Nursing home aides were trained in pilot study in Oklahoma to find answers to questions on course standards, staffing, and administration and to observe corollary improvements in patient care.

Training Nursing Home Aides

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FEW TASKS are more perplexing for the public health worker than those concerned with improving the care of the patient in the nursing home. The average patient is old and has a long-term disease or a disability, which may be exaggerated or complicated by existing socioeconomic, emotional, and spiritual problems. Meeting the needs of the patient requires not only special knowledge and skills to cope with his medical condition but also the ability to understand and deal with his personal problems.

Essentially, the primary service given in the nursing home is nursing care. This may range from the nurturing, protective type to the more complex and comprehensive; from tasks requiring know-how easily gained through observation or training on the job to those acquired only through extensive technical training and professional education.

A substantial number of nursing home patients are receiving nursing care that is not of professional quality or planned to meet individual needs. Most frequently the care is given by untrained, unskilled nursing aides who find themselves called upon to perform tasks requiring skills, knowledge, and judgment beyond their competencies. More often than not, the "nurser" of the patient is functioning without benefit of qualified nurse supervision or procedure manuals.

For special training of nursing home personnel, the Public Health Service developed the manual "How to be a Nursing Aide in a Nursing Home." The manual contains selected nursing procedures to be taught to nursing aides and adapted by nursing homes to standardize practices and maintain a higher quality of care. The Public Health Service also allocated funds for a pilot study in a single State to test the manual, train aides, and note observable changes, if any, in patient care. It was recommended that the study method be simple and easily duplicated by another State. The study was expected to yield significant information useful to the State in planning and strengthening its nursing home program.

Oklahoma was selected for the study, conducted from January 1 to December 31, 1958, because the Oklahoma State Department of Health is responsible for licensing nursing homes; the problems related to nursing home care were likely to be similar to those in other States; and the State had had previous experience in training nursing aides for hospital service. In line with the purposes stated above, the study sought to demonstrate how patient care can be improved in nursing homes through planned instruction of nursing aides using the content of the manual and the rapid training method of teaching (*1*), and to find answers to questions relating to course admin-

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istration, staffing, teacher and trainee-aide recruitment, and training costs.

This paper recapitulates the highlights of the study project method, findings, and recommendations.

Method of Study

The pilot study was organized and administered by the division of public health nursing, Oklahoma State Department of Health, with other divisions cooperating to assure integration with the total program of the health department. Consultation, assistance with data analysis, and preparation of the final report were provided by the Public Health Service's Chronic Disease Branch (fig. 1).

The central office staff consisted of a full-time coordinator, a qualified nurse consultant familiar with the rapid training method of teaching, and a part-time secretary. The coordinator's function was to select and train teachers for the courses; promote, coordinate, evaluate the study; and collect data.

State and local advisory committees were appointed to give support and assistance to the current study and possible future training programs. The limited membership was representative of public and private agencies, institutions, or groups interested in or giving services to nursing home patients. Local health department nursing personnel assisted with community organization, public education, and teacher recruitment. One of the purposes of the study was to determine whether graduate professional or licensed practical nurses living in the local area could be recruited to give aide training. The teachers were to be employed on an hourly basis to organize the courses, teach the aides, and supervise their practice in the nursing home as well as collect data.

The collection of data was a continuous activity and the responsibility of the teachers and the coordinator. Application blanks, evaluation forms, teacher observational visits to nursing homes, classroom and anecdotal records, narrative reports, and terminal conferences were used to gather information for use in the study and for planning future programs.

The study group, consisting of 71 nursing homes taken from the 1957 licensed nursing home population, included 4 types of geographic areas: metropolitan, cluster, scatter, and rural.

Of the 291 nursing aides employed in the nursing homes, 211 were nominated for training by operators of these homes. The teachers made the final selection of trainee-aides on the basis of their ability to read and write; whether they actually were giving patient care; and their willingness to complete the course.

