Rehabilitation Care in Nursing Homes

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DEMONSTRATION of the value of rehabilitation nursing of elderly patients in nursing homes was the object of a 1-year project in Minneapolis in 1958–59. The project was the outgrowth of an earlier and still continuing educational and surveillance program of the Minneapolis Health Department and of the interest of the Kenny Institute in wider use of its rehabilitation nursing techniques.

For several years, the Minneapolis Health Department has been conducting a vigorous surveillance and educational program in the city's nursing homes, under deputized authority from the Minnesota Department of Health. Minneapolis, a city of approximately 527,000 people, has 65 licensed nursing homes with a total of 2,632 beds. Eleven of these homes, with a total of approximately 870 beds, are for elderly well people. Forty homes are under the guidance of nurses-in-charge who are registered nurses; the remainder are supervised by licensed practical nurses.

All nursing homes in Minneapolis are visited on an average of nine times a year, and, at each visit, the emphasis is on helping the administrators and nurses. Various grading systems have been tried and revised. The most useful is that currently in use, the "Minneapolis Scoring System" (*1*). This system has made it possible to measure progress and to pinpoint the areas where improvements are needed.

Educational Program

Early in the educational program it was recognized that many defects and deficiencies in nursing homes were being perpetuated because neither the nursing staff nor the nursing home administrators knew how to do a better job. The philosophy that the aged were in the homes simply to wait for death was all too common, and little effort was being made to improve the health of the patients or their enjoyment of the time remaining to them. If nursing care was to improve, nurses' aides needed some training either through inservice training or through some outside program. Also, the nurses-in-charge needed a much better appreciation of their responsibilities for supervising nurses' aides, controlling medicines and treatments, contacting and informing attending physicians about their patients, obtaining up-to-date doctors' orders, and keeping accurate and meaningful records. All this added up to a crying need for training at all levels.

At the beginning of the program classes were held in various nursing homes, and the nursing staffs from neighboring homes were invited. The number of persons wishing to participate quickly mounted to more than 100, and it was realized that fewer people and longer sessions would be more practical. A room equipped with a hospital bed and bedside nursing equipment was set aside in the public health center as a classroom. Teaching charts were prepared, and a 2-day course in basic nursing was designed. Classes, limited to about 20 students by an advance appointment system, are being conducted 2 days a week, with the same nurses' aides attending both days. Each aide is provided with an experience record card on which

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each of the more than 50 procedures taught is initialed by the teacher. After the aide has demonstrated satisfactory performance of a procedure, the nursing home supervisor initials the item. This card, certifying the aide's degree of proficiency, is a valuable document, which she can show to her employer or to any future employer.

The cooperation of the nursing homes, hospitals, doctors, and nurses has been excellent, and outstanding progress has been made (*2–5*).

Kenny Institute

In 1957 the medical staff of the Kenny Institute in Minneapolis became interested in extending their rehabilitation nursing techniques to a larger number of handicapped people. The staff felt that hospitals, nursing homes, and public health officials might be interested in such a project. The institute set up a series of 1½-day classes, and representatives of these groups were invited to attend.

The Minneapolis Health Department was quick to realize the contribution which the Kenny Institute could make to rehabilitation nursing. With assistance from the Kenny Foundation, arrangements were made to send two nurses at a time from the combined nursing service of the health department and the Visiting Nurse Service to work on the wards of the institute for 10- to 12-week intervals. The health department felt that nurses so trained, when attending patients in their homes, would apply and teach patients and their families the nursing techniques used at the Kenny Institute, with primary emphasis on maintaining remaining muscle function and on prevention of unnecessary contractures. By the time the health department was prepared to embark on a demonstration of rehabilitation nursing in nursing homes in October 1958, 8 or 10 nurses in the combined nursing service had had the Kenny Institute experience.

Rehabilitation Nursing Project

Early in 1958 the health department undertook an extensive educational program for nursing home administrators and their nursing staffs. The acceptance of the program was very gratifying, and it was challenging to find that nursing home personnel wanted to do a better job of caring for their patients and were only too anxious to learn how to accomplish it.

