

ALLIED HEALTH PROFESSIONS PERSONNEL TRAINING ACT OF 1966

WEDNESDAY, MARCH 30, 1966

HOUSE OF REPRESENTATIVES,
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

The committee met at 10 a.m., pursuant to recess, in room 2123, Rayburn House Office Building, Hon. Harley O. Staggers (chairman) presiding.

The CHAIRMAN. The committee will come to order.

Yesterday when the committee adjourned we were having hearings on H.R. 13196, Allied Health Professions Personnel Training Act.

STATEMENT OF MISS RUTH HOVDE, PROFESSOR AND DIRECTOR, THE DIVISION OF MEDICAL TECHNOLOGY, COLLEGE OF MEDICAL SCIENCES, THE UNIVERSITY OF MINNESOTA, ON BEHALF OF THE AMERICAN SOCIETY OF MEDICAL TECHNOLOGISTS

Miss HOVDE. Mr. Chairman and members of the committee, my name is Ruth F. Hovde. I am professor and director of the Division of Medical Technology in the Department of Laboratory Medicine of the College of Medical Sciences at the University of Minnesota.

As a past president of the American Society of Medical Technologists, I am appearing on behalf of this organization whose active membership consists of 10,000 professional medical technologists whose standards of education and certification meet the requirements of the Council on Medical Education of the American Medical Association as well as the National Commission on Accrediting.

A medical technologist has an educational background of 4 years of academic and professional study in basic sciences related to health. Three of these years are in college with the final year in a hospital laboratory approved for clinical training.

As an educator for the past 20 years in medical technology, I am pleased to appear here in support of this bill (H.R. 13196) which provides for improvement of the quality of educational programs and increase in educational opportunities for students in the allied health professions.

You are all well aware of the overall factors involved in the tremendous task of providing total health care to the people of this Nation and of the major problems of an adequate supply of qualified personnel, and adequate facilities for service, education, and research.

I am here today to speak specifically about only one of the allied health professions, medical technology, which can be defined briefly as "the application of principles of natural, physical, and biological sciences to the performance of laboratory procedures which aid in the prevention, diagnosis, and treatment of disease."

In the last 15 to 20 years the amount of knowledge in all basic sciences related to health and disease has expanded at an incredible rate. Even without the impact of medicare and the regional medical complexes, it has been estimated that the utilization of laboratory services has been increasing between 10 and 30 percent annually.

This increase in service is not merely an increase in numbers of existing procedures but reflects also the introduction of new methodology and instrumentation making possible more precise and accurate determinations in less time. Contrary to popular opinion such methods and instruments require more, not less, scientific education.

The critical shortage of medical technologists has developed primarily because of lack of sound educational programs under good instruction, lack of adequate facilities for classrooms and laboratories, and lack of financial support for educational opportunities in medical technology.

The early development of laboratory services relied on personnel with on-the-job or apprenticeship training. Now with the increasing sophistication of modern science in methodology and utilization, this pattern of training is outmoded, inefficient, and inept. To meet today's and, indeed, future needs, educational programs for medical technology require emphasis on sound academic curriculums properly balanced with clinical experience to prepare the graduate for demands being made of him.

The quality of any medical laboratory service depends on the quality of the personnel. First and foremost, of course, is the individual who must possess the intelligence, the devotion, and the integrity to do the job. But this individual, however otherwise qualified, must also have the basic scientific knowledge and skills with which to work.

This is obtained through a strong academic and professional program under the best instructors available. But no matter how excellent a program may be in content and instruction, it must also be

given in proper physical facilities. To go further, good programs, instruction, and facilities are meaningless without students.

Opportunities for loan, scholarship, or traineeship programs for students in medical technology at the collegiate or graduate level have been practically nonexistent. Financial assistance for students must be made available if the shortages are to be corrected.

To my knowledge there are no current valid figures regarding exact needs in medical technology education specifically or in allied health fields generally. Therefore I am going to draw on my experience at one university, the University of Minnesota, on the assumption that this situation is not unique but rather is representative of the whole.

For the past year I have served as a member of the ancillary professions subcommittee of a large committee on the future planning for the health sciences at the University of Minnesota. This subcommittee was charged with the responsibility of envisioning future activities in the ancillary health professions under optimal programs with reference to faculty, to facilities, to space needs and location, and to student numbers and services, and with special consideration to local and national health needs.

This committee has completed a preliminary study on 14 ancillary disciplines; 7 are established teaching programs and 7 include partially developed or proposed programs.

Although these following data are strictly preliminary and in some instances incomplete at this time, they are significant. From the survey it is estimated that for the ancillary programs in 5 to 10 years, 40 percent increase in physical facilities—classrooms, laboratories, et cetera—over present facilities will be needed with a 100-percent increase in 15 to 20 years.

It is estimated that student enrollments in the ancillary professions will increase 75 percent over the present numbers in the next 10 years and up to 120 percent in the next 15 to 20 years.

It is estimated that an 80 percent increase in academic faculty over the present numbers will be needed in 5 to 10 years, with a 175 percent increase in 15 to 20 years.

