So You Are a Registered Nuclear Medicine Technologist!*

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By applying the psychologic theories of Abraham H. Maslow, the author postulates that continuing education in nuclear medicine technology is desirable and is an unconscious drive towards happiness. It would seem that certified continuing education is not only desirable but is also practical on several levels.

"Registered Nuclear Medicine Technologists"—what does this coveted title imply? The R.T. implies that the person who legitimately has earned the right to use this title is a well-trained competent nuclear medicine technologist. We can infer that the registered technologist has successfully completed an acceptable training program in this special branch of technology and that he has successfully completed an examination with a satisfactory grade that is to attest to his basic knowledge about the specialty. We might also infer that this person is a serious minded person, that he is serious about his profession, and that he is interested in pursuing this profession as a means of making a living, or that he is better qualified in his craft than someone without this certification or one who is unable to pass the examination. We may also infer that he is an ethical person and that he would practice his profession in an ethical manner. We might even infer that he is a real student of the technology or that he is probably a disciplined person who is desirous of helping his fellow man. We might even conclude that he has set his goals in life and really knows what he wants out of life. Furthermore, he is probably a well motivated person, that is, motivated to accept the discipline and tedium of learning his craft and also to accept the challenge of becoming an integral part of his profession. One that is dedicated to saving lives and helping his fellow man in discomfort and disease; the profession that not everyone can join. Thus we see that the implications and valid inferences regarding one who is a registered technologist in nuclear medicine describe a really great person. A person who is to be looked up to by all his peers. However, in truth, what does the R.T. really mean? All that the R.T. attached to one's name really tells us about the person is that he was accepted to sit for an examination and at that point in time had sufficient mental recall to answer at least 75% of the questions correctly.

The R.T. label does not in fact tell us that the person has had sufficient theoretical background to function satisfactorily, nor does it give us any assurance that he has sufficient manual skills to be able to "draw up doses, pipet small volumes of fluid, or even to be able to intelligently twirl the numerous dials on the imaging equipment." The R.T. label by itself cannot assure us of beginning or continuing competency. Nor does it in any way assure us that the person will behave ethically or professionally. There is no magic attached to the R.T. label that can assure us that the person who has earned the right to use the R.T. label may not be a selfish, self-centered person who is not too well qualified in nuclear medicine technology.

Do these above statements mean that I do not believe that the R.T. is no better than the person trained on the job, that the R.T. is not worth more money than technologists without the label? No. For I do believe that the R.T. is worth more than the non-R.T. What I am trying to say about the R.T. is that becoming registered in nuclear medicine is only the beginning. It is the first step on the road, the long road of study, application, and experience. I do believe that the inferences that were made earlier are all valid. But I also believe that there are some R.T.'s who believe the label is the end and not only the beginning. What I am really saying is that the label, registered technologist, is only as good as the person who wears it. I believe that every registered technologist must accept the challenge so that all that is implied by being certified is in fact true. It should be the beginning of continued self analysis, both as a technologist and a person. It behooves every registered technologist to insure his own competency and continuing competency.

Everyone in the medical field knows that when we step onto the professional path of medicine, the rest of our lives, at least professionally, will be dedicated to continued study and continued development of whatever skills are necessary to function, and not just adequately, to the best of our ability. In our "consumer oriented" society there are a great many people who have taken it upon themselves to dictate what they feel competency

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is. If we do not take the challenge to evaluate ourselves and to constantly improve ourselves, there are those on the outside who will tell us what we must do. It is our obligation, our duty, and I think our desire to do this ourselves. For who can better evaluate our performance than ourselves and our peers. We can all easily accept the desirability of self-evaluation and self-improvement. But how are we to accomplish this? Are we motivated to do this? Let me digress for a moment and discuss motivation. Abraham Mazlow was a psychologist who studied the whole area of man's needs and his motivations. Unlike Freud, Mazlow studied mentally healthy and successful individuals, not neurotics or psychotics. He was first trained in the behavior school of psychology. However, he found that this was not adequate to understand man totally. Mazlow studied man from the point of view of his needs, his goals, his successes, and his achievements. He came up with a very interesting theory, one which is almost universally accepted. He said, "what man can do, he must do." He postulated that every man wants to become self-actualized, which merely means the development or discovery of the true self and the developing of existent or latent potentials. Said more simply, he states that the desire of man is to become a truly human being. The self-actualized person would see life as it is, rather than the way he would like to see it; he would be less emotional and more objective than others. These people would be more decisive and have a clearer notion of right and wrong. They would be more accurate in their predictions of the future. These fully human beings would have the ability to see more efficiently and be better in their judgement, and this ability would extend into many areas of life involving not only the understanding of people but also of art, music, politics, and philosophy.

The self-actualized person would penetrate and see the concealed and confused realities more swiftly and accurately than the average individual, yet have a kind of humility to admit that they do not know everything, and that other people can teach them something.

Without exception, Mazlow found that the "self-actualized" people that he studied were all dedicated to some work task, duty, or vocation which they considered to be important. It seems that commitment to an important job is a major requirement for growth, self-actualization, and happiness. This, of course, requires hard work, discipline, training, and often the postponement of pleasure. Mazlow pictured the needs of man in a triangle (Fig. 1). He divided the needs of man into basic and growth needs. He found that we all have the same needs and that, as soon as the basic needs are more or less satisfied, the growth needs become paramount and our motivation to continue development. He found that these needs are the motivation of all men. He found that it is an innate characteristic of man to automatically and unconsciously strive towards self-actualization. That this is man's ultimate goal, once the basic needs are satisfied. This is the challenge of life itself.

