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SYMPOSIUM ON THE TEACHING OF PSYCHIATRY

Undergraduate Medical Students in Denmark

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Summary: The increasing role of psychiatry in the medical curriculum in Denmark is described. The general schedule of psychiatric teaching to medical students is outlined, emphasizing some of the special features of the Danish tradition. Roughly speaking, six per cent of all curriculum time is devoted to psychiatry. Clinical psychiatry, medical psychology and human sexuality are described separately. Interesting new possibilities for psychiatry in connection with a current curriculum reform, allotting more time to clerkships, elective periods and liaison teaching are pointed out.

Psychiatry in the medical curriculum

An announcement in the journal of the Danish Medical Association of 1870 read, 'Dr C. G. Gædeken, lecturer, will publicly give clinical lectures on insanity, Sundays 8–9 a.m.' This was the beginning of the teaching of academic psychiatry in Denmark and very much reflects the humble position that this subject held until the middle of the twentieth century. It was only gradually recognized that psychiatry was an entity in itself, not belonging to public health, forensic medicine or neurology. A true academic centre with particular obligations to research and the teaching of psychiatry to medical students was not established until 1933, and this was at the University Hospital of Copenhagen, Rigshospitalet, first headed by Professor August Wimmer. From 1902 the medical students had compulsory lectures and clinical demonstrations in psychiatry for one (half-yearly) term. Later, from 1912, this was improved to form a real course, three hours a week for one clinical term. Despite a major curriculum reform of 1936, this remained the situation for psychiatry.

Through a grant from the Rockefeller Foundation, Erik Strömgren at the University of Aarhus succeeded in doubling the number of lectures in psychiatry at the university from 1945. This contributed to a real improvement of the teaching of psychiatry in the next nation-wide curriculum reform of 1954: 60 hours of lectures distributed the first three clinical semesters, followed by a qualifying examination, and combined with one month of psychiatric clerkship.

The study plan of 1967, which is still in effect, markedly improved the situation for psychiatry, which acquired the status of a major clinical discipline. In terms of curriculum position it rose to third place after surgery and internal medicine, ahead of paediatrics and obstetrics and gynaecology. Table I shows the quantity of psychiatric teaching to undergraduate medical students for each of the three universities in the six-and-a-half-year estimated study programme. For each term the percentage of all teaching in that term represented by psychiatry is calculated (Nystrup and Oldinger, 1981). Roughly speaking, 6 per cent of all curriculum time is devoted to psychiatry in Denmark.

The bulk of psychiatric teaching falls in the fifth and sixth years, centred around the psychiatric clerkship of four weeks duration. Despite this, the principle of psychiatric teaching in the curriculum is an ongoing programme, starting pre-clinically with medical psychology, emphasizing normal features and development, continuing clinically with general psychiatry, particularly the major psychoses, before the students are introduced to the psychiatry subspecialities, child psychiatry, adolescent psychiatry, forensic psychiatry and mental retardation. Before the final examination most schools offer a revision course emphasizing general psychiatry and diagnosis and treatment of the major psychoses and neuroses. The approach throughout the programme is holistic, underlining both psychosocial and biological mechanisms behind the phenomenology of the clinical cases.

Some aspects of the content of the psychiatric teaching programme

In the absence of a list of psychiatric teaching objectives, the most relevant definition and delimitation of the subject is to be found in the textbooks. Textbooks have existed in the Danish language since the 1890s. Today two major Danish psychiatric textbooks each cover the requirements of psychiatric knowledge for the undergraduate medical student.

TABLE I

Number of hours of psychiatric teaching given to undergraduate medical students in Denmark at the universities of Copenhagen, Odense, and Aarhus

	Copenhagen		Odense		Aarhus	
Year of study	Hours	%*	Hours	%*	Hours	%*
1	26	5	0	0	45	8.7
2	0	0	0	0	0	0
3	30	6.4	40	5.8	0	0
4	0	0	30	4	0	0
5	45	4.7	95**	12	164**	13.7
6	142**	18.6	60	12.2	65	9.6
7	0	0			0	0
Total	243	6.4	225	5.8	274	6.7

*Percentage of all teaching hours.
**Including four weeks of clinical psychiatric clerkship (one week = 20 hours).
Each year is divided into two semesters with separate programmes.
Total length of study is estimated at six and a half years in Copenhagen and Aarhus, six years in Odense.

