

21. The Teachers: Working Through the Possibilities

The philosophy of teaching can only be acquired through contact with others similarly interested.

To clearly define specialism is the uppermost thought in current medicine.

WILLIAM P. WHERRY, 1931



SITTING on a hotel porch at the 1929 Academy meeting, Samuel J. Kopetsky, a New York otolaryngologist, and Burt R. Shurly, a Detroit otolaryngologist, were bantering around ideas they thought might be valuable in bringing about higher standards and better opportunities for specialty education.^{1(p78)} Their conversation spurred Dr Kopetsky to go back to the session and suggest the Academy arrange for a forum where undergraduate and graduate teachers could bring their problems and their methods, find out what others were doing, and return home with new ideas and approaches.^{2(p507)} Two years earlier a group of Eastern otolaryngologists had formed an independent Teachers' Club to see what could be done about the sorry state of graduate medical education.

At the Academy's 1930 meeting, a dinner was arranged for interested teachers, and after casting about the idea of a forum, they drew up a resolution that resulted in formation of an Academy Teachers' Section.^{3(pp486-487)} During the next decade, the section wore the topic of medical and specialty education threadbare. In

the process they arrived at a flexible approach toward specialty education that was on target with what residency programs are today.

As it turned out, thoughts on what the Teachers' Section should be and do varied about as widely among the teachers as their thoughts on specialty education. Some were under the impression that the section would be, as originally intended, a gathering of teachers for the interchange of specific problems and thoughts on the best way to teach various aspects of the specialties. It rankled them that meetings tended to be less an open forum and more a formal program of reports and discussions ranging broadly over the entire spectrum of undergraduate and graduate instruction in the two specialties.

Others had grander plans for the section from the beginning. William P. Wherry wanted the teachers to act as a "Pedagogical Research section" to gather and study information and present it for discussion. From this blend of fact and opinion, Dr Wherry projected the section could "construct a minimum level of knowledge necessary to acceptance as qualified ap-

plied to the individual, to the undergraduate or graduate school."⁴

Indeed the section began by sending questionnaires designed to poll the status of instruction in the specialties. The first questionnaire to class A medical schools asked them to define the undergraduate curriculum in ophthalmology and otolaryngology. Another questionnaire went to selected graduates in general practice to ascertain the adequacy of their training in ophthalmology and otolaryngology and how well it served them in practice. Conclusions were drawn about what was needed most by undergraduates who would not specialize but would need to recognize and treat common conditions of the eye, ear, nose, and throat.⁵⁻¹⁰

Two other questionnaires went to teaching institutions and hospitals conducting graduate courses or residencies in the two specialties. Analysis of the responses accorded a rather clear, if not entirely complete, picture of what was available in the way of specialty education, where the programs were and how they were set up, who was admitted and with what background, who did the teaching, and how much basic science and clinical work was included.⁹⁻¹¹

Not everyone shared Dr Wherry's view of the Teachers' Section as a research laboratory. Data presented on how many institutions were doing what type of training for how many residents precipitated much discussion on the old theme of minimum training and curriculum. Some members denounced the section for attempting to achieve adequate specialty education by dictating the recipe down to the last teaspoonful. And section chairman A. D. Ruedemann felt obliged to open the 1935 meeting with a reminder to his colleagues that the section "was not founded with the idea of directing medical education, but rather to educate our own members."¹²

Peopled as it was by some of the most renowned personages in the two specialties, this

Teachers' Section, the published rendering of its meetings, gives a bird's-eye view of the emergence of specialty education and the problems medicine was up against in trying to provide it. The section was disbanded in 1942, officially because the Academy was carrying forth with some tangible contributions to graduate training—notably the Home Study Courses—and unofficially because, as Harris Mosher once acidly observed, it was accomplishing "about as much as the League of Nations."¹³

Dr Mosher's remark preceded by about two hours Harry Gradle's motion that the Academy give courses of home study for residents. If nothing else came out of the Teachers' Section, the fact that it provided the soil for sprouting the Home Study Courses would justify its existence.

From the perspective of 40 years hence, the section probably accomplished more than anyone in the thick of it realized. Specialty education was still in the process of being drawn up from scratch. But that wasn't the only problem. Expanding medical knowledge reinforced and validated the existence of medical specialists. In turn, there were more medical graduates wanting to specialize, the country was demanding more bona fide specialists, and the education for a specialty was becoming more complex. All this put a severe strain on a medical system that had made almost no provision for turning out specialists until after the First World War.