Teacher Training

The study coordinator conducted a 3-day workshop for the teachers. They were acquainted with the study purposes, policies, procedures, training methods, forms for collecting data, and the relationship of the study to the objectives and procedures of the State health department's nursing home program. A visit was made to a nursing home for orientation to the nursing environment, types and characteristics of the patients, and the teachers' role and functions. In addition to the workshop, teachers attended two conferences: the first, at the midway period of the pilot study and the second, at the end. The first conference provided an opportunity for progress reports, exchange of ideas and experiences, and discussion of problems and possible solutions. The second was held to assess the total project and to receive recommendations for improving the course and for revising forms used to collect data.

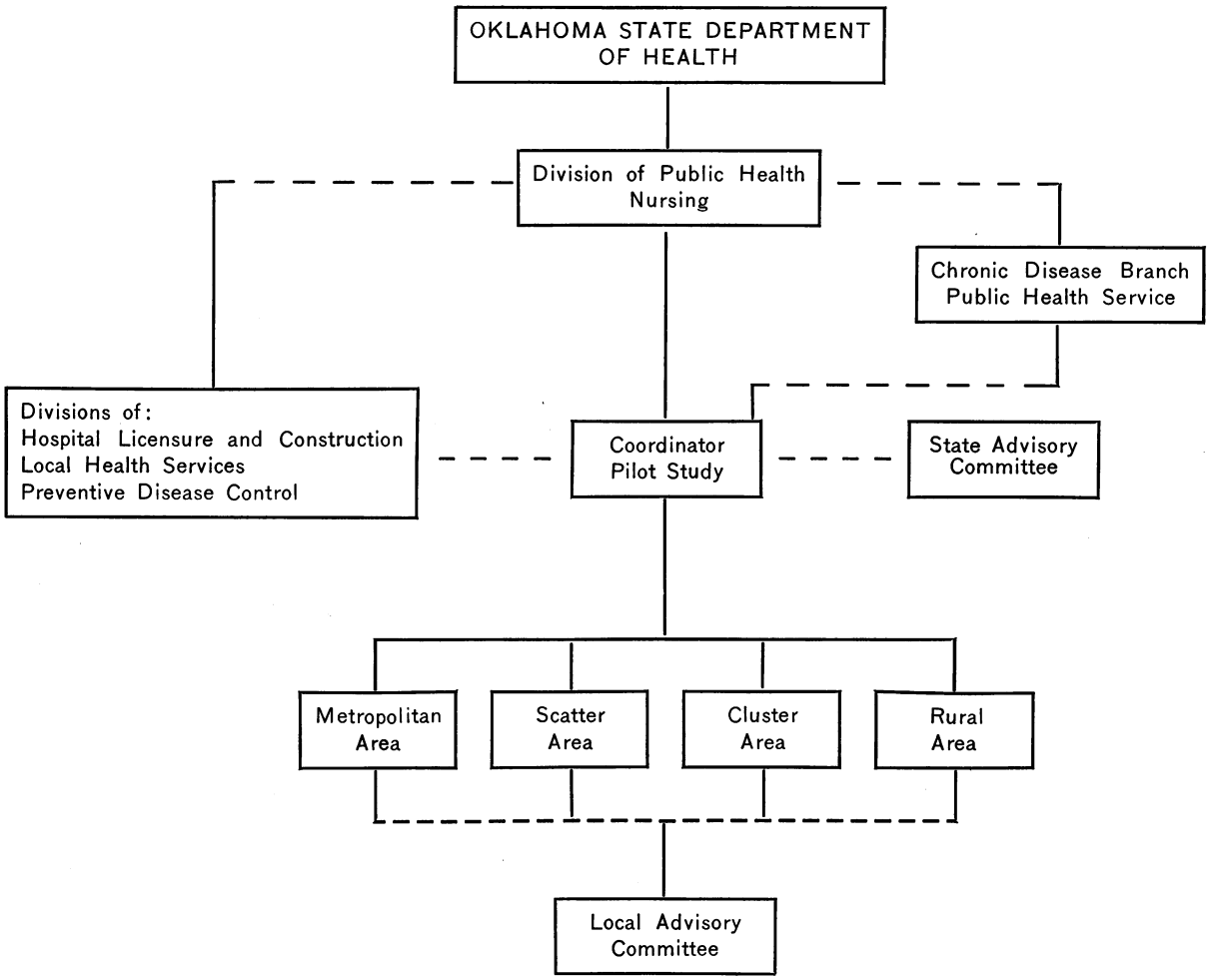
Prior to organizing a course, the teacher visited each of the nursing homes from which aides were to be trained to familiarize herself with the work environment and prepare for limited supervised practice for the trainee. At the same time, she informed the operator of the nursing home of the plan for a followup visit to the home 3 months after completion of training to observe the job performance of the aide.

