sea, and in the skies. They are serving on hospital ships, trains, and planes. They have come from all fields of nursing: 64 per cent from institutions, hospitals, and the like; 17 per cent from private duty; 5 per cent from public health; 3 per cent from the comparatively new field of industrial nursing; and the remainder from scattered sources. On June 30, 1944, they were stationed at 1,329 installations in continental United States, and in all the theaters of operation. While, in 1941, there were relatively few nurses abroad for the United States government, early in this current year approximately 35,000 nurses were believed to be on military duty outside the borders of continental America. Throughout this war, wherever there are and have been any considerable number of American soldiers, sailors, and Marines, nurses have been, and are now, found.

Casualty figures reinforce the indisputable contributions of nurses to the war. Over 300,000 of the Army's 500,000 wounded (as of June 30, 1945) were aided by nurses in their return to active service.

In *That Men Might Live*, the story of the medical service in the ETO, it is said:

Sixty hours after landing on D plus 2, the 51st Field Hospital had handled more than 1,000 casualties. This unit was one of the first field hospitals ashore and was followed closely by the 13th, 42nd, 45th, and 47th. The 128th and 91st were the first evacuation hospitals in France. It was a woman's war, too, because nurses came with them. This was only D plus 4.

For such devotion to duty in the last four years, 964 Army and Navy nurses have already received awards and citations. Among these are:

#### Army Nurse Corps

- 1 Distinguished Service Medal
- 2 Distinguished Flying Crosses (one of which was posthumous)
- 4 Silver Stars
- 12 Legion of Merit
- 5 Soldiers Medals
- 332 Bronze Stars (one with an Oak Leaf Cluster)
- 354 Air Medals
- 103 Citations

60 Purple Hearts (15 posthumous and one with an Oak Leaf Cluster)

Navy Nurse Corps

1 Legion of Merit

13 Bronze Star Medals

12 Presidential Unit Citations

42 Unit Citations

21 Individual Commendations

Significantly, these achievements are not only consistent with past records, but surpass them. During the Civil War, 3,214 nurses served—as did 1,563 graduate nurses in the Spanish-American War. In World War I there were 23,868 nurses of whom 10,400 saw overseas service in the Army alone.

#### ACTIVITIES AT HOME

On the home front, in World War II, nurses have played an equally important part. This, in spite of the magnitude of the civilian nursing load. The daily average hospital census for 1940 was 1,026,171; by 1944, it had risen to 1,299,474. The number of babies born in the first two years of the war increased from 2,513,427 in 1941, to 2,934,860 in 1943; yet, in this same year (1943), the infant death rate reached a low of 40.4 per 1,000 for the country as a whole.

At the same time, between 1941 and 1944, general staff nurses in hospitals decreased by 42.6 per cent: 112,842 of these nurses were reported by the American Medical Association in 1941, while—in 1944—the figure dropped to 64,741.

To help relieve this shortage in the present national emergency, older inactive nurses returned to active practice: 6.9 per cent more nurses over fifty years of age were listed with nurses professional registries in 1944 than in 1942. Since relatively few of these nurses took refresher courses, only a small part of the federal funds allocated for the purpose was so used.

#### AID HOME NURSING

The home nursing program of the American Red Cross, designed to safeguard the health of families and greatly expanded in wartime, called for many hours of teaching by registered nurses. This was a full-time job for many of the R.N. instructors employed by the Red Cross, but many nurses also devoted "off duty" time to such teaching. From classes in home nursing taught by registered nurses a total of 490,789 housewives, mothers, daughters, and even fathers, have been graduated in the period 1943-45.

Other thousands of patriotic citizens helped to carry the burden by assisting nurses, as paid and voluntary auxiliary workers, in hospitals and out, after the day's work was completed in factory, office, store, or business. In addition, the 181,477 volunteer nurse's aides taught by the American Red Cross since Pearl Harbor have made an ex-

ceedingly valuable contribution to the care of patients, chiefly in civilian hospitals. All these volunteer aides have enabled professional nurses to be released for more pressing, highly skilled work, and have also lightened the burden on physicians.

To aid victims of the 70 major catastrophes suffered in the United States in the past year, 2,537 nurses gave 31,404 hours of service to the Red Cross. They assisted in the usual extra-war disasters, public transportation accidents, epidemics, explosions, fires, floods, hurricanes and tornadoes, et cetera.

In addition 499 registered nurses served in Red Cross blood donor centers. Through these centers, 12,922,206 pints of blood were collected through May 1945.

During this period also, efforts were made to distribute the limited number of available private duty nurses to civilian patients needing special services. Experienced, professional nurses undertook a successful campaign to help discourage unnecessary employment of private duty nurses, so that private duty nursing service might be conserved for patients who were acutely ill and whose condition required special nursing.

