

By EUGENE LEVINE, M.P.A., MAURICE E. ODOROFF, M.A., MARGARET G. ARNSTEIN, R.N., M.P.H., and JOHN W. CRONIN, M.D.

THE OPENING of new hospitals in communities which formerly had none is attracting many nurses back to their profession. In 388 small communities that have built new hospitals since 1946 under the Hospital Survey and Construction Program, 2 of every 5 professional nurses employed on the staffs have come

Mr. Levine is statistical analyst in the Division of Nursing Resources, Public Health Service, and Miss Arnstein is chief of the division. Mr. Odoroff is chief of the Evaluation and Reports Branch in the Service's Division of Hospital Facilities, and Dr. Cronin is chief of the division. back to work from "retirement." This is one of the findings uncovered in a survey of nurses employed in these hospitals.

The survey was undertaken because the existing shortage of nurses raised questions about the sources of nurse supply for new hospitals. There were some indications that nurses were attracted back to their profession because hospitals were built where none existed before.

Two years ago in Texas, the hospital survey and construction division of the Texas State Department of Health found that 1 of 5 professional nurses employed in Hill-Burton hospitals in the State had been inactive before their employment (1). This finding raised the question of what was happening on a nationwide

356 Public Health Reports

basis. The Public Health Service, through the Division of Nursing Resources and the Division of Hospital Facilities, designed a study to answer the following questions:

Are the new hospitals recruiting many members of their nursing staffs out of retirement?

Why do nurses take jobs in these hospitals? How do nurses find out about the vacancies? How well staffed are the nursing services?

### How the PHS Study Was Conducted

Questionnaires were sent in May 1954 to 516 hospitals—388 new Hill-Burton hospitals and 128 hospitals established before the Hill-Burton program began. (The Hospital Survey and Construction Act was passed in 1946, Public Law 725, 79th Cong., 2d Sess.; and the first hospital was opened on October 15, 1948.) The latter hospitals, similar in location, size, and type to the Hill-Burton group, served as a control group and formed a basis for evaluating findings from the new hospitals.

The individual nurses filled out the questionnaires, and the hospitals provided data on bed capacity, patient census, staffing, and vacancies. One or more forms were received from 403 hospitals in 36 States.

Returns by type of hospital were as follows:

	All hos-		
	pitals	New	Older
Number of hospitals where nurses received forms	516	388	128
Number of hospitals re- turning 1 or more forms. Percentage returns	403 78. 1	322 83. 0	81 63. 3

A total of 2,311 professional nurses in the new hospitals and 634 in the older group participated in this study. These participants represent two-thirds of the nurse staff of the new group and three-fifths of the nurse staff of the older group. The results of this study are considered reliable because of the large proportion of hospitals and nurses who responded.

## **Staffing Patterns**

Three characteristics distinguish the 403 hospitals that participated in the survey:

# Staffing the New Hospital

This recent study of recruitment of 2,311 professional nurses in new Hill-Burton rural hospitals and a control group of 634 nurses in 81 hospitals built before the Hospital Survey and Construction Program began in 1948 reveals the following facts: Two out of every five nurses employed in rural hospitals (old and new) were previously housewives and thus retired from the nursing profession. New rural hospitals, by creating employment opportunities where none existed before, are attracting back to work many nurses who probably would have remained permanently inactive professionally. The new Hill-Burton hospitals have fewer professional nurses per patient than the average hospital in the United States. However, they have so many more nonprofessional nurses that the total number of nurses per patient is higher.

Fifteen percent of the professional nurse positions in the new hospitals are vacant. There is some evidence in the survey that these hospitals have a fairly high turnover rate—although probably no higher than other hospitals.

Many nurses who previously were working in hospitals in other localities came to work in new hospitals because they could return to their home towns to live. Most inactive nurses returned to work in order to help relieve the nursing shortage or to assist with the financial upkeep of their families. The best way to recruit new nursing personnel is by personal contact. Hospitals can help solve staffing problems by keeping good relations with their own employees and with the public.

They are small—97 percent of both these new and older hospitals have less than 100 beds (table 1) compared with 66 percent in the country as a whole.

They are the only hospital facilities serving areas where they are located.

