AROUND EUROPE

Medical Education in Italy

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In Italy at present all students who gain their lyceum degree after eight years of high-school study are eligible to enter the faculty of medicine in any university. This often results in considerable overcrowding of the medical schools, and those of Rome and Naples are particularly burdened. Teaching such large groups—irrespective of the methods used—is seldom satisfactory.

There are 23 faculties of medicine in Italy, but their geographic distribution is uneven. Some provinces have more than one faculty (there are four in Emilia, three in Tuscany, two in Lombardy, two in Veneto, two in Lazio—one of which is the non-government Catholic university—and two in Sardinia), while others (such as Abruzzi, Basilicata, Calabria, and Marche) have none at all. Consequently the number of doctors per head of population in the regions with no faculty is considerably below average. At the end of December 1966, the doctor-patient ratio for the whole of Italy was 1 to 582. But in Abruzzi it was 1 to 829, Basilicata 1 to 1,008, Calabria 1 to 788, and Marche 1 to 745. Table I shows the distribution of first-year students for two successive years at the different medical schools and the total number enrolled, including "repeat" students (those taking the year's course again) and graduates. Table II shows the global figures of first-year and succeeding year students (including "repeat" students) and graduates for the years 1963-4, 1964-5, and 1965-6. The progressive increase in first-year students is clearly illustrated by comparing the Tables. The number of graduates in medicine and surgery in 1956 was 3,504, whereas in 1966 it was 2,857.

This apparent disparity is due to the great number of repeat students, and it applies particularly in the overcrowded faculties, such as those in Rome and Naples. Among a total

of 2,839 enrolments in the medical faculty of the University of Rome for the year 1964-5, 1,020 were repeats, and of a total of 2,245 in Naples, 972 were repeats. This large number of students repeating the final year of study in those universities where overcrowding is most marked shows the imbalance between the numbers of students and the number of teachers.

TABLE II.—Numbers of Students Studying Medicine in 1963-4, 1964-5, and 1965-6

Year	First Year Students	Total Number of Students	"Repeat" Students	Number Graduating
1963-64	4,135	19,263	6,459	2,761
1964-65	5,456	21,174	6,956	2,652
1965-66	7,401	25,074	7,008	2,857

The situation is further aggravated by a current rise in first-year enrolments. The comparative figures for the University of Naples are: 812 for 1965-6, 1,060 for 1966-7, and 1,293 for 1967-8. These statistics (which reflect the general trend throughout the country) emphasize the need for changes in the distribution of students and for new medical schools in the overcrowded and underserved areas.

The ratio between the number of students and the number of teaching beds available in different university clinics further emphasizes the problem. In 1964-5, for example, the University of Rome had 2,839 students and 2,936 beds, while the University of Naples had 2,245 students and 1,885 beds.

TABLE I.—Distribution of Students in the Various Medical Faculties for the Year 1964-5

University	First Year Students	Total Number of Students	"Repeat" Students	Number Graduating
Bari	310	867	237	75
Bologna	339	1,841	538	315
Cagliari	138	615	61	51
Catania	280	965	427	139
Ferrara	40	346	193	58
Florence	140	572	193	71
Genoa	173	811	228	120
Messina	174	625	231	71
Milan	432	1,146	391	171
Modena	96	666	398	214
Naples	624	2,245	972	309
Padua	458	1,609	404	161
Palermo	280	925	225	92
Parma	144	619	241	128
Pavia	196	798	214	119
Perugia	162	612	237	70
Pisa	179	687	181	47
Rome	757	2,839	1,020	326
Rome (Catholic University)	141	506	—	—
Sassari	46	488	79	32
Siena	93	502	306	66
Turin	254	889	180	117
Trieste	—	—	—	—
Total	5,456	21,174	6,956	2,652

Qualifying Examinations

University medical studies are concluded after six years with three major clinical examinations—one in general medicine, another in general surgery, and a third in obstetrics and gynaecology—and the presentation of the candidate's doctoral thesis. This includes discussion of two medico-biological topics which the student has prepared.

The "doctoral examination" is conducted by a panel of 11 full- and part-time professors (*professori incaricati* or *liberi docenti*) and in practice seldom affects the students' final acceptance by a "vote of merit" for the title of "Doctor of Medicine and Surgery." Before this title is considered legally valid, however, the graduate has to pass a State examination of competence to practise medicine and surgery. This also comprises three sections: general medicine, general surgery, and obstetrics and gynaecology, and it takes place in the students' university. The value of the State examination is reduced by the fact that the student is required to do only six months' practical training in a university clinic or selected hospital centre. The medical faculties have unanimously requested that this period be extended to at least one year, and legislation has been put in motion to bring this about.

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After passing the State examination of competence, the young doctor must join the Order of Physicians and Surgeons before he can begin to practise. This is a national organization of representatives of provincial medical associations which guide and regulate professional conduct. Each association may remove any member who contravenes certain regulations, and he is thus automatically deprived of the right to practise.