The Teachers' Section did some important wading through of problems and potential answers necessary to any solution. Deliberations wandered through the maze of possibilities from preceptorship to graduate specialty degree. Ideas brought forth ran the gamut from the local and practical to the general and theoretic. They were discussed, discarded, left pending, or adopted as general consensus.

In essence, the section acted somewhat in the capacity of a modern-day think tank, and out

of it all came, at the very least, a general feeling of direction for specialty education, arrived at by men who had been grappling with the problem for years and whose influence would fan out to reach most, if not all, of the ophthalmology and otolaryngology training programs in the country.

RESIDENCY PROGRAMS: QUANTITY AND QUALITY

By 1930, education for a specialty was definitely expanding. Most importantly, it had been taken off the low-priority back burner where it was an every-man-for-himself concoction. American medicine recognized that proper training for specialists had to be provided.

One measure of this recognition was an increase in the number of residency programs. The number of available positions, however, fell far short of accommodating the full number requiring them. In ophthalmology and otolaryngology, as in other specialties, the problem was the inability of the training centers and hospitals then functioning to provide enough residency positions and thorough training for the residents they did have. Willard C. Rappleye, dean of Columbia University College of Physicians and Surgeons, told the Teachers' Section in 1936:

No phase of medical service and education is more important at present, both from the standpoint of the public and of the profession, than that of the proper training of specialists. The public is confused by the large number of physicians who claim to be specialists, whereas, in reality, there is a shortage of properly trained experts to meet the medical needs of the country. Present facilities and opportunities are quite inadequate for the training of a sufficient number of properly qualified specialists, although the number of hospitals in which such training may be given is sufficient if educational supervision and direction can be secured.¹⁴

Out of response to requests from those seeking training, the Academy published a voluntary yearly listing of residencies and graduate

courses. The second compilation in 1937 showed there were roughly 60 institutions affording residency opportunities in ophthalmology and otolaryngology. These institutions could take about 100 new residents per year in each specialty (a few were combined programs).^{15,16} That made a grand total of 200 openings for the two specialties. According to one estimate, close to 1,000 physicians hoped to enter the specialty of ophthalmology or of otolaryngology or the combined specialties yearly.¹⁷

By 1940, 73 institutions afforded opportunities for about 123 new ophthalmic residents per year. In otolaryngology, 77 institutions could take a total of 150 residents each year. Only 11 of the institutions combined the specialties in their training programs.¹⁸

Each year saw a gradual expansion in the number of residency positions as men and materials were coalesced for systematic instruction. But this took time as well as steadily increasing ties between hospitals and university medical schools.

In the early thirties particularly, many of the residency programs were accused of being glorified internships. Few institutions provided thorough preparation for specialty practice. They simply did not have the faculty or facilities for complete specialty training, and they lacked the financial resources to provide them. There was a great preponderance of clinical training over basic science training.¹⁴

Most staff physicians at hospitals and clinics were private practitioners who had little time for teaching the basic sciences applicable to clinical ophthalmology and otolaryngology. The resident carried a dawn-to-dusk workload and was left to scour up or buy what textbooks he could and sandwich basic reading into his schedule. Adequate libraries and laboratories for the resident physician were luxuries that many hospitals could not afford.^{13,19-21}

It may be added that few general or special hospitals offering residencies readily admitted to their lack of facilities. In response to one of the questionnaires sent to medical schools (a few of which had formal graduate schools of medicine but most of which had a more informal program for training specialists) and to hospitals offering residencies, all institutions replied that they had laboratory facilities for the study of special pathology. Ralph A. Fenton remarked: "We find this hard to believe. There are not enough highly qualified special pathologists in the United States to serve all these graduate residences."¹¹ Catalogues put out by institutions describing their training programs were likewise to be taken with a grain of skepticism.

Because in reality many institutions that could provide the clinical experience could not also provide the basic science instruction, there was an artificial segregation of clinical and basic science training. They were spoken of, and often obtained, as two separate entities.