In the fall the commissioner of health for Minneapolis authorized a 1-year demonstration project in rehabilitation nursing in nursing homes, which would be supplemental to the established surveillance and educational program. Six public health nurses who had completed their work on the wards of the Kenny Institute were assigned to work with and under the immediate supervision of the nurse adviser for rest homes for one-half day per week.

The important but simple booklet "Strike Back at Stroke" (*6*) illustrates techniques of handling partially paralyzed people which are very similar to those employed by the Kenny Institute. This publication, along with "How to be a Nursing Aide in a Nursing Home" (*7*), teaching guides used by the Kenny Institute, the Minneapolis General Hospital, and the American National Red Cross, and other books on rehabilitation nursing provided background and reference materials.

The project was organized and guidelines outlined through consultations among the leading participants and supervisors of the combined nursing service.

Anticipated Benefits

It was anticipated that the program would demonstrate that some patients in nursing homes would be restored to self-sufficiency or made much more self-sufficient.

It was also anticipated that the program would provide other benefits, such as:

- Improvement in the general quality of nursing care.
- Recognition by the nursing home of the value of regular inservice training and establishment of a desire to continue such training.
- Improvement in the general morale of the nursing staff.
- Improvement in the general atmosphere of the nursing home and in the morale of the patients.
- Upgrading of the home as a result of improvements resulting from participation in the project.

- Beneficial publicity for the home.
- Improvement in public relations.
- Stimulation of other nursing homes to make improvements in their homes, in order to maintain their competitive positions.
- Benefits to participating members of the Minneapolis combined nursing service from the teaching experience gained.
- Additional impetus and recognition received by the Minneapolis Health Department.
- Greater appreciation by training schools for nurses and practical nurses of the need for more trained people in nursing homes.
- Recognition by nursing home associations of the value of cooperative inservice training, leading them to undertake to develop and maintain teaching programs of their own.

Groundwork

The proposed demonstration was explained in detail to groups which might be interested in or affected by it. Letters describing the project were sent to the president and the executive secretary of the Hennepin County Medical Society, and the society's Committee on Nursing Homes. The board of directors of the medical society subsequently enthusiastically approved the project. Letters were also sent to the Minnesota Department of Health, the Minnesota Board of Nursing, and the Minnesota Department of Education, explaining the project and assuring them that no attempt would be made to issue diplomas nor to interfere in any way with their regular teaching and licensing procedures.

Meetings were held with the supervisory staff of the Kenny Institute and the executive staff of Hennepin County Welfare Board. At a regular meeting of the Twin City Nursing Home Association the project was explained fully and the approval and moral support of the association were obtained. The Twin City Nursing Home Association was advised that the commissioner of health proposed to place the participating homes in competition and to award a citation to the nursing home making the most improvement during each competition period. The county welfare board agreed to cooperate in the appraisal of patients and not to reduce payments to nursing homes for any patient given intensive rehabilitation nursing, until the end of the demonstration period, no matter how self-sufficient the patient became.

Project Design

The demonstration was designed to operate in six nursing homes for 6 months and to transfer to six other nursing homes for a second 6 months. The procedures followed were the same in both groups of homes.

Six participating homes were chosen, and one public health nurse was assigned to work in each home for the same half-day each week. The homes selected were all about the same size, the quality of service provided was similar, and the patients were of the same type and age. Patients with disabilities and limitations were chosen for rehabilitation nursing without regard to their prospects of benefiting from the techniques. Six or more nursing homes similar in size and comparable in type of patients to the participating homes were selected as controls. One home for the aged was included in each group. Nurses were not assigned to work in the control homes, but the homes were evaluated on the same basis as the participating homes. In both participating and control homes the nurse adviser explained the project fully to administrators and nurses-in-charge and obtained their cooperation.

The nurse adviser and the county welfare worker jointly selected and appraised individual patients for intensive rehabilitation nursing in the participating homes and selected similar patients in the control homes. Both participating and control patients were elderly and were suffering from disabilities resulting from strokes, old fractures, arteriosclerosis, paralysis agitans, arthritis, amputations, and so on.