Specialization

Specialization is a matter of individual choice. A small minority are accepted as "university assistants" in a university clinic. The majority have to enrol in a "school of specialization," or become hospital assistants. A few gain entrance to university departments, where they can hold posts providing the theoretical and practical training for a specialty. Italy does not have a stringent code of specialization which protection of the public demands. Physicians can legally practise in a specialty without the relevant diploma, and this gives rise to ambiguities in determining professional qualifications. In strict technical terms, a doctor is a specialist only if he holds a diploma from a school of specialization, or if he has earned by examination the title of *libera docenza*. In the past, confusion has resulted from certain universities having taken too much initiative, but now the schools in similar disciplines are trying to harmonize their programmes, to bring them into line with those in the other Common Market countries. Some examples are given (Appendix I, II, and III) of the organization and programmes typical of schools of specialization concerned with general medical disciplines (for example, internal medicine), and of those concerned with sub-disciplines—for example, endocrinology and metabolic diseases.

Securing a diploma requires the passing of examinations in the subject and presenting a thesis. This permits a good evaluation of a candidate's all round competence to be made. The schools of specialization are now entirely under the jurisdiction of the faculties of medicine and surgery, and in certain isolated cases only are hospital centres involved.

The professional qualification *libera docenza* can be obtained in a minimum of five years after graduation through examinations set by a National commission appointed by the Ministry of National Education. Theoretically, the acquisition of a *libera docenza* should encourage development of the recipient's career towards university teaching or research. In practice, however, the title has lost its previous standing and is now largely accepted as indicating practical competence. It has thus become a "qualification" equivalent to a diploma of specialization, though its original meaning was quite different. It is evident that the system should be changed in order to remove the ambiguity.

Research

Graduates intending to enter advanced biomedical research can take one or two possible avenues. They may either follow the lines of an academic career through the progressive university grades, or go through the National Research Council, which has the grades of aspirant researcher, assistant researcher, researcher, chief researcher, and director of the laboratory.

Researchers of the National Research Council (C.N.R.) can pursue their work either in a university department (which conducts research programmes approved and subsidized by a

committee for biology and medicine of the C.N.R.) or join an autonomous research institute organized and subsidized by the C.N.R. (as, for example, the International Centre of Genetics and Biophysics in Naples.)

Young doctors contemplating a university career take an examination to become a university assistant, which assures stable employment as a civil servant. Many university members are urging the establishment of a full-time system, and the idea is being studied at the moment. Such a system would avoid the individual, and sometimes rather elastic interpretations of the teaching and research obligations of university personnel.

Academic Advancement

Appointments to professorial chairs are made by a national competitive examination each time a chair becomes vacant. A commission of five members nominated by the Ministry of National Education on the basis of recommendations from all the medical faculties in Italy serves as examining board. The system does not produce a fair and objective judgement of the candidates, and it is being critically studied for possible revision. At present there are large numbers of university assistants at the base of the career pyramid, and a limited number of positions at the top (corresponding to those of associate and full professor). This obliges a large number of assistants in clinical departments to seek careers outside of the university either in hospitals, the health service, or in private practice.

The composite picture I have tried to draw of medical education in Italy reveals a multiplicity of defects and inadequacies. An effective spur towards the modernization of medical education could be provided by a meeting at an international and, more particularly, on a European level in order to compare the methods of the various countries. A constructive effort to find a common system could lay the foundation for the mutual recognition of medical, academic, and professional qualifications.

Appendix I

School of Specialization in Internal Medicine

Duration: 5 years. Responsible Institution: Institute of General Clinical Medicine.

Course subjects:

1st Year	(1) Pharmacology
(2) Diagnosis of diseases of the mouth
(3) Diagnosis of otorhinolaryngeal diseases
(4) Diagnosis of dermatological diseases
(5) Bacteriology and serology
2nd Year	(1) Physical and functional diagnosis
(2) Diagnosis of diseases of the eye
(3) Clinical chemistry
(4) Clinical pathology
(5) Anatomical pathology
3rd Year	(1) Neuropathology
(2) Infectious diseases
(3) Endocrinology
(4) Tuberculous disease
4th Year	(1) Haematology
(2) Nephrology
(3) Diseases of the digestive system
(4) Metabolic diseases
5th Year	(1) General clinical medicine
(2) Diseases of the respiratory system
(3) Diseases of the cardiovascular system
(4) Radiology
(5) Diagnosis and therapy with radioactive isotopes

Appendix II

School of Specialization in Endocrinology and Metabolic Disease
Duration 3 years. Responsible Institutions: Institute of Medical Pathology, and Institute of General Clinical Medicine

Course subjects:

- 1st Year (1) Anatomy and histopathology of endocrine and metabolic diseases
(2) Physiology of the organs involved in endocrine and metabolic disease
(3) Biochemistry of endocrine and metabolic disorders
(4) Genetic factors in endocrine and metabolic disease
- 2nd Year (1) Pathology of the endocrine glands
(2) Pathology of the organs involved in metabolic disease
(3) Biological, biochemical, and radioisotopic techniques applicable in endocrinology
(4) Genotypology and embryology
(5) Gynaecological factors in endocrine disease
- 3rd Year (1) Clinical considerations of endocrine diseases
(2) Clinical considerations of metabolic diseases
(3) Medical treatment of endocrine and metabolic diseases
(4) Surgical treatment of endocrine and metabolic diseases
(5) X-ray diagnosis and therapy of endocrine and metabolic diseases

Appendix III

School of Specialization in Ophthalmology
Duration 4 years. Responsible Institution: Institute of Ophthalmology

Course subjects:

- 1st Year (1) Anatomy and histology of the ocular system
(2) Embryologic and genetic factors in eye disease
(3) Physiology of the eye and biochemistry of ocular tissues and humors
(4) Optical physiology and refraction
(5) Microbiology and ocular hygiene
- 2nd Year (1) Clinical diagnosis and methods of investigation of ocular disorders
(2) Pharmacology of the ocular system and physical therapy
(3) Anatomical pathology
(4) Clinical pathology
- 3rd Year (1) Clinical pathology
(2) Disturbances and pathology of ocular motility and of binocular vision: Orthoptics and pleoptics
(3) Infections of the eye and otorhinolaryngeal system
(4) Surgical techniques: Part I
- 4th year (1) Neuro-ophthalmology
(2) Diseases of the eye relative to general infection
(3) Occupational hazards, accidents to the eye and medico-legal considerations
(4) Surgical techniques: Part II

CONFERENCES AND MEETINGS

Psychiatry, Medicine, and the Social Services— Annual Conference of B.M.A. Psychological Medicine Group

The Psychological Medical Group of the British Medical Association held its annual meeting at B.M.A. House on 30 May. The conference received the report of the Group Committee for the year 1968-9, which showed that membership of the group was now 540 compared with 436 in May 1968.

The theme of the conference for this year was "The Role of Psychiatry Today in Medicine and the Social Services."

Continuing Medical Education

Dr. R. E. MAGGS (Hellingly Hospital, Hailsham), discussing "Continuing Medical Education in the Light of the Todd Report," said the weakest and most unacceptable part concerned the proposed new hospital medical staffing structure—with the designation of junior specialist and specialist posts. Since emphasis had been on a training programme to give a trainee a reasonable chance of becoming a specialist, it seemed illogical to propose that many specialist and junior specialist posts would be part time. To link part-time service solely with sub-consultant sessions would perpetuate the present ineffective use of trained women doctors.

The development of the psychiatric unit of the district general hospital was an exciting move towards the provision of a comprehensive hospital service where the psychiatrist could be seen to be working under the same

conditions as his general medical and surgical colleagues. The psychiatrist must be prepared to take full responsibility in the organization and implementation of training programmes aimed not only at doctors but also at untrained and trained nursing personnel. Medical psychiatric training must be considered as a composite experience involving both the district general hospital and area psychiatric hospital, thus preventing the development of the idea that the "hospital behind the walls" had lost its function.

Until more doctors were available medical staff would have to be prepared to support teaching programmes as well as their ordinary clinical duties. To evolve a system of payment by session as the basis for postgraduate educational sessions would be disastrous, for teaching should be seen to be closely linked with patient care.

Medical Administration and the Social Services

Dr. ROBERT M. SHAW (Department of Health and Social Security) spoke on "Medical Administration and the Social Services." He said that, perhaps more than any other specialty, psychiatry spanned a field where there should be no functional boundaries—boundaries between hospital and community. He himself believed that medicine was one of the social services. Dealing with the clini-

cian's part in management, he considered that much of what had been said in the "cog-wheel" report applied equally to psychiatry as to any other specialty. It was quite clear that no future district general hospital would be complete without a psychiatric department designed to serve the needs of its district on the same footing as the specialties concerned with physical illness.

"People are busy," said Dr. Shaw, "looking for a new name for the medical officer of health on the assumption that this name is no longer appropriate now that so much of his work is not concerned with the old-style public health—that is, environmental hygiene, control of infectious diseases, etc. The most popular name so far coined is that of 'community physician,' though there are many who decry this title. I am personally in no doubt that there will be a need for such a person."

It would be the community physician's responsibility that a sensible plan was worked out in each district. To do his job properly he would have to use a wide range of medical, statistical, and epidemiological skills. Some might say the old-time medical officer of health had almost worked himself out of a job, but nobody could be happy with the present incidence of food poisoning or venereal disease, for example. Nevertheless, there were great advances to be sought in the limitation of disability from acquired or chronic degenerative disease. It was here that the community physician could support