Courses for the aides were conducted in temporary training centers located and equipped either by the local advisory committee, teacher, health department, or community, or a combination of these.

Development of Course Content

There was no pattern for the teacher to follow in the development of the course. Each

Figure 1. Organizational chart of the pilot study



teacher experimented with the number of class hours required to teach the content and to supervise practice. The class size was limited to not less than 6 and no more than 10 trainees.

The training manual provided the primary content for the course, but the sequence of the units and the selection of procedures to be taught were left to the judgment of the teacher.

To help the teacher determine the nature of the training needed by the aides, the operators of the selected nursing homes were asked to classify patients by judging their nursing needs. Teachers also attempted an inventory of tasks that trainee-aides performed to determine what competencies should be expected of the aides and what preparation would be needed to meet their job requirements. On the basis of observations in the nursing home, patient classification, and the inventory, the teacher developed the course content. It is worth noting that some of the tasks that the aides professed to be performing were highly technical and, according to the recent function studies of the American Nurses' Association, would require the knowledge and skill of a professional nurse.

Findings

Of the 71 homes participating in the study, approximately 20 percent had been in operation less than a year. Most of them had less than 20 beds with an estimated 83 percent occupancy. It was estimated that 81 percent of the patients were on some form of public assistance.

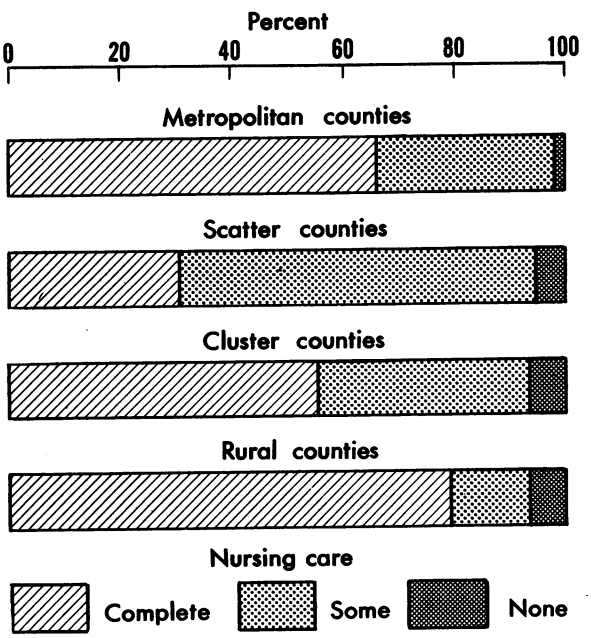
As perceived by the operators, approximately

two-thirds of the patients required complete bed care and about one-third some nursing care. The small number remaining were considered capable of self-care (fig. 2). The department of public welfare pays more for the patient on bed care than self-care, which may have influenced the classification.

The operators of the homes had a variety of background experiences. By far the largest number (49 percent) were housewives; the next largest group (42 percent) had some business experience. Thirteen percent listed themselves as licensed practical nurses by waiver and not by education. The situation calls for concern because not a single graduate nurse was among the operators or employees in the homes. Although no operator reported preparation for administering a nursing home, it must be recognized that no educational institution within the State offers a course in nursing home administration. The operators assume responsibility for the management of the home, judge the patients' nursing needs, plan patient care, and assign tasks for the aides to perform or do the jobs themselves.