They are located in towns serving semirural and rural areas—the majority in towns of less than 5,000 people (table 1).

Because of these characteristics, the problems of recruiting nurses in these hospitals are different from those in large cities. Surveys of nursing needs and resources in various States during the last few years have indicated that

Table 1. Size of 403 hospitals in the study and size of communities in which they are located

Size of hospitals and community		ber of oitals	Percent of hospitals		
	New	Older	New	Older	
Total322		81	100. 0	100. 0	
Number of beds: Under 25	96 140 73 13	13 36 30 2	29. 8 43. 5 22. 7 4. 0	16. 0 44. 5 37. 0 2. 5	
Total	322	81	100. 0	100. 0	
Population: <sup>1</sup> Under 5,000 5,000-9,999 10,000-24,999 25,000-49,999 50, 000 and over	255 47 17 2 1	43 29 9	79. 2 14. 6 5. 3 . 6 . 3	53. 1 35. 8 11. 1	

<sup>&</sup>lt;sup>1</sup>According to 1950 census of population.

hospitals in small towns often have difficulties in attracting the personnel they need, primarily because the available social and cultural opportunities are limited.

The study shows the new Hill-Burton hospitals have fewer professional nurses for every 100 patients than the average hospital in the country—but the total number of nursing personnel is actually higher. (It was not the purpose of the study, nor is it possible from these data, to draw any conclusions on the adequacy of nursing care.) Comparative figures for the number of nursing personnel giving direct care per 100 patients follow:

	All nursing person- nel	Profes- sional nurses	Other nursing person- nel
All general hospitals,			
United States (2)	74	34	40
New hospitals in survey	<b>7</b> 9	24	55
Older hospitals in survey.	67	26	41

Although the Hill-Burton hospitals have more nursing personnel than the national average, they probably are not better staffed than hospitals as a whole. Where staffing of professional nurses is low, a higher number of other nursing personnel—practical nurses, aides, orderlies—is needed because these auxiliary per-

sonnel do not substitute for professional nurses on a 1 to 1 basis. Also, small hospitals need a higher ratio of nurses to patients than large hospitals in order to provide the around the clock, 7 days a week nursing service required in all hospitals.

For every 100 patients, the new hospitals have 24 professional nurses and 55 practical nurses, aides, and other members of their nursing staffs; the older hospitals have 26 professional nurses and 41 other members of their nursing staffs.

The higher personnel-to-patient ratios in the Hill-Burton hospitals are partially offset by a shorter workweek than in the older hospitals. The trend in the new hospitals is toward a workweek of 44 hours or less. In the older hospitals the average workweek is closer to 48 hours. Adjustment for the workweek differential results in an average figure of 4.6 daily hours of nursing care per patient in Hill-Burton hospitals and 4.2 hours in the control hospitals and, also, a lower ratio of professional to nonprofessional nurses in the Hill-Burton hospitals. Although the new hospitals have more nursing personnel, they are not much better staffed than the older hospitals since the patients receive only a little more care. The vacancy rate in professional nurse positions in the two groups of hospitals is almost identical, about 15 percent.

Tenure is one of the problems in keeping a hospital staffed with nurses. The average number of years the Hill-Burton hospitals have been in operation is about 3 (the oldest hospitals in this group opened at the end of 1948). The average number of years the 2,311 nurses have been working in these hospitals is 1.3. Allowing at least 6 months for new hospitals to come up to full staffing, there is still evidence of considerable turnover. In the older hospitals the turnover is high, too. The average number of years of employment for nurses is 2.8 and the period of years these hospitals have been in operation ranges from 6 to 60.

## **Previous Employment**

Two of every five nurses employed in the Hill-Burton hospitals were previously housewives and thus "retired" from the profession (table 2). Similarly, the older hospitals recruited the same proportion of their nursing staffs out of

Table 2. Previous status of professional nurses

Previous status	Number	of nurses	Percent of nurses		
	New hospitals	Older hospitals	New hospitals	Older hospitals	
Total	2, 311	634	100. 0	100. 0	
Inactive nurse_ Student undergraduate_ Student graduate_ Hospital nurse_ Other nursing ¹_ Unknown	22 866	229 113 5 190 94 3	37. 8 11. 8 1. 0 37. 4 11. 8	36. 1 17. 8 . 8 30. 0 14. 8 . 5	

<sup>&</sup>lt;sup>1</sup> Private duty, office, public health, and industrial nursing.

retirement. These nurses did not retire because of age. They retired usually because of home and family responsibilities. Their average age is 35, the same as the average age of all active nurses in the United States (3).