For each patient selected in the participating homes, the nurse adviser obtained the approval of the attending physician and the consent of the patient's relatives for him to receive intensive rehabilitation nursing care. Whenever possible, personal interviews were held with the physician, at which time the project was explained fully and his support obtained. When a personal interview could not be arranged, the evaluations were sent to the physician for

Minneapolis
Health Department

Evaluation date_____
Evaluation by_____

NURSING HOME IMPROVEMENT EVALUATION RECORD

Name of home_____ Address_____ Phone_____
Superintendent or manager_____ Nurse in charge_____ LPN, RN (encircle)
Doctor on call_____ Phone_____ Number of patients by license_____
Number on nursing staff at start_____ 3 months_____, 6 months_____

Evaluation Rating: 1—Unsatisfactory, 2—Satisfactory, 3—Good

Number	Item	Start	3 months	6 months
	Nurse in charge	1 2 3	1 2 3	1 2 3
1.	Is she given necessary authority to function well?			
2.	Is she well informed and interested in learning?			
3.	Does she assign duties specifically and fairly?			
4.	Are job classifications set up for staff?			
5.	Is Kardex kept up accurately?			
6.	Is the diagnosis of each patient clearly defined?			
7.	Does she evaluate doctor's orders regularly?			
8.	Are drug effects known and recognized?			
9.	Is staff given adequate instruction?			
10.	Does she participate in an active staff training program?			
11.	Does she hold regular staff conferences?			
	Nursing Staff			
1.	Care of bed patient with frequent change of position.			
2.	Care of seriously ill.			
3.	Is total patient care understood? Adjusting environment to encourage self-help.			
4.	Are total patient's needs supplied?			
5.	Does staff understand what constitutes good patient position?			
6.	Are body mechanics understood in this home?			
7.	Is rehabilitation understood?			
8.	Is any intensive nursing therapy practiced?			
9.	Is preventive therapy emphasized?			
10.	Does staff understand what is meant by preventable conditions?			
11.	Are nursing measures used to prevent contractures?			
12.	Are bedsores given prompt regular care?			
13.	Are incontinent patients given bedpan or urinal regularly?			
14.	Is the patient given training in bowel control?			
15.	Does staff understand the meaning and effect of stroke, senility, heart disease and similar diagnosis?			

his verification and signature, and he authorized the type of care to be given the patient or specified certain limitations of care.

Patients were evaluated before the demonstration began, at the end of 3 months, and at the end of 6 months.

The public health nurses, under the direction of the nurse adviser, conducted teaching programs in the nursing homes participating in the demonstration. The nurse-in-charge and the nurses' aides gathered around the selected patients and the public health nurse taught and demonstrated rehabilitation nursing techniques. Among items covered were muscle and joint movements, placement in bed, use of footboards, techniques of getting in and out of bed, use of wheelchairs, crutches, and appliances, self-help in dressing, walking, bowel and bladder training, patient motivation, and so on. The nursing home staff was expected to continue working with the selected patients throughout the 6-month period, with the guidance and stimulation of the public health nurse.

During the demonstration, the nurse adviser continued the regular educational program begun early in 1958 for all nursing home administrators and their staffs without particular

Nursing Staff—Continued		Start			3 months			6 months		
Number	Item	1	2	3	1	2	3	1	2	3
16.	Is patient teaching practiced with emphasis on aid to daily living?									
17.	Does staff have a healthy attitude toward the aging?									
18.	Is each patient approached with a positive attitude toward rehabilitation?									
19.	Does staff understand doctor's order as to patient's limitation?									
20.	Can staff interpret doctor's orders as to "within pain limits"?									
21.	Does staff know which exercises they must do and those which a patient can do?									
22.	Are basic principles carried out in making up a bed for a rehabilitation patient?									
23.	Does staff know how to:									
	a. Assist a patient to a sitting position?									
	b. Transfer a patient from a bed to a wheelchair?									
	c. Propel a wheelchair?									
	d. Transfer from wheelchair to bed?									
	e. Wheelchair to toilet?									
	f. Transfer from wheelchair to bathtub?									
	g. Transfer from wheelchair to armchair?									
24.	Does staff carry out active or passive exercise?									
25.	Does bedside care include "range of motion"?									
26.	Is home interested in our Home Improvement Program?									
27.	Are extra classes incorporated to make staff better qualified to share this program?									
28.	Have any reference books been added for staff education?									
29.	Morale of nursing staff.									
30.	Is patient contentment and well-being affected?									
31.	General level of care provided in home.									
32.	Equipment to carry out rehabilitative measures more effectively.									