Those nurses remaining at home because of over-age or other necessity played a less dramatic rôle, perhaps, than those in the services: in hospitals—private and public; helping with the blood banks; in home nursing; disaster work; public health; and in industry. But in spite of the serious wartime depletion of the ranks of professional nurses, many of these women—with loyal civilian assistance—worked valiantly and steadily in their attempts to maintain American civilian health standards.

#### SOCIAL LEADERSHIP AND PROFESSIONAL PLANNING

As for the work of organized leadership within the profession, advances and difficulties were both the result of, or directly affected by, the general wartime situation. Under these conditions it is a tribute to the professional nursing organizations, and the individual nurses themselves, that socially progressive developments between 1941 and 1945 are predominant. The nursing profession, the record shows, has rendered invaluable personal service to men and women at home and abroad. It has not been unmindful of its social responsibilities. Important changes have been accomplished in salary standards; in education and social service—including race relations—and in establishing rapport with key government agencies.

The Procurement and Assignment Service of the War Manpower Commission played an important part in stabilizing nursing services throughout the country. Nursing was declared an essential service. Directly, the classification of 283,895 nurses by the Procurement and Assignment Service committees made it possible to apply the principle of selective

service to the withdrawal of nurses for military service and to safeguard essential civilian nursing services. By establishing minimum standards for civilian nursing services, a more equitable distribution of professional nurses was effected than would otherwise have been possible. This Service disclosed the areas of critical shortages and urgent need. Through surveys, it helped to restore nursing to comparative normalcy in these places, and also helped in recruiting volunteers for the armed forces.

Wartime efforts of the several national nursing organizations, and the federal agencies concerned with nursing service, have been co-ordinated effectively at home under the aegis of the National Nursing Council for War Service. Abroad, UNRRA—in which 45 nations participate—has now 136 American nurses on its staff, in the difficult task of providing for the ill, homeless, and starving in Asia, Africa, and Europe. Other reports indicate that in 15 Central and South American countries, U. S. civilian nurses are working to improve standards of nursing and nurse-education.

#### IMPROVED SALARY STANDARDS

Although there is still a long way to go to put nursing-status on economic parity with other professions, effect of the war has been to give one recognition of the need for increases in nurses' salaries, in accord with the rise in the cost of living—28.6 per cent, as an average, since August 1939 in cities of the United States. Seven states—California, Indiana, the District of Columbia, Washington, New York, Ohio, Massachusetts—have established and improved minimum salary schedules for general staff nurses.

Although the greatest salary increases have occurred in the military services, and in civilian hospitals where the shortage of nurses was most acute, a description of national salary ranges for 1942, as against 1945, suggests the changes:

	1942	1945
Non-federal institutional nursing . . . . .	\$ 825-\$5,000	\$1,600-\$6,000
Nursing education . . . . .	825- 6,000	1,380- 8,400
Army and Navy Nurse Corps . . . . .	1,080- 4,300	1,800- 4,000 plus allowances, et cetera
Public health nursing . . .	1,200- 7,500	1,600- 7,500

Good professional standards in nursing education were maintained against great difficulties. Aware of the needs of the country for additional military and civilian nurses, closer relations were established between the federal government and nursing organizations and leadership. In this the Division of Nurse Education of the U. S. Public Health Service, organized after passage of the Bolton Act (1943), co-operated wholeheartedly with the professional nursing organizations.

Since July 1941, in fact, the federal government has appropriated \$176,422,295 for nursing education. Of this, federal funds to the extent of \$6,852,784 were made available to graduate nurses. In 1944-45 alone, 12,321 of these nurses took post-graduate courses—including 3,498 who enrolled for courses in teaching and administration, and 2,458 who enrolled in public health nursing programs of study. Of the \$169,569,510 appropriated for basic programs since July 1941, the Cadet Nurse Corps has received \$165,422,120. Since its organization in 1943, this Corps has been tremendously successful in replenishing the depleted number of nurses at home and abroad.

#### EDUCATIONAL STATUS

The number of schools of nursing remained, to all intents, constant. But many essential faculty positions remained vacant because they could not be filled. These unfilled positions included:

14%	science instructors
10%	nursing arts instructors
27%	clinical instructors
11%	head nurses and assistants

Moreover, although the proportion of unfilled positions is still not as great as in 1944, many of the faculty posts are being filled by inadequately prepared personnel.

Nevertheless, there has been an advance in the number of undergraduate programs leading to a degree. Only 76 nursing schools offered such programs in 1940, as against 138, now in 1945. The enrolment in schools of nursing increased 31.7 per cent—87,588 to 126,576, from 1941 to 1945. Close to 9,000 more students, in fact, were graduated from nursing schools in 1945 than in 1941.

The nursing profession has accepted responsibility for educational and administrative leadership in its field. In addition to trying to get legislative support in defining nursing standards, it has attempted to improve the opportunities for Negro nurses. There has been definite improvement in the field of racial relationships within the profession.