These estimates—and again, I must emphasize these figures are preliminary and incomplete—point up dramatically the immediate need and urgency in providing for better facilities and for more teachers in these areas.

In the United States today there are only 10 universities offering graduate education in medical technology. Only at the University of Minnesota and Temple University are teaching methods and education courses incorporated with the scientific course of study to provide graduates specially trained as teaching supervisors and instructors for medical technology.

These qualified teachers are needed in the 780 hospital laboratories to teach the fourth year of clinical training for the medical technologist, and other specialized courses.

It is obvious that two graduate schools cannot begin to provide the number of instructors needed for these expanding educational programs, even if they were filled to capacity. Here again, may I borrow from the experience of the University of Minnesota.

Since our graduate program was established 7 years ago, only 28 applicants have been accepted. Of these 28, 4 have completed the

requirements for the M.S. degree, 5 are currently matriculating, and the remaining 19 were unable to remain in school because of lack of funds.

There have been no traineeships available for them, and they had to rely on part-time employment to support themselves and sometimes their families. Holding a job while meeting scholastic and academic demands of graduate school is difficult.

During these 7 years there were 66 other applicants for the graduate program in medical technology, 40 or roughly 60 percent, were not accepted because of inadequate undergraduate preparation, and 26, or roughly 40 percent, who were adequately prepared were refused admission because of lack of space and faculty advisers.

To me these figures emphasize again the urgent need for funds for improvement of undergraduate programs as well as funds for facilities, faculties, and traineeships on the graduate level.

Another area of need in medical technology education arising from the expanding scientific knowledge and methodology is in the emerging role of the specialist as an essential and integral part of laboratory services. Fortunately, the sound basic academic preparation in medical technology provides the foundation on which the person can then build his acquisition of knowledge and use of skills within the area of the specialty.

Programs specially designed to train the immunohematologist, virologist and mycologist are examples. The inclusion in the legislation of grants to develop new or improved curriculums for training is farsighted.

We cannot speak of responsibilities of educational institutions without including provisions for continuing education. As professional people, medical technologists are well aware that education does not and cannot end with a degree at the baccalaureate or graduate level but rather is a continuing process. The scientific discoveries and changing methodologies applied to laboratory medicine intensify the need for seminars, symposia, workshops, tutorials, institutes, and so forth, on a short-term basis. But again, such programs are expensive and need support for both the participant and the institution. Schools should be encouraged and assisted in developing a well-integrated system of continuing educational programs.

On behalf of the members of the American Society of Medical Technologists, I thank you for this opportunity to give some of their views on medical technology education. Ours is a young profession and your understanding of the related manpower and education needs is sought.

Your approval of assistance in developing educational programs, opportunities for students, teaching facilities, and expansion of educational facilities will enable medical technologists to continue giving high-quality service on an expanded level.

Mr. ROGERS of Texas. Thank you, Miss Hovde. Mr. Rogers, do you have any questions?

Mr. ROGERS of Florida. Thank you, Mr. Chairman.

I think your statement is excellent. You point up here an area that does need help, I am sure, as we try to find increased services for the people in this country. Do you have any program for training of medical technologists, say in the junior college program—2 years and then 1 year in a laboratory, or any such program?

Miss HOVDE. At our particular institution we do have a training program for medical laboratory assistants. There are about a hundred such programs throughout the country at this subcollege level or vocational level.

Mr. ROGERS of Florida. Would there be any reason why it would not be feasible to include those in this legislation?

Miss HOVDE. It is my understanding that legislation under the Vocational Manpower Act, for example, has provided for this type of person. One of the reasons why, in my opinion, some of these programs have had great difficulty in getting off the ground is that they have had no one to teach in them.

Mr. ROGERS of Florida. Yes, I can understand this problem, but while we are trying to teach, we also want to try to produce them at the same time. I wonder if it would not be wise to at last make available the benefits of this law to any reasonable institution that can help contribute.

Miss **Hovde**. I am strictly in favor of anything that is going to help us in this total problem of providing qualified laboratory personnel.

Mr. **Rogers** of Florida. Now you say there are only two colleges that are doing graduate work in the training.

Miss **Hovde**. Including education. There are 10 universities that give graduate work in medical technology, emphasizing one of the basic sciences areas, and 2 of the 10 include in their curriculum specifically courses in educational administration and educational methods.

Mr. **Rogers** of Florida. How many do you think would be encouraged to do this as a result of this bill?

Miss **Hovde**. As I say in our own experience we had to turn down all of these applicants because we did not have space and money for them. It was a good group.

Mr. **Rogers** of Florida. I mean how many institutions do you think would be encouraged as a result of this legislation?

Miss **Hovde**. I think there would be many institutions that would be encouraged to do this if they had space, faculty, facilities to do this. I believe this is an important part of your legislation, to encourage the development of new programs and new curriculums.

Mr. **Rogers** of Florida. Thank you very much.

Mr. **Rogers** of Texas. Mr. Nelsen.