List equipment added

Remarks:

emphasis on the nursing homes in the demonstration project, except as she worked with and supervised the six public health nurses assigned to the participating homes.

To stimulate competition and promote publicity, awards were promised to the nursing homes making the most improvement during the demonstration period. The awards were in the form of framed embossed citations which the nursing homes could hang for public display. The awards were presented at regular meetings of the Twin City Nursing Home Association, and the local newspaper carried news items regarding them.

Evaluations

All evaluations of participating patients and control patients were made jointly by the nurse adviser and a county welfare worker. The original evaluations, and in most instances the final evaluations as well, were verified by the attending physician. The evaluation form provided a choice of three columns for recording each patient's status. These columns were headed "Total care," "Needs help," and "No help." A fourth column was headed "Remarks." Items were grouped under such broad areas as bed status, mobility, personal needs, dressing, continence, mental condition, and

motivation. The letter S was inserted in the appropriate column opposite the item to designate the patient's status at the start, the figure 3 to designate the 3-month evaluation, and the figure 6 to designate the 6-month evaluation. The doctor's order sheet was attached to the evaluation form.

The effect of rehabilitation nursing on selected patients is shown in table 1. Table 2 shows the status of the control patients at the end of the demonstration. In table 3, total changes are expressed in percentages after eliminating patients who died or were transferred to other facilities and those who became worse due to natural deterioration.

While less than 50 percent of the patients receiving intensive rehabilitation nursing were benefited, nevertheless, about 30 percent showed significantly more improvement than the control group (table 3). This accomplishment is all the more significant when it is realized how unpromising some nursing home patients are and that no physiotherapy was used. The following cases illustrate some of the accomplishments.

One elderly lady who had had a stroke in 1949 and had fractured her hip in 1950 had been bedridden ever since and was only out of bed when lifted. After intensive care, she was able to transfer from bed to wheelchair with little help, operate the wheelchair alone, dress herself, and is now living a much happier life.

An inoperable cancer patient who was previously bedfast and receiving complete care became entirely self-sufficient, up and dressed every day, walking about with an air of dignity and self-respect not previously manifested.

With a patient who was fearful and resistant, the indirect approach worked out very well. Mrs. A was an elderly leg amputee who had been a total care patient for about 2 years. She had been out of bed and in a wheelchair only when lifted by nurses. Her doctor said she could be up and about on crutches if she wanted to. She refused to try any exercises so another leg amputee was placed in the room with her. Rehabilitation nursing techniques were carried out on her roommate. Surreptitiously Mrs. A began doing the exercises she saw her roommate doing and eventually she became largely self-sufficient. Mrs. A improved to the extent that she left the nursing home and went by airplane to live with her daughter in California.

The following comment from a nurse's letter speaks for itself: "It is a good feeling to see patients come into our home unable to move their extremities on one side and one day see them walk down the hall with little or no assistance."

One public health nurse, reporting on the home she served, wrote "All the nurses have a good knowledge of the range of motion exercises, wheelchair transfer, and other rehabilitative nursing procedures. They are proud of the fact that not one bedpan is used, that all

Table 1. Status of patients given intensive rehabilitation nursing care at end of demonstration

Nursing home	Number patients at start of demonstration	Number patients followed throughout	Number patients by changes					
			Transferred	Died	Worse	No change	Better	Markedly better
1	7	7	0	0	0	1	3	3
2	4	4	0	0	0	3	0	1
3	9	8	0	1	1	6	1	0
4	8	6	1	1	0	5	1	0
5	7	6	0	1	1	4	0	1
6	5	5	0	0	1	2	2	0
7	12	12	0	0	0	3	4	5
8	5	5	0	0	0	2	1	2
9	9	9	0	0	0	6	2	1
10	8	8	0	0	0	3	3	2
11	7	7	0	0	1	1	4	1
12	6	5	0	1	0	4	1	0
Total	87	82	1	4	4	40	22	16