Some educators looked toward the development of graduate medical departments as the eventual—and only—salvation for basic science instruction. This was mostly a wait-and-hope philosophy. There were a few institutions that offered long (for that time) postgraduate advanced courses in each specialty. Presumably, these programs intertwined clinical and basic science training and turned out excellent specialists.

To fill the needs of the rank and file of hospital residents who were receiving mostly clinical training, there were but three institutions in 1935 that ran a special full-time basic science course in ophthalmology and four institutions that ran one in otolaryngology (all about a year in length).¹¹

Other educators entertained the notion that specialists-in-training could be rotated through university medical schools for basic science instruction. This meant the undergraduate

medical faculties would be doing the teaching—in fact, they did provide some basic science instruction for residents—and the proposal assumed that medical schools could somehow organize graduate basic science courses for specialists. This proposed solution was finally dashed by recognition that it was illogical in premise and conclusion. The undergraduate professor of anatomy was not the man to teach anatomy of the eye, ear, nose, or throat. For medical schools to teach basic sciences in specialties, it would require revision of teaching staffs, laboratories, and budgets.^{19,20,22}

Even if the medical schools could have managed it, it would have been wasteful overkill. There was no need for such an abundance of basic courses. Realizing this, some suggested setting up a sufficient number of basic courses at strategic locations throughout the country and requiring all residents to attend.^{23,24} Again, both logistic and financial considerations made this difficult.

William C. Cutter, secretary of the AMA Council on Medical Education and Hospitals, proffered an opinion to the Teachers' Section that turned out to be the final word on the matter, in effect, that if specialists wanted the basic sciences taught, they were going to have to organize to do it themselves. "There are men who like to teach," reasoned Dr Cutter, "and are willing to give up a good deal of their time to teaching without much compensation. If you can get those men properly organized, about the only thing that the University has to provide is a room and some tables and some anatomical material and things of that sort, but . . . the cost of instruction, can be met by . . . voluntary service from members of the profession. . . ." ^{22(p18)}

Dr Cutter only put in words what had finally percolated down from all the assorted schemes as the only solution. "You must get your eye man to teach your eye anatomy and your eye

physiology. You must get your nose and throat man to teach your nose and throat pathology and bacteriology. . . ."^{22(p18)} The Academy already had plans to do precisely what Dr Cutter ordered, in a slightly different format.

As a society, the Academy didn't have authority to organize groups of specialists and arrange for them to present basic science instruction at far-flung universities. But it could and did organize the far-flung talents of men throughout the country into a composite faculty for a basic science course in each specialty.

Another matter for debate was the *when* of basic science instruction. Some thought it should precede clinical training, and a few institutions made a basic science course a prerequisite to residency training. Others thought the basic sciences should be taught after a bit of clinical training so the resident would have some basis for making correlations to clinical application. In working through the various options and opinions, the Teachers' Section ultimately agreed that basic science and clinical training should go hand-in-hand in the making of a specialist.^{16,21,25}

Underlying the whole issue of how and when to supply basic science instruction was the still unresolved question of what was adequate training for the practice of a specialty.^{13,23,26,27} The graduate educators in the Teachers' Section reached a consensus of opinion that the well-trained specialist should have four years of medical school, one year of internship, and two to four years of graduate specialty training at an institution that could supply the basic training as well as plenty of clinical training.²⁸

The teachers also agreed, and this could be counted as an accomplishment, that it was unworkable to prescribe a precise curriculum and dictate the number of hours needed in each subject. Teachers had been mulling over proper curriculum for years to no avail, since few in-

stitutions could or would meet such exacting measurements.

"There has always been more than one way to skin a cat," lectured Harris Mosher. "Regimentation and initiative have never been able to live together."^{13(p26)} And the teachers agreed that the final judgment on any type of training program was the caliber of graduates, not the number of hours devoted to each basic or clinical training area. The most workable plan was to outline generally what needed to be covered in a residency program and leave it up to individual institutions and their circumstances how best to cover it.²⁹⁻³¹ The Academy's Home Study Courses as well as the Boards helped point the way.

COMBINED PRACTICE— SEPARATE TRAINING

The fact that in practice the Academy specialties were often combined presented another training problem. Neither the Board certification procedures nor the development of separate training programs that they influenced were adapted for the combined specialist. Some believed they were causing a premature separation of the specialties that clashed with good medicine, the prevailing practice situation, and the demand for care.