We have all built within our very being the motivation to accept the challenge to attain self-actualization in our professional and personal lives. As Mazlow also found, if we strive for self-actualization in one part of our life, it will also be attained in the other. All we need to do is to accept this idea, that it is an innate desire within us to attain. We must see through the false needs long enough to recognize our real goal. So I am postulating that to become a self-actualized person is not only a worthy goal, but the true goal of all men. I further postulate that if we desire this end in our personal lives, and who can deny it, it can be attained through dedication to our professional lives. I would also postulate that, according to Mazlow's theories, a true commitment to your profession and your professional society is the first step to self-actualization. In order to grow towards this goal it would seem to me that continuing education and competency would be necessary. I am saying that continuing education and competency are so much a part of your commitment that they are your unconscious goal and need only to be brought into consciousness.

The current trend in the medical profession, as well as others, is to require such things as recertification or proof of continuing education to insure continuing competency. The Board of Internal Medicine gave a recertification examination in 1974 to those diplomats who volunteered. This procedure is still voluntary. As of July 1, 1975, The American College of Radiology has made it mandatory that its members are required to obtain 150 hr of certified continuing education credits within three years. The actual guidelines for this program have not been distributed yet, but the requirement is in force. Also, as of July 1, 1975, the American Society of Radiologic Technologists has instituted a voluntary program for certification of continuing
education credits. Their goal is to receive 100 hr of such credit in a 3-year period. I understand that the American College of Clinical Pathology has also made a voluntary program available to the medical technologists. Each certifying body in medicine is studying this complex problem in order to determine the best ways to insure continuing competency of its members.

So we see that the trend today is not only for continuing education, which has always been a practice in the medical field, but also for certified continuing education. The American College of Radiology has for the past two years sponsored a voluntary self-evaluation and self-study program. In this program an examination is sent to the candidates who then complete the examination and return it to the College for grading. The corrected examination, with statistical analysis, is returned to the candidate. He also then receives a syllabus covering the material on the examination for self-study. As a participant in this program, I can attest to its great value. The American Society of Radiologic Technologists is at present doing research into the feasibility of this type of program for the technologist. The results of the research should be available for evaluation by the end of this year. This research is financed by a grant by the federal government.

How then can you as a nuclear medicine technologist become involved in this trend? I think that first and foremost there must be a commitment to total involvement in your profession and your professional society. I think you will have to address yourself to this whole area at once, so that a simple and valid system of certified continuing education can be developed.

It is obvious to me that self-study is a valid way of keeping up with the trends, however, you may read all of the textbooks and all of the journals, but how are you going to prove this continued education unless there is a certifying mechanism? The continuing education programs that are sponsored by various Chapters of the Society of Nuclear Medicine are one way that you can become involved in certified continuing education at this time. Attending the refresher courses and scientific sessions at the annual meetings of the Society of Nuclear Medicine is another way to become certified as far as continuing education. Indeed, at last years' meeting, a mechanism was set up where you could punch in and out of different sessions in order to obtain certifying credit. However, there are many other ways in which you can involve yourselves in continuing education at the local level. A certifying mechanism can be established for your attendance at continuing education offerings at local meetings and credit can be given for the time set aside for scientific pursuit. It is also possible that a sort of "Journal Club" could be formed within your local Society chapter. In such a club, certain people would be assigned the review of current literature, which would then be discussed by the members. Those attending could receive credit for participating, those preparing it could perhaps receive double credit. The famous bull sessions after your local meeting are probably one of the best ways of continuing education because it is then that you get down to the nitty-gritty of the technological problem. However, this of course could not be certified for credit.

Another possible way of certifying continuing education would be participation at in-service programs within your own institution. Where those participating would receive credit and those who would prepare the program possibly receive double or triple credits. Is there any reason that a particularly good in-service program from one institution could not then go to another institution, and thereby receive certifying credit? Is it entirely without possibility that a committee could be formed within your local Tech Group to prepare samples of serum that could be distributed to other departments for evaluation? Say, for instance, performing a T3 or T4 on an unknown sample. It is also possible to prepare unknown samples for scanning that could be rotated through various departments to evaluate each technologist's ability to properly scan the unknown "phantom" and give the greatest diagnostic information. Indeed, the American Society of Clinical Pathologists has such a service available, where unknown samples and scans are sent out, I think, on a quarterly basis, and then returned to the Society for evaluation. This whole idea is nothing new in the clinical laboratory; even if such unknown samples were not shared between institutions, certainly it would be very helpful for the chief technologist of a department to prepare unknowns for his staff people to analyze periodically. In the area of diagnostic imaging, film critique on a periodic basis would be very valuable, especially if this was also attended by a clinician so that the shortcomings of a scan, if present, could be analyzed from the clinical point of view.

Another way of self-evaluation, a very simple way, would be for those especially involved in the education of nuclear medicine technologists to prepare periodic self-evaluation examinations. Indeed, the March 1975 issue of the JNMT (Vol. 3, No. 1) has such a self-evaluation examination, and I would suggest that, if you have not already done so, all of you take it. All of the self-evaluation could be done in such a way that no one participating need be embarrassed because of their low scoring on self-evaluation examinations or self-evaluation of unknowns. I would suggest that at your local level you appoint a committee to investigate this vastly important area of continuing education.

I am suggesting that all of you commit yourselves to involvement in your Society and your profession and work diligently, each one of you, not just the officers, to work out an in-depth realistic system of continuing education. Take up this challenge of being a true registered technologist, a professional. Your reward can only lead to self-actualization, continued licensure in the technology.