Table 2. Status of control patients at end of demonstration

Nursing home	Number patients at start of demonstration	Number patients followed throughout	Number patients by changes					
			Transferred	Died	Worse	No change	Better	Markedly better
1	2	2	0	0	0	1	1	0
2	4	4	0	0	0	2	1	1
3	7	7	0	0	0	4	3	0
4	6	5	0	1	0	4	1	0
5	5	4	1	0	0	4	0	0
6	4	2	0	2	0	1	1	0
7	10	5	4	1	0	5	0	0
8	12	11	1	0	0	11	0	0
9	12	10	0	2	2	8	0	0
10	10	8	1	1	0	8	0	0
11	6	5	0	1	0	2	3	0
12	8	5	1	2	0	5	0	0
13	5	5	0	0	0	3	1	1
Total	91	73	8	10	2	58	11	2

of the patients get up and dress during the day and everyone gets a tub bath. The working morale is excellent and this is reflected in their attitudes toward the patients."

The impact of the demonstration program on the participating homes was measured in many different ways, and the same evaluations were applied to the control homes. Eight scoring items were used in evaluating the homes in competition for the awards. The criteria used were: purchase of hospital room furnishings, such as beds, mattresses, bedside tables; evaluation of functions of the nurse-in-charge and functions of the nursing staff in the three categories—unsatisfactory, satisfactory, good or excellent—scored at the beginning of the demonstration and at the end of 3 months and 6 months; attainment count, based on the evaluation record; narrative comment; patient improvement; participation in instruction classes; redecorating building; and purchase of equipment, especially for the use of nurses, such as manuals, teaching aids, and filing equipment.

The most important of the evaluation forms was the Nursing Home Improvement Evaluation Record (p. 608). This form provides a checklist which was used by the nurse adviser at the start, at the 3-month interval, and at the end of the 6-month period, and was chiefly concerned with the impact of the program on the nursing staff. On the form, the nurse-in-charge was rated unsatisfactory, satisfactory, or good on 11 items and the nursing staff on 32 items.

Competition was keen among the participating nursing homes. During the first 6-month period, five homes chalked up creditable scores, with one winning the award citation. During the second 6-month period, three nursing homes ran so closely together, and away out in front, that each was awarded a citation.

Conclusions

The rehabilitation nursing demonstration was so successful that all of the objectives and anticipated benefits were accomplished except the increased appreciation of training schools of the need for more trained people in nursing homes, and recognition by nursing home associations of the value of cooperative inservice

Table 3. Percentage of change among patients followed [1]

Category	Number	No change (percent)	Better (percent)	Markedly better (percent)
Participating	78	51.3	28.2	20.5
Control	71	81.7	15.5	2.8
Net improvement			12.7	17.7

[1] Exclusive of patients who died or became worse.

training and development and maintenance of teaching programs. However, further developments may take place in these two areas.

The impact of the demonstration project on most of the participating nursing homes was markedly evident, as manifested in better nursing service, better morale among both staff and patients, and striking improvements in the physical appearance of the homes.

Some benefits were not entirely foreseen. For instance, getting people up during the day and the marked success in bowel and bladder training reduced the amount of laundry, practically eliminated bedsores, and greatly reduced the back care and bedpan service falling on the unpopular 3 to 11 p.m. nursing shift. Nursing staff became more stabilized, nurses more interested in further training and in using reference books. Nurses began to see the real function of occupational therapy as practiced by registered therapists. Even nursing homes outside of the demonstration project began to increase their emphasis on occupational therapy, to participate more fully in educational opportunities, and to build up their own nurses' reference libraries. In the participating homes a spirit of optimism was evident everywhere and was justified by the successful efforts of the patients to help themselves and to participate in more communal living.

The demonstration itself, and the publicity associated with the granting of awards, had a stimulating effect on all the nursing homes in the city, and interest in improving them was definitely deepened. The demonstration also served to dispel part of the pessimistic attitude of doctors, nurses, and relatives toward patients in nursing homes.

The demonstration substantiated the belief that the Kenny Institute's rehabilitation nursing techniques and other similar published rehabilitation nursing techniques can be learned and applied by nursing staffs in nursing homes.