Turnover in nursing aide staff was high in all nursing homes in the study group. In the scatter area approximately 75 percent had been in their jobs less than 1 year as compared with 65 percent in the cluster area, 49 percent in the metropolitan area, and 43 percent in the rural area. No attempt was made to determine the causes of the high rate of aide mobility. However, one teacher reported: "In one home the aides work 10 hours a day, 7 days a week, and are docked from their check if they take a day off. There are no paid vacations. As a result they are changing employees frequently." Other teachers told of "raider" practices among the homes. Nursing aides sometimes "raid" the employer's nursing home of patients, resign, and open their own facility. Standards of practice and the quality of patient care were most likely affected by the frequent change in staff personnel.

Figure 2. Percentage distribution of patients in 71 nursing homes according to nursing care classifications, by geographic areas



Definitions

Geographic area classifications referred to in the study were defined as follows:

Metropolitan: a city-county under supervision of the health department with nursing homes of all sizes located in the city and county.

Cluster: an area under supervision of the local health department with nursing homes of all sizes located in one town.

Scatter: an area under the supervision of the local health department with homes of all sizes located in several towns.

Rural: an area with nursing homes, which may or may not have a local health department.

The age range of the 211 trainees was 21 to 75 years, with the median age 45 years. The majority were married and maintained homes in addition to service for hire. The level of education ranged from fourth grade through college. Figure 3 presents a graphic picture of this distribution based on 204 responses to questionnaires on education and background: 44 percent completed seventh grade or less; 38 percent completed eighth grade; 16 percent finished high school; and 2 percent, college. These persons give nursing care regardless of the degree of medical illness or level of nursing care required. Unfortunately the functions of nursing aides had not been defined by the State,

therefore no criteria were available to determine what they should or should not be doing. Prior to the study, no training facilities or courses were available to prepare the aide for the job.

Of the 211 nursing aides who enrolled, 184, or 87 percent, completed the course. Fifty-one were operators of nursing homes; however, for purposes of the study they were classified as aides. The largest number of "drop-outs" occurred during the latter part of the course. The teachers queried operators to determine the causes of "drop-outs" and concluded they were mainly: personal reasons, "knew it all," had previous training, fired, and other business employment.

