

Patient Care

An Examination of Technologist–Patient Communications

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We interviewed 100 patients referred to our nuclear medicine department to determine the effect of education on their concerns, feelings, and level of cooperation in our department. The appropriate role of the nuclear medicine technologist in the complex area of patient sensitivities and patient education is examined. The need to further humanize our approach to patient care is clear and the manner in which this may be accomplished is suggested.

An experimental program of patient interviews was scheduled preceding nuclear medicine scan procedures at a large, urban teaching hospital. Observations are summarized:

1. Most patients were reporting to the department in almost total ignorance of the anticipated procedure;
2. Most were leaving the department with little additional information; and
3. As a result, during the study they were likely to feel frightened, confused, and less cooperative than they needed or wanted to be.

Although this situation may be characteristic throughout the growing field of high technology medicine, it does not lessen the necessity for us in nuclear medicine to improve our methods for dealing with our patients' sensitivities, feelings, and emotional needs. With a few relatively simple additions to the department's patient-handling procedures, a patient's time in the department can be less threatening, with significantly lower anxiety levels and improved cooperation. The purpose of the study, therefore, was to evaluate the feasibility and efficacy of a modest patient and technologist educational program on patient status.

Method

One hundred patients were interviewed in order to ascertain the level of patient knowledge, patient's state of mind, and level of patient cooperation prior to the procedure. In addition, patient state of mind and level of cooperation following explanation of procedure by the technologist were assessed.

The methodology was basic: a very simple set of questions was devised experimentally and aimed at eliciting informed responses from the patient, for example,

- How are you feeling today?
- Did your physician (or anyone else) have an opportunity to explain this procedure to you?
- Do you have any questions?

These questions and the responses to them were correlated with a series of observations of patient behavior in the department. Criteria observed were appearance, physical behavior patterns, alertness, reaction to explanation of procedure, and reaction to procedural requirements, e.g., patient prep, injection, and scan.

Results

Only 30 of the 100 patients studied had any knowledge of what the procedure involved. Seventy percent had not been told more than the apparently typical "I'm sending you down for a scan," or "I think we better have a look at your liver...." This minimal information was neither comforting nor informative to the patient.

A majority of the uninformed group were quite visibly anxious when they arrived in the department. Those patients, however, given an increased level of education and counseling by the technologist appeared more relaxed and less anxious (almost two-thirds) and most openly said so. About one-half showed an improved level of cooperation.

Discussion

As this study was being conducted, it became apparent that in addition to the minimal *information* the patient received from the physician, much *misinformation* may have been received from a host of well-intentioned but sometimes grossly misinformed friends and relatives, e.g., "Oh, they're going to take a piece of your liver out with this great big long needle!" and so forth.

What the patient actually saw upon arrival at the nuclear medicine department was then examined—in order to compare the real to the imagined. Very obvious were:

- Signs reading "Caution Radioactive Material;"
- Other patients looking strained, uncomfortable, and generally nervous in the busy waiting room or hospital corridor;
- The staff wearing protective white coats, film badges, ring badges, and sometimes, gloves; and
- The high technology equipment used in our profession.

In addition, the patient might have observed mysteri-

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ous-looking compounds prepared behind lead barricades, protective clothing, and gloves worn while working with these materials, and this very same material then being injected into the patient. After all these factors are considered, it is understandable why the patient appeared to be anxious!

It seems appropriate to ask how we arrived at this state and what might be done about it. First, the literature on the need for humanizing medical care was reviewed. Two key concepts emerged: *humanization* and *communication*.

One definition of "humanized health care" that seemed appropriate to nuclear medicine was set forth by Jan Howard at an HEW-sponsored symposium as "...care that enhances the dignity and autonomy of patients and health professionals alike." In this same report, Dr. Howard states that "...medical technology has been labeled a major cause of dehumanization in modern health care...[even though] the manifest purpose of medical [technology] is clearly humanistic—to prolong life, to relieve pain, and to increase social functioning" (1).

Similarly, Korsch and Negrete examine the subject of doctor-patient communications. They state that "...the need for understanding the problem of communications and coping with it is increasing as the delivery of medical care is taken over more and more by specialized professionals and technicians so that the patient must relate to a galaxy of different health workers." They conclude that "...attention to effective communications...could make a valuable contribution to the quality of health care" (2).

As medicine has grown more complex and technology has distributed itself across the entire spectrum of diagnostic medicine, a communications gap has developed—not only between the physician and his patient but also among physician, patient, and technologist. Moreover, while much effort is aimed at reducing the gap between physician and patient, very little attention has been paid to the proper role of the technologist in patient education as a means for reversing some of the dehumanizing trends previously discussed.

In nuclear medicine, the patient's main contact is with a technologist who, typically, has had little training in patient interviews and communications. Indeed, for some technologists, it would appear to be the machinery and not the patient that is the main interest. The technologist is the one who has the patient's time and attention while in the department, and the way in which he or she uses this time can have a significant impact on the patient's overall well-being.

For example, examine the setting in the patient waiting area with an eye towards making it as comfortable as possible. The dose preparation area should be adequately screened from patient observation. There are many other similar small improvements that a caring and observant technologist can initiate. A whole new approach, though, would require a larger role for the properly trained technologist in dealing more openly with the patient's feelings, concerns, and sensitivities and going beyond the mechanics of nuclear medicine scanning. This would put a greater

share of responsibility on the technologist, but even a small increase in the appropriately trained technologist's role can have a significant beneficial impact. We can, at the very least, make the time spent in our departments less threatening to the patient and more productive diagnostically.

This pilot study offered a few preliminary insights. When each of the patients was shown an increased level of individual consideration and counseling by the technologist during the course of his or her time in the department, results were impressive. As stated, almost two-thirds of the patients appeared more relaxed and less anxious; most openly said as much. Approximately one-half of the group showed an improved level of cooperation.

To refine this approach further, an experimental course in patient care for nuclear medicine technology students was developed at George Washington University Medical Center. Its purpose is to teach them how to communicate better with patients. Two fundamental principles are stressed: first, an important skill for the technologist is the ability to interact with the patient in a productive and nonchallenging way; second, the technologist's behavior as he or she conducts the scan is a major factor in determining how relaxed and cooperative the patient will be.

Our goal is to develop an effective and meaningful patient care program, which can become an integral part of the usual heavily technical two-year training program for the nuclear medicine technologist.

Finally, although this was a highly qualitative pilot study, it did point out in a general way the relationship between what we tell our patients, how we tell it, and the patient's state of mind as a result. Further refinements in the measurement and evaluation of patient anxiety levels are certainly in order. We are now designing a more highly structured experiment specifically relating patient anxiety levels to patient education in the diagnostic setting. We hope thereby to be able to quantify these events more accurately and perhaps, to begin to define improved patient education protocols for general use in nuclear medicine. In addition, we will continue to seek more effective ways of measuring the impact of this education on patient and technologist alike.

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