In 1934, for instance, the Boston City, Cleveland City, and Battle Creek City Hospital Schools of Nursing were among the few admitting Negro students as well as white. In 1941, 29 schools admitted Negro students; in 1943, 46—with 14 of these open to both Negro and white. Although it is still a very small percentage of the total of approximately 1,200 schools, by 1945 the number of schools open to Negro students has increased to 64. Since 1943 the number opened to mixed student bodies has almost tripled.

Mindful of its interesting and eventful record in domestic and military activities, the National Nursing Planning Committee of the National Nursing Council for War Service has correlated

studies on the best ways and means to ensure continued development and progress in the difficult period of reconversion and in times to come.

#### POSTWAR CONSIDERATIONS

Key major questions for postwar attention deal with considerations by leadership and co-operative social forces: (a) of an evaluation of the educational soundness and lasting value of the methods which have been found expedient in preparing nurses more rapidly for wartime nursing service; (b) of whether or not there is threat to the security of the graduate registered nurse in recognizing a need for both professional and vocational nurses; (c) of the justification of federal aid for schools of nursing—except as a war emergency measure; (d) of the re-employment rights of veteran nurses.

The readjustment problems of individual nurses—especially those who have had foreign military service—are already receiving close attention. Since relatively few may wish to return to their

former positions, the G. I. Bill of Rights is expected to help fill their needs for better psychological orientation and educational equipment for their tasks. Through postgraduate study made possible by the Bill, and through other sources of scholarship aid, many nurses will undoubtedly seek opportunity to acquire new knowledge and to perfect their skills needed for peacetime service. Moreover, some graduates of homefront accelerated courses, taught under the exigencies of wartime pressures, may not feel secure in even the basic skills. They will wish to reorient themselves, along with the veterans, for civilian services.

War stimulates dynamic interest in community and personal health. The evidence that professional nurses, particularly, are now working on both fronts to improve postwar services—and that there is the promise of overall development in readjustment of individuals, job-ratios for the group, and study of nursing needs and resources—convincingly points to a broad future for nursing.

## The Chinese Blood Bank in Kunming

By JEAN CHUM LIU, R.N.

THE CHINESE BLOOD BANK was organized with a staff of eight: two nurses, the director, a technician, bacteriologist, manager and secretary, receptionist, and engineer. Ruth Derr, a China-born American nurse, and I made up the nursing staff. When we first put on our Chinese Army uniforms—we were in the United States then—we visited U. S. Army camps and traveled on a U. S. transport, feeling really important. Everybody seemed to know we were going to China, though we could not say that we knew. Ours would be the first blood bank ever to operate in China, under the sponsorship of the Chinese Army.

We left January 15 of last year and reached Bombay, India, on April 26; then on to Calcutta, from where we flew to Kunming, arriving there in May.

Ninety-nine days on the ocean is a long time, but we enjoyed it very much. Every place we stopped, I made a point of visiting the Army hospitals, especially the operating rooms. On the ship I found myself helping with an operation and setting up the operating room. Quite often I helped in the dispensary. I never gave so many injections before—five hundred in a morning. I also taught Chinese to a class of twenty-four United States officers. That helped me to forget myself and pass the time pleasantly.

The blood bank in Kunming opened in July

1944, is located in a nice new building. Half of it is used by the blood bank and the other half is the Chinese Army Medical Administration headquarters. The bank is divided into several sections: office, the donor clinic, laboratory, pooling, drying, and engineering. There is one room for refrigerators for storing blood, one room for handling the liquid plasma, and one machine shop. Recently we built an engine-room and an autoclaving room outside the building.

The Nursing Department takes care of the donor's clinic and the mobile units. At the present time, we have four graduate nurses, two nurse's aides, and two soldiers to help. We have two beds in one donor-room. There are two preparation rooms and one cleaning-room. Sometimes we have to prepare 350 bottles a day with only one small autoclave. At first, when we were going on a trip, we autoclaved till 1:00 A.M. the night before, but now we are improving.

We have no running water in the building. There is a well outside, but we cannot use it because the water is so hard and we cannot get the bottles clean. From an outside hydrant, the city water runs slowly from 8:00 A.M. to noon and 2:00 P.M. to 6:00 P.M. Three groups of people use that one stream of water, the blood bank, the Army Medical Administration, and a group of seventy Chinese Army men.

Each bottle has to be rinsed five times before soaping and five times after soaping and another five times after rinsing with sulphuric acid. Both plasma and donor bottles, two hundred a day, are

Mrs. Liu (Shanghai Sanitarium and Hospital School of Nursing) was trained for her work with the Chinese blood bank in New York City. *Journal* readers will remember her story of the siege of Hankow, published in the October 1943 issue, page 927.