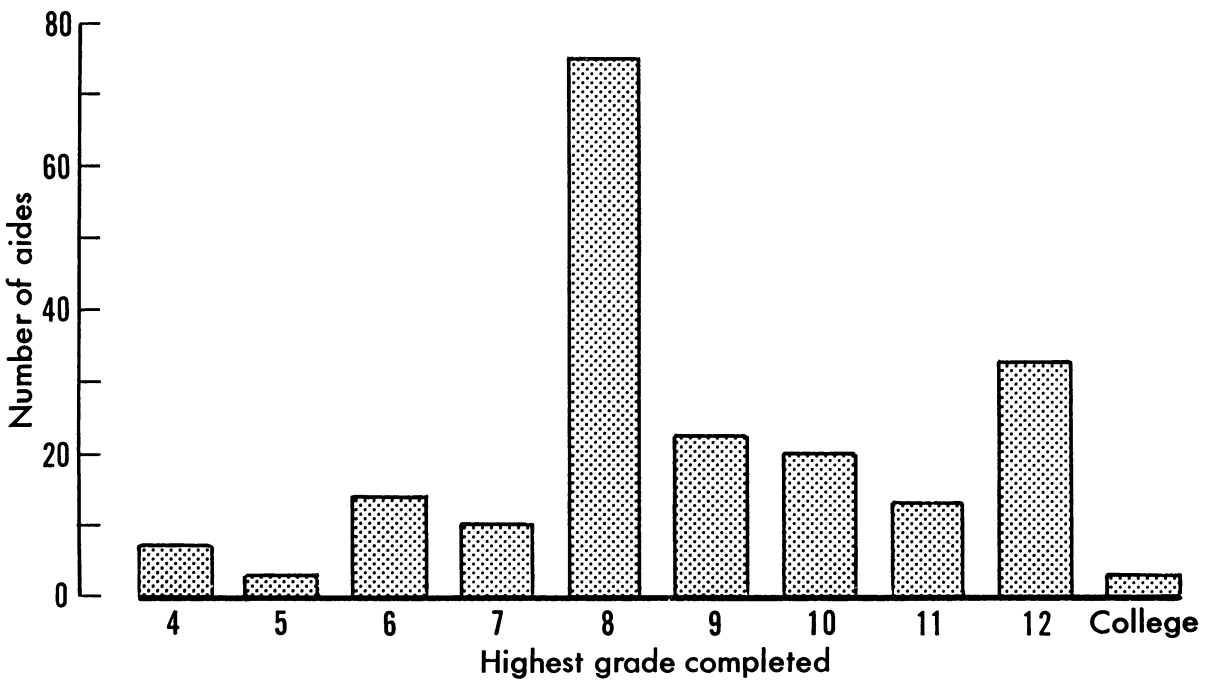
The 24 training courses conducted ranged in length from 3.5 to 8.5 weeks. No definite number of hours was selected for teaching the procedures in the manual. Class periods lasted for 3 hours a day and were held twice a week. The actual hours of classroom teaching ranged from 21 to 51; the median was 34.5 hours. One teacher who had participated in the hospital aide training program thought 40 to 60 hours should be spent for the classroom teaching rather than the 30 hours she taught. Another teacher, formerly on the staff in a school of practical nursing, thought 51 hours inadequate for training aides having the education level of her group. Supervised practice ranged from 8 to 20 hours. The time of day the teacher supervised practice varied from 6:30 a.m. to 5:00 p.m. The total course hours, including classroom teaching and supervised practice, ranged from 31 to 60 hours; the mode was 40 to 49 hours.

Evaluation

Subjective evaluation of the training courses by aides, operators, and teachers was also part of the study. At the end of each course, each aide and operator had an opportunity to express her reactions anonymously through an unstructured opinionnaire. The teachers made an overall evaluation, at the end of the study, of their own orientation, teaching methods, supervision of practice in the home, content of the course, and changes in the nursing care of patients and the behavior of the nursing aides.

About 80 percent of the aides considered the course helpful, useful, important, interesting, or a good review. More than 60 percent reported that they learned new skills and the

Figure 3. Educational level of 204 nursing aides in the pilot study



fundamentals of general nursing care needed to carry out their job responsibilities. In addition to better working methods, the aides learned work planning and organization, self-protection, and ways of working with others. The operators reviewed the course in terms of improvement in patient care. Fourteen percent observed new or improved techniques; 4 percent, better work organization; and more than 15 percent, interest in the patient as a person. One operator remarked that the training stimulated older workers and improved relationships among aide personnel and between aide and patient. Some commented that the aides seemed happier in their work.

Although the majority of responses were favorable, the negative reactions of 12 nursing aides (or 7 percent) merit serious consideration. They thought the content of the course was too elementary and that it did not equip them to perform the tasks required in the nursing home, such as giving "shots" and catheterizations, administering medicines, and treatments and measuring blood pressure. Likewise, 25 operators, or 45 percent, were dissatisfied with the course because it was too basic for experienced aides: they needed instructions in such things as "shots," first aid, rectal feedings, catheterizations, blood pressure, and medications.

The Teachers' Reactions

Although each teacher was required to attend an orientation course (workshop) prior to conducting aide training classes, many teachers later found themselves confronted with multiple and complex problems unrelated to course content and beyond the scope of the study. The 3-day workshops proved adequate for learning the rapid method of training, fundamental in using the aide manual. But the teachers expressed a need for additional information about the State nursing home program and the nursing home law. They felt their functions should be more clearly delineated and interpreted to nursing home operators. They found teaching and supervision in the home complicated by the operators' request for help with administrative decisions within the home; by the operators' lack of understanding of the rules and regulations as they relate to standards of nursing care; and by the operators' lack of knowledge of nursing care.