Mr. **Nelsen**. I wish to welcome a fellow Minnesotan before this committee. I might mention that the name **Hovde** rings a bell with the Golden Gophers.

Miss **Hovde**. That is right.

Mr. **Nelsen**. What percent of the students who have finished your medical school in Minnesota stay within the State?

Miss **Hovde**. The majority of our graduates in medical technology stay within the State of Minnesota. I would say roughly 60 percent at least would stay in the State.

Mr. **Nelsen**. What about the School of Public Health Nursing? I think we pioneered in that program. Many leave the State, do they not?

Miss **Hovde**. I am sorry, I have no information on that.

Mr. **Nelsen**. Of course the reason I ask the question is to emphasize that it would seem justified that there be some assistance through the Congress to the medical school and to a school of public nursing because some of the students who are trained in these schools go to other States which do not have such facilities.

Miss **Hovde**. It is of interest, if I may include this little bit of information, as I stated the four people who completed their masters of science degrees in medical technology have gone to institutions of higher learning to four other States to fill a need there.

Mr. NELSEN. I was interested in your testimony on page 4. What do you mean by the term immunohematologist?

Miss HOVDE. Immunohematologist is a person trained specifically in immunological procedures—well, the closest I come to it would be in allergies, the whole field of human sensitivities that we are hearing so much about now and in the whole field of blood transfusions. All of this comes into work of an immunohematologist.

Mr. NELSEN. I think we all agree that a great stimulation could result from some additional Federal funds as would be provided in this proposal. However, we always seem to find ourselves with more requests than we have dollars. Sometimes after a program has become established, funds are cut off. For example, in the land-grant colleges areas, the school milk program, and so forth.

At the present time there is some possibility that these may be cut back. It may be restored. However, with programs of this kind we always have to anticipate that the faucet will be turned off, and you may be left with the program on your own.

Be that as it may, we are happy to have your testimony. Certainly there appears to be a great need in these fields.

Thank you so much for coming in from the great State of Minnesota to address the chairman who is from the lesser State of Texas—we will change the record later, Walter.

Mr. ROGERS of Texas. I was wondering if the gentleman would care to identify the Golden Gophers.

Mr. NELSEN. Yes; our great football team at the University of Minnesota is known as the Golden Gophers.

Mr. ROGERS of Texas. Mr. Kornegay.

Mr. KORNEGAY. I have no questions.

Mr. ROGERS of Texas. Mr. Adams.

Mr. ADAMS. Miss Hovde, I have very much enjoyed your statement. Again you have defined for us these various levels of medical technicians. I should ask again the same question that I did of the prior witness.

Do we by emphasizing in our programs too heavily the terms of the educational requirements place on our students a burden that they cannot follow through financially and, therefore, would we not be better off, for example, in the community college system, to go to the European gymnasium system of developing technicians?

Miss HOVDE. I am very much opposed to this type of education for the graduate professional medical technologist.

Mr. ADAMS. Where do we break them? Apparently you have this broken down into training educators and training them to train those who actually work in the field?

Miss HOVDE. There are two classes of laboratory personnel, those who are called laboratory assistants who usually have 1 year of training or 2 years of training in programs being developed within the junior colleges. The other class of medical technologists is the 4-year professional medical technologist.

Anything beyond that is just as any other profession, a step beyond.

It is true that many of our baccalaureates, many of them do conduct the actual teaching in the hospital. That is true.

Mr. ADAMS. In other words, they would be aided by this in producing people who would go back into either the junior colleges or the other areas and instruct the laboratory assistants as opposed to technologists?

Miss HOVDE. That is right. I think the time has passed for us to wait for our educators and administrators to rise through the ranks by reason of experience alone to do this.

Things are moving too rapidly. We have to provide some provisions to give these people some assistance in providing instructors for laboratory personnel. In my own opinion I think it is very unwise to talk about increasing the auxiliary personnel without providing instructors for these personnel.

Mr. ADAMS. This is one of the problems we have, our production of the various strata. We find this not only in the medical field but all over, a series of strata have come down historically from the past to prevent the production at the lower level of a number of people who may not be qualified financially, motivewise, and a lot of other ways, to do the more complicated jobs.

We are using highly trained personnel to do these jobs. We want to avoid using skilled personnel for lower level jobs. This is what we are searching for.

Miss HOVDE. That is right. We do need the laboratory assistant. We need them very badly because there are many areas within laboratory work that are repetitive, that require a certain degree of skill that we can train to do this type of thing; thus, we relieve the technologist for the more demanding skills in chemistry and in other areas.

Mr. ADAMS. You feel this bill will produce the people who can do this instruction?

Miss HOVDE. Yes; I do.

Mr. ADAMS. Thank you. I have no further questions.

Mr. ROGERS of Texas. Thank you, Miss Hovde, for your statement and your kindness in answering the questions.

That concludes the testimony this morning. The committee will stand adjourned until 10 o'clock in the morning.

(Whereupon, at 11:45 a.m., the committee adjourned, to reconvene at 10 a.m., Thursday, March 31, 1966.)