In addition to the supply of nurses who are already employed elsewhere, new hospitals have two major sources of nurse supply: the nurses graduating from schools of nursing, and those willing to return to work from temporary retirement. Both sources are limited. We know that there are only 25,000 new graduates each year (3), barely enough to meet the annual replacement needs in the 7,000 hospitals in the country in addition to other fields of nursing. The other source, inactive nurses, is unpredictable, because the borderline between temporary and permanent retirement for some nurses is slight. Factors causing a nurse to return to active practice are mostly beyond the control of those concerned with relieving the nursing shortage. Hospitals can encourage nurses to come back to the active practice of the nursing profession by providing good opportunities for service, including suitable hours and convenient location.

A new hospital in a rural area creates job opportunities close to home and offers attractive employment to many inactive nurses who otherwise would probably remain inactive professionally. The survey showed that nearly 90 percent of the nurses in both the Hill-Burton and the older hospitals who were inactive before accepting their present jobs had lived, at some time in their lives, in the areas where they are now employed. Most of them were living in these areas

at the time they accepted their present jobs. Since the new hospitals are the only hospital facilities in the areas, this finding raises the question whether inactive nurses would have returned to work without the existence of the new job opportunities. Most of the nurses formerly inactive are married, and probably could not migrate easily to other areas to seek employment.

On the other hand, among the nurses who were active in nursing before taking their present jobs, there are more single than married nurses. It probably was easier for them to move from one area to another to change jobs. Nearly two-thirds of the nurses in Hill-Burton hospitals who previously worked in other hospitals which, of course, were in other localities—were actually returning to their own home towns when they accepted their present jobs. They might have preferred to go to work in their home towns earlier, when first graduating from schools of nursing, but could not do so until there were opportunities. After the new hospitals were built they could return to home communities to nurse.

One nurse said on the questionnaire, "My home is here, and when this hospital opened I found it more convenient to work here than where I was formerly employed."

#### **Reasons for Accepting Present Jobs**

The reasons the nurses gave for taking their present jobs varied considerably according to their previous employment (table 3). Those who were formerly inactive had various motiva-

Table 3. The reasons why professional nurses in new hospitals accepted their jobs

Reason for accepting present job <sup>1</sup>	Total	Inac- tive nurse	Under- gradu- ate stu- dent	Grad- uate stu- dent	Hos- pital nurse	Other nurse	Un- known
	Number of nurses						
Total	2, 311	873	273	22	866	273	4
Hospital is close to home For economic advantages To help relieve shortage To continue nursing career Prefer working in a general hospital Good working conditions in hospital Husband transferred to area To gain experience in small hospital To work in a new hospital Only hospital in community Other reasons Unknown reasons	17	187 180 206 179 16 26 12 11 26 7	184 14 2 1 12 10 4 24 7 3	12 1 	341 88 30 9 53 86 60 45 28 4 82 40	96 21 26 2 71 17 18 6 5 2 2	1 2
	Percentage of nurses						
_ Total	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	(2)
Hospital is close to home For economic advantages To help relieve shortage To continue nursing career Prefer working in a general hospital Good working conditions in hospital Husband transferred to area To gain experience in small hospital To work in a new hospital Only hospital in community Other reasons Unknown reasons	13. 2 11. 5 8. 3 6. 6 6. 1 4. 1 3. 8 2. 9 . 8 3. 6	21. 4 20. 6 23. 6 20. 5 1. 8 3. 0 1. 4 1. 3 3. 0	1. 5 8. 8 2. 6 1. 1		39. 4 10. 2 3. 4 1. 0 6. 1 10. 0 6. 9 5. 2 3. 5 9. 5 4. 6	35. 2 7. 7 9. 5 7. 26. 0 6. 2 6. 6 2. 2 1. 9 . 7 2. 6	

 $<sup>^{\</sup>rm 1}$  Where more than one reason was given, the first reason stated was tabulated. ^2 Numbers too small to compute percentages.