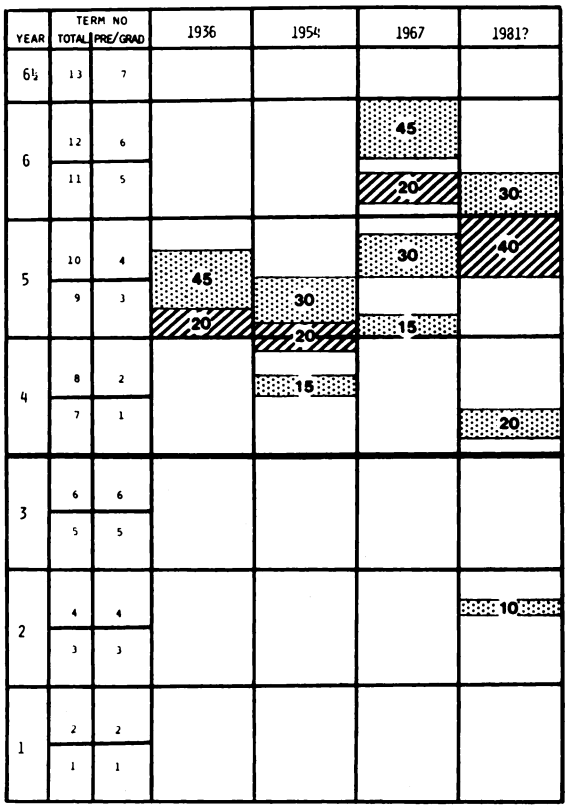

FIG 1.—Psychiatric teaching to undergraduates in the three Danish medical schools. PRE: pre-graduate; GRAD: graduate. The area shaded with dots represents lectures, the area shaded with lines clerkships.

Being familiar with the textbook of Strömgren (1979) or the book edited by Welner *et al* (1980), the Danish physician will be well equipped with current psychiatric capabilities. In addition, Danish textbooks on child psychiatry (Lomholt and Brask, 1979) and mental retardation (Dupont, 1979) are recommended.

The model of psychiatric teaching to undergraduate medical students is similar in all three medical schools (Fig 1). The students are introduced to psychiatry through a series of lectures (20–45 hours). The intention is to familiarize the students with the major psychoses, neuroses, character disorders and general principles of psychiatric examination and treatment. Besides overview, motivation and guidance on the textbooks, the lecture course aims at providing a background for the subsequent clerkship.

In the clerkship of four week's duration, the students are requested to work up records on patients admitted to the wards to which they are assigned. Some limited 'on call' experience is also provided, linking the student to the attending junior registrar. During the clerkship formal teaching is organized in addition to the clinical supervision. The teaching at this stage encompasses case presentation clinics and independent seminars for small groups of students on various psychiatric problems. The opportunities to expose the student to the current research scene of the department is utilized. In the medical school in Aarhus as many as 64 hours of theoretical sessions are offered during the four-week clerkship period. This gives an opportunity of going through the major psychiatric subdisciplines parallel to the practical clinical experiences in the wards.

A new series of lectures follows the clerkship period in the programme of psychiatric teaching. Here a

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number of lectures deal with psychiatric subspecialties, such as adolescent psychiatry, social psychiatry, forensic psychiatry and biological psychiatry. Various treatment modes, such as the pharmacological, physical and psychological, are taught in close relationship with the ultimate clinical realities. The students are at this level expected to be able to discuss differential diagnoses and borderline states.

Danish psychiatric research holds a strong position in epidemiology and psychopharmacology. This naturally influences the content of the psychiatric teaching programme. One may say that the average Danish physician is unusually competent in psychopharmacology. This is important because there are only psychiatric in-patient beds for 0.23 per cent of the population. Epidemiological research estimates the actual need at 0.25 per cent.

The teaching in respect of psychological treatment methods is restricted to psychoanalytically oriented psychotherapy and behavioural therapy. However, other psychotherapies are mentioned, and references are given in the textbook of Welner *et al* to, e.g., group therapy, gestalt therapy and transactional analysis.

In Copenhagen and in Aarhus the psychiatric teaching programme leads to a graded, written examination half a year prior to the final examination in surgery and internal medicine. In Odense, the psychiatric evaluation is postponed to the very end together with those of the other major clinical disciplines. The psychiatry examination in Odense is oral, using clinical cases on video-tape.