There was need for more assistance in ways and means of improving practice in the nursing home where qualified nursing supervision was lacking and in methods of working with operators who lacked the knowledge necessary to teach and supervise aides. All teachers found it difficult to adhere to their job functions as they understood them and to avoid involvement in nursing home and licensure agency problems.

The teachers felt that their ability to teach and the aides' ability to learn was influenced by a number of factors. The training center, itself, affected the learning situation. It was frequently a long distance from the nursing home, crowded, poorly ventilated, and difficult to reach because of stairs. Very early teachers became aware of the great disparity in education and experience of each class group. The level of preparation influenced the amount of discussion that took place and the speed with which the procedures were mastered. It was sometimes necessary to hold the group back for the slower ones to catch up. The lack of reading ability and comprehension was sometimes embarrassing to the learner. Mixed groups (much and little education and experience) did not prove to be a handicap in all classes or with all teachers. The aides who were quicker to learn tended to help the slower ones.

Fifty-seven percent of the teachers observed a very high fatigue element among the trainees. However, fatigue, limited education, or difference in experience did not dampen the aides' enthusiasm or eagerness to learn. Each aide seemed grateful for the opportunity and took pride in self-improvement. The groups from the beginning to the end maintained a remarkable esprit de corps.

The nursing home situation frequently influenced the aide's ability to practice what she had learned. Among these was the attitude of the operator. In the homes where operators enrolled in the class as trainees, there was a receptiveness to change. In homes where the operators did not attend the class, sometimes there was objection to change: "That is not the way we do it here!"

Teachers found that the aide was often handicapped in performing her duties because of lack

of equipment and supplies, lack of standards of nursing care, and lack of qualified nurse supervision. Inadequate staffing and frequent changes in staff affected the time she had to carry out procedures accurately and skillfully. Frequently the assigned tasks were beyond her abilities; sometimes the duties were in a different area, such as laundry work and housekeeping.

Of the teachers, 57 percent pointed out the need for improved personnel policies and better salaries for nursing aides. One teacher suggested that the doctors be informed of what the aide has been taught to do and her limitations, thus providing him with criteria for the selection of patients and referral to nursing homes.

Observable Effects

Though no tests or objective measurements of change in patient care were made before or after the nursing aides were trained, there was evidence of changes or improvement in patient care. In observing the practices of the aides before and after training, the teacher-trainers concluded that patient care had improved in most of the nursing homes. Nursing home administrators concurred in this conclusion as did the public health nurses who evaluate the homes for the State licensure agency. While these reports were all subjective in that each person was free to use her own criteria for evaluation, the agreement is noteworthy, and we believe, indicative of real improvement in care.

One of the most striking indications of improvement was in the personal appearance of patients as a result of better general nursing care. There was improvement in the techniques of bathing, feeding, and toileting. More patients were out of bed, and social activities were instituted to bolster their outlook on life. Odors decreased noticeably; patient units were cleaner and more functional; and soiled linen was no longer thrown on the floor but placed in a new or improvised hamper.

The pilot study provided for a followup visit to the aide in the nursing home 3 months after completion of training to observe the job performance. Approximately one-half of the teachers made these visits before the termination of the study. The number of aides in each geographic area who completed the course and the number remaining in the nursing homes at the time of the followup visit are as follows:

Area	*Completing course*	*Followup*
Metropolitan	57	44
Scatter	24	18
Cluster	17	14
Rural	23	16
Total	121	92

Although 121 aides had been trained, only 92 were still employed in the same nursing home; an attrition of 24 percent. The reasons, as stated by operators, are given according to order of frequency: personal reasons, entered practical nurse school, fired, employed in another home, other type of work, and working in hospital.