Table 4. How professional nurses in new hospitals learned about vacancies in the hospital where now employed

New hos- pitals	Older hos- pitals	New hos- pitals	Older hos- pitals
2, 311	634	100. 0	100. (
1, 136 523 377 93 13 7	391 116 81 4 7 1	49. 2 22. 6 16. 3 4. 0 6 . 3 4. 2	61. 7 18. 3 12. 6 1. 1
	2, 311 1, 136 523 377 93 13	2, 311 634  1, 136 391 523 116 377 81 93 4 13 7 7 1 98 10	2, 311 634 100. 0  1, 136 391 49. 2 523 116 22. 6 377 81 16. 3 93 4 4. 0 13 7 . 6 7 1 . 3 98 10 4. 2

tions; the most important was the desire to help relieve the nursing shortage.

"The hospital needed nurses, and I wished to nurse," said one.

Economic reasons and the desire to continue their careers were also important. "When the hospital was constructed here, I was happy to get back into the nursing profession," said another.

"The satisfaction derived from the work as well as financial help were important," one nurse wrote.

The newness of the hospital attracted others: "After being inactive for a number of years—this new, modern, convenient building was a big temptation."

Nine out of ten of the formerly inactive nurses had lived, at some time in their lives, in the areas where they were now employed, and most of them were living in these areas just before accepting their present work. The opening of the new Hill-Burton hospitals brought them job opportunities. They did not accept their present jobs to be close to home—they were already home. Most of the nurses who were active before accepting present jobs came to the new hospitals from other areas although 7 of every 10 had lived at some time in the past in the areas where they are now employed. Being accepted for their present jobs enabled them to return to their home towns.

"This position made it possible to be near my parents after being away 10 years in college, training, work," said a nurse formerly employed in another hospital.

For the nurses who had been attending school, more than for any of the others in the survey, the hospital's nearness to their home communities was the most important reason they gave for accepting present jobs. This reflects the fact that some nurses who left home to obtain their nursing education returned when there were suitable job opportunities available. For nurses previously in school, the desire to broaden their educational background by gaining experience in a small hospital ranked second among the reasons for accepting jobs in new hospitals.

According to replies to the questionnaire, some factors that are under the hospitals' control, such as good personnel policies, apparently play only a small role in recruiting nurses for the new hospitals. Only among nurses who formerly worked in other hospitals did this item have any effect at all. This suggests that satisfactory working environmental conditions may not be the primary consideration in choosing a job. Other studies (4), however, have shown that dissatisfaction with personnel policies is responsible for much of the high turnover in hospitals.

#### **How Positions Were Advertised**

As has been found elsewhere (4, 5), the best way to recruit new nursing personnel is by "word of mouth." Nearly 60 percent of the nurses in the new hospitals learned about the vacancies either from someone in the hospital or from a friend or relative not employed by the hospital (table 4). Few nurses were recruited by advertisements appearing in newspapers or professional journals. This finding indicates the desirability of hospitals keeping their employees informed of vacancies and of maintaining good relations with the general public.

#### REFERENCES

- Texas State Department of Health: A special study of professional nurses in new hospitals. Unpublished report dated February 6, 1953.
- (2) Arestad, F. H., and McGovern, M. A.: Hospital service in the United States. The 1953 census of hospitals. Thirty-third annual presentation of hospital statistics by the Council on Medical Education and Hospitals of the American Hospital Association. Reprinted, with supplement, from the Journal of the American Medical Association, hospital number, May 15, 1954, 108 pp.
- (3) Tibbitts, H. G., and Levine, E.: Health manpower source book. Section 2. Nursing personnel. Washington, D. C., U. S. Government Printing Office, 1953, 88 pp.
- (4) Abdellah, F. G., and Levine, E.: Why nurses leave "home." Hospitals 28: 80-81, pt. 1, June 1954.
- (5) Schoenfeld, H.: Why people work in hospitals. Hospitals 26: 60-62, December 1952.