A limited survey made in 1938 showed that in smaller communities, and in fact in cities up to 500,000, the number of those practicing the combined specialties was greater than the total of those practicing eye or ear, nose, and throat exclusively. In cities with a population of 500,000 or more, the ratio swung the other way, with those limiting themselves to one specialty far outnumbering those combining the specialties in their practice.³²

Another estimate in 1938 held that 75% or more of those claiming either specialty were actually engaged in the practice of both ophthalmology and otolaryngology.³³ Whether or not these statistics are accurate, the truth is

that from the standpoint of community need and economics, it was less feasible to limit practice outside the larger population centers. Almost two thirds of Academy members lived and worked in communities of less than 500,000 population.³⁴

Practicing in communities of less than 50,000 inhabitants were 29% of Academy members. Since more than 60% of the population of the United States lived in communities of less than 50,000, these communities were considered undermanned in terms of qualified specialists.³⁴⁻³⁶

Some Academy members believed that special provision should be made for training EENT specialists who would serve the needs of smaller communities. The idea was for a less in-depth training program that would outfit men to handle all basic ophthalmic and otolaryngologic medical care. One proposal even called for creation of an examining board to test the fitness of candidates for eye, ear, nose, and throat practice; the Boards of ophthalmology and otolaryngology would continue to function for those wishing to restrict practice.³³

Others believed that a double specialist should be just that and should first acquire complete training in one specialty and then turn around and do the same thing in the other specialty. However correct this reasoning was, few prospective EENT specialists had any intention of completing two separate specialty training programs. It was difficult enough, given the insufficient number of residency programs, to acquire training in one specialty. And the time and financial drain were enough to inhibit even the most ambitious and hardy students. A few did manage it, spending about four years in taking two separate programs, a long haul for the day.^{13,37-39}

In the end, sporadic thoughts on the care and training of the combined specialist got lost in the larger and more specific dilemma for each specialty of providing enough high-quality programs to meet the needs of those seeking

training and the requirements of the country for specialists.

There is no doubt that during the 1930s, as the Boards assumed more importance in American medicine and training was separated, the practice of the combined specialties lost ground.

A PUSH FROM THE BOARDS

The influence of the specialty Boards was a coercive force on institutions to bring their training up to a satisfactory level. The ophthalmology and otolaryngology Boards existed in splendid isolation until 1930, when a third Board, that of obstetrics and gynecology, was established. Thereafter, the specialty board idea caught on rapidly. By the end of the thirties, all major specialties had established examining Boards.

The Boards helped define, by their requirements, the component parts of specialty education. Institutions began increasing the scope of their residency programs to include instruction in the basic sciences required by the Boards. Prospective residents became more selective and wanted to enter programs that would prepare them for Board examination.

The Advisory Board for Medical Specialties was organized in 1933 to provide some cohesion of standards among the different Boards. A year later, this Board in conjunction with the AMA Council on Medical Education and Hospitals recommended that all residency programs be lengthened to three years, with at least 18 months devoted to the basic sciences. The target date was variously reported as 1937 or 1938.^{11,35} According to the 1937 Academy listing of residencies, ophthalmology residencies of three years or longer were offered by eight institutions; otolaryngology residencies, by ten institutions.¹⁵ The majority of residencies were in the range of one to two years. Most institutions simply weren't ready to put the long curriculum into operation. The goal was

not met by the decreed time, but it was met with time.

The Boards, their policies, their requirements, their pass-fail ratio were a barometer of the improvement in specialty education. All too common were anecdotes such as one Allen Greenwood recalled from the early days of the ophthalmic Board when a candidate "used his ophthalmoscope wrong side out and saw an optic atrophy."^{1(p78)} The general level of knowledge had improved considerably by the 1930s, and prospective candidates were realizing what

training they needed even if they didn't know where to obtain it.

Some of the special eye and ear hospitals received inquiries as to whether they gave correspondence courses in subjects like anatomy and pathology.⁴⁰ Such queries were a distressing commentary on the state of specialty education. It was estimated in 1938 that only 25% of those going into ophthalmology and otolaryngology received directed graduate instruction.⁴¹

"How can that be improved?"⁴¹ demanded Harry Gradle. And he had an answer.