

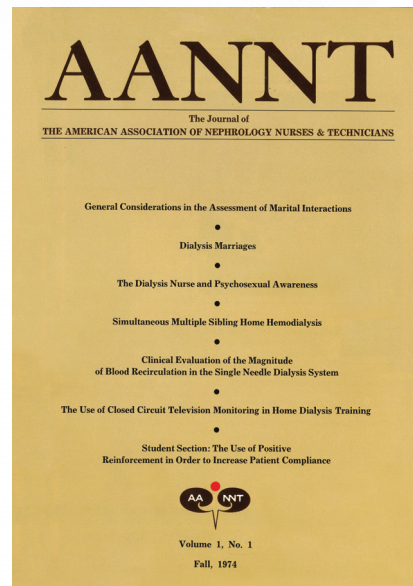
The *Nephrology Nursing Journal* Celebrates 50 Years!

The Use of Closed Circuit Television Monitoring in Home Dialysis Training

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Through the use of television monitoring and audio-intercom, home hemodialysis training was facilitated in twelve patients. Prior to the installation of the system, forty patients had been trained. A comparison is made between these two groups.

Home hemodialysis training was initiated in December 1969. Originally, there was one training room, but this gradually expanded by March 1973 to three training rooms in which five patients could be trained during each week. To date, 54 patients have completed training. Our philosophy is to train the patient alone, initially. Teaching includes learning about his disease and the various dialysis procedures, plus self-venepuncture of the arterio-venous fistula. The equipment used is a 100 liter standard Kolff tank, with blood pump and a positive pressure monitor with high-low alarm and pump shut off.

Teaching is done on an individual basis. Once the patient has developed a degree of expertise, the helper enters training, and is taught by the patient under the supervision of the nurse. It is felt that this gives the patient a greater independence and sense of responsibility once he is home. Subsequently, the helper does not feel "put-upon" as has been the case with those patients who have relied heavily on their spouses to carry out the treatment.

As training progressed, it became evident that many of the patient's requests for help did not require the nurse's presence in the room, but were a plea for reassurance. The ties between patient and nurse were becoming stronger instead of weaker. The nurses' area, which had been within the teaching rooms, was moved to an office further away. There was now a tendency for the nurse to remain with the patients longer, or to run for any and all calls. Therefore, it was decided to install an audiovisual system, and incorporate it into the teaching program. Each of the three training rooms was equipped with a camera, intercom speaker, and call button. The camera was mounted on the wall for viewing the patient and artificial kidney machine. The intercom relay with call lights and television monitors, were arranged in the nurses' office for ease of operation and visualization. The approximate cost of this system was \$1500.00.

Since the installation of this equipment, twelve patients have been trained. Initially, the training program remained the same, but as the patient became more independent, the nurse would oversee the dialysis from her office. By viewing the monitors, the level of comprehension and skill the patient had acquired in carrying out the technical aspects of the treatment was assessed. Problem areas that needed reinforcement were identified and additional training was provided. Since the nurse was not visibly present, the patient was more at ease in conducting dialysis and had a greater sense of accomplishment once a task was mastered.

An important adjunct to the visual portion of the system was the intercom. It gave the patient a chance to assess the problem and relate it to the nurse in an intelligible fashion. It created a greater command and use of technical and medical terms, instead of the usual slang substitutes. Inter-communication was essential and helped prepare for the telephone interactions once the patient was at home. In considering the telephone calls received the first three months from home patients, there was a marked difference between the two groups. In the group trained prior to the monitoring system, the calls were three times as frequent, not as understandable, and were usually concerned with minor details.

A common phenomenon in home training is "separation anxiety". This is manifested toward the end of training when the patient becomes aware that he is soon to leave the Unit and the security it provides. It continues once the patient is at home, and may persist anywhere from a few weeks to several months or until the adjustment is made. The signs and symptoms of separation anxiety may vary in number and degree, but are almost always present.

A frequent manifestation of this anxiety is insomnia in a patient who previously did not have this complaint. Nightmares concerning such problems as massive blood leaks, fires, power failures, or fatal accidents, have been reported. Suddenly the patient becomes forgetful and calls to check on unchanged details about his medications, diet, and minor technical points. During this period in which the patient is attempting to cope with his anxiety, these calls are seen as a need for reassurance.

In the group of twelve patients trained after the installation of the audiovisual system, a marked decrease in the anxiety level was noted. There was a more rapid adjustment to the home environment, fewer calls, and a decrease in the number of problems encountered. In general, a greater level of confidence was displayed. As a result of this experience, it is felt that a closed circuit audiovisual monitoring system, incorporated into a home program, can be a worthwhile instrument for training.

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Editor-In-Chief Note: ANNA's journal, first published in 1974 using the title, *The Journal of the American Association of Nephrology Nurses and Technicians*, and now titled, the *Nephrology Nursing Journal*, published its first issue in 1974. Throughout our 50th year of publication in 2023, we will be sharing excerpts and information about our first 50 years here in NNJ and on social media (#NNJOnline).