Problems Encountered

The study was not without its problems. Locating the training centers was difficult and required a great deal of teacher and public health nurse time for visits and telephone contacts. Since no classroom was permanent, it was necessary to obtain equipment on a temporary basis from hospitals, health centers, and nursing homes. Sometimes equipment had to be returned at the end of the class and brought back for the next session.

Although it was agreed that classes should be held on duty time, the aides from all homes with the exception of one, had to attend in the evening after a day of work. Frequently they were tardy, and had not read the assignment, which slowed up class progress.

Supervised practice in the home as a part of training had difficulties too. Most teachers were of the opinion that the actual hours made little difference for if the home was notified in advance, the work was done before they arrived and the purpose of supervised practice in the home was negated. It proved advantageous to go on unscheduled visits to learn how procedures were carried out. The following is offered as evidence: "One home did not use draw sheets on incontinent patients' beds except the day I was to supervise."

One purpose of the pilot study was to determine the availability of graduate professional and trained practical nurses in the four geographic areas to teach classes on a part-time basis. Professional nurse recruitment was difficult because of the paucity and lack of interest in teaching on the part of those available. Another aim was to experiment with trained practical nurses as teachers of the course. Their recruitment was an even greater problem, and it was not until the last quarter of the study that one was available.

The study also supplied an estimate of the cost of training each aide. The estimates were based on salaries, travel expenses, and per diem fees of teachers and coordinator, and supplies, but did not include rent, utilities, laundry, and similar items. Roughly the cost was approximately $416.67 for each class, or $54.35 for each nursing aide trained.

Discussion

The pilot study included only 16 percent of the 454 licensed homes in the 1957 Oklahoma State Inventory, leaving 383, or 84 percent, presumably in need of training assistance. Since the 184 nursing aides trained were recruited only from nursing homes, the course was a type of inservice training. No consideration was given to preservice training. Within the State there also are convalescent rest homes which, according to the State Advisory Committee, have patients requiring all levels of care and employ nursing aides. It may be assumed that nursing aides in all three types of homes could benefit from training which would be reflected in improved patient care.

The 1958 Oklahoma State Inventory of Homes (all types) showed a nursing staff of only 14 graduate registered nurses, 35 licensed practical nurses, and 1,200 nursing aides giving nursing care to patients. In the study sample of 71 homes no professional nurses were employed. Therefore, no one with professional competence was available to assess patient needs, assign tasks, or supervise nursing care.

There is no educational institution in Oklahoma where nursing home operators can obtain training in administration of a nursing home or nursing services, the primary therapy in the nursing home. Also, there are no qualification requirements (educational or physical) or definitions of functions for either the nursing home operator or the nursing aide. This means that ways of identifying what operators and nursing aides should or should not be doing are currently unavailable.

During the study teachers repeatedly called attention to the absence of supervision of nursing practice, lack of standards of nursing care, lack of procedure manuals, and the lack of equipment for the care of patients in nursing homes which affect the quality of nursing care. It was felt that both operators and aides could be helped considerably in job performance through special training. The high rate of turnover in nursing aide staffs emphasized the need for regular and continuous offering of such training.

It was recognized that the effectiveness of aide training programs depends to a great extent on some one person to provide the leadership and to coordinate the program's activities and interests of the community and participating groups. Adequate staff and sufficient time for teaching and followup are essential. In addition, there should be a definite source to provide financial support in the training programs.

It has been demonstrated that such training programs can contribute to improved patient care but that many related problems remain unsolved and require further study.

The manual, How To Be a Nursing Aide in a Nursing Home, by Dorothy E. Reese, may be obtained from the American Nursing Home Association, 1346 Connecticut Avenue NW., Washington 6, D.C., at $2.50 a copy.

REFERENCE

(1) Public Health Service: Nursing aide instructor's guide. PHS Pub. No. 324. Washington, D.C., U.S. Government Printing Office, 1953.