Experience showed that acceptance of the principles of rehabilitation nursing and the enthusiasm of the nurse-in-charge were the factors of primary importance.

The study also showed that intelligent nurses' aides can carry out the techniques after they have been given some grounding in basic nursing, an elementary description of each patient's physical and mental condition, and taught specifically what to do for each patient.

The nurses' aide should have ready access to a supervising nurse or a consultant who has had special training in rehabilitation nursing. The on-the-ward training at Kenny Institute does provide that needed training, but careful reading of written and illustrated materials such as "Strike Back at Stroke" (*6*) and many others also gives sufficient guidance when combined with knowledge of the patient's condition and specific doctor's orders.

The demonstration showed that much can be accomplished in preservation of function and restoration of activity within the framework of nursing techniques without infringing on the field of physical therapy. This has real significance in view of the severe shortage of trained physical therapists.

The patients under study received no physiotherapy but were given intensive rehabilitation nursing care such as is practiced at the Kenny Institute in Minneapolis and by other rehabilitation centers. The study showed significant improvement in 48.7 percent of the patients given intensive care as compared with 18.3 percent of the control patients.

The impact on the participating nursing homes was even more significant. Under the scoring system used, the average number of points scored by the 12 participating homes out of a possible 294 was 126.5, with a high of 188.5 as compared with an average of 48.7 points, and a high of 91.5 by the 12 control homes. While it is admittedly difficult to measure improvement mathematically, there can be no doubt about the tremendous improvement which took place in the majority of the nursing homes which participated in the demonstration project.

Future plans of the Minneapolis Health Department include the continued promotion and teaching of rehabilitation nursing as a part of the already established educational program in Minneapolis nursing homes. This will require one additional nurse but the benefits will be available to all nursing homes in the city on a continuing basis.

The demonstration of rehabilitation nursing was conducted by the Minneapolis Health Department and extended over a period of 1

year. During that time, intensive rehabilitation nursing was demonstrated in 12 nursing homes on selected patients with the authorization of the patients' own physicians. The impact of the program on 78 individual patients was measured and compared with 71 control patients who were followed during the same period. The impact of the program on the 12 participating nursing homes was also evaluated and compared with 12 control homes, similarly evaluated.

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(*6*) U.S. Public Health Service: Strike back at stroke. PHS Pub. No. 596. Washington, D.C., U.S. Government Printing Office, 1958, 37 pages.

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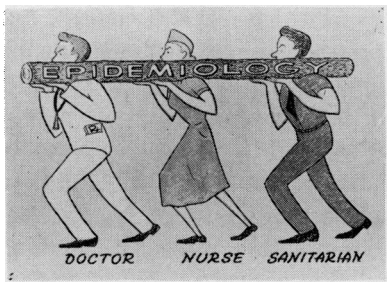
films

The Nurse Epidemiologist

35-mm. filmstrip, color, sound, 95 frames, 14 minutes, cleared for television, 1959. (Order No. F–361.)

Audience: Hospital and public health nurses, nursing students, and allied personnel.

This filmstrip outlines the knowledges, duties, and responsibilities of the public health nurse in an epidemiological investigation, including sequences on identification of specific epidemiological patterns of time, place, and persons; the spread of pathogenic organisms; how disease organisms reach the various portals of entry; and chronological order of the nurse's duties during an investigation.



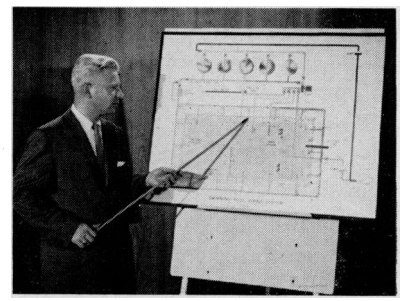
Prints are available on short-term loan, United States only, from the Communicable Disease Center, Public Health Service, Post Office Box 185, Chamblee, Ga. They can be purchased from United World Films, Inc., 1445 Park Ave., New York 29, N.Y., list price $9.10.

Introduction to Swimming Pool Sanitation

16-mm. motion picture, color, sound, 23½ minutes, 846 feet, 1959, not cleared for television. (Order No. M–402.)

Audience: Public health personnel, pool operators, environmental hygienists, and others concerned with swimming pool sanitation.

An introductory lecture for courses in swimming pool sanitation, the film uses as a guide the introductory lecture given on pages 15–21 of the manual "Swimming Pools—Disease Control Through Proper Design and Operation." It previews the course by summarizing the field that will be dealt with, that is, design, layout, and operation.



The film can be used as an aid for organizing scheduled lectures. It shows how to use the "Swimming Pool Sanitation Color Charts," and suggests training aids for the presentation.

It is available for purchase, $179.17 list, from United World Films, Inc., 1445 Park Ave., New York 29, N.Y., or obtained on short-term loan (United States only), from the Communicable Disease Center, Public Health Service, Post Office Box 185, Chamblee, Ga.

Legal note . . . Protection Against Radiation Hazards

City held without authority, in exercise of police power, to prohibit licensee of Atomic Energy Commission from conducting business of collecting, packaging, and disposing of radioactive wastes at sea, on ground that Federal Government had preempted the field of protection of health against radiation hazard from such materials. (*Boswell* v. *City of Long Beach,* Cal. Super. Ct., 28 L.W. 2481, March 21, 1960.)

Plaintiff, who was licensed by the Atomic Energy Commission to collect, package, and dispose of radioactive waste material by dumping it at sea, had contracted with two AEC licensed laboratories in northern California to dispose of their radioactive waste. He applied for and complied with all requirements of the City of Long Beach for a license to engage in this business on property located within the city. Although the application was in fact approved by all the city departments concerned, including the health department, and the license fee was paid, the actual license was never issued. When the first shipments of radioactive materials arrived at plaintiff's premises, city police prevented unloading of the waste, the health department withdrew its approval, the license fee was refunded, and a criminal prosecution instituted against the plaintiff for engaging in business without a city license. Plaintiff then brought this action to restrain the city and its officers from interfering with the conduct of his business. The court granted the injunction, holding that the city could not prohibit the plaintiff's activities conducted in accordance with the terms and conditions of his license from the AEC.

In opposing the injunction, the city relied on two grounds: that plaintiff's business violated a zoning ordinance and the protection of the public health.

The city contended that plaintiff's operation constituted a junk business, which was prohibited in the city by the zoning ordinance. The court noted that the record showed a finding that plaintiff's business was permitted by the ordinance and that, despite the failure to issue a formal license, the plaintiff was in fact duly licensed. The procedure followed by the city in its attempt to withdraw the license, without just cause or notice and hearing, was therefore arbitrary and unauthorized.

The court commented that, on the merits, it was doubtful that the business could be classified as a junk business, but found it unnecessary to decide the question since in its view the city was powerless to stop the operation "by zoning or any other exercise of the police power."

Turning to the second ground urged by the city—the protection of the public health—the court held that the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) had fully occupied "the entire field of atomic energy legislation, including protection of public health and disposal of radioactive wastes." The court pointed out that section 2021 (added to the act by P.L. 86–373, enacted September 23, 1959), authorizing cooperation with the States by the Atomic Energy Commission in the regulation of by-product, source, and special nuclear materials, specifically prohibits the Commission from discontinuing its authority and responsibility with respect to the disposal into the ocean or sea of wastes from such material.

Finding that the Federal statute clearly occupied the field of atomic energy and "particularly the matter of radioactive waste disposal and public health problems incident thereto" the court held that the attempted absolute prohibition of the plaintiff's activities, which were licensed and supervised by the AEC, was unreasonable and beyond the power of the city.

This did not, in the court's opinion, mean that the people of the city were without protection against radiation hazards (created by AEC licensees), but merely that such protection must be afforded by the Atomic Energy Commission. Moreover, the court noted, licensees of the Commission are not exempt from local regulations which do not unreasonably interfere with or frustrate the national objectives committed to the exclusive jurisdiction of the Commission. (42 U.S.C. 2021(k) provides: "Nothing in this section shall be construed to affect the authority of any State or local agency to regulate activities for purposes other than protection against radiation hazards.")—SIDNEY EDELMAN, *assistant chief, Public Health Division, Office of the General Counsel, Department of Health, Education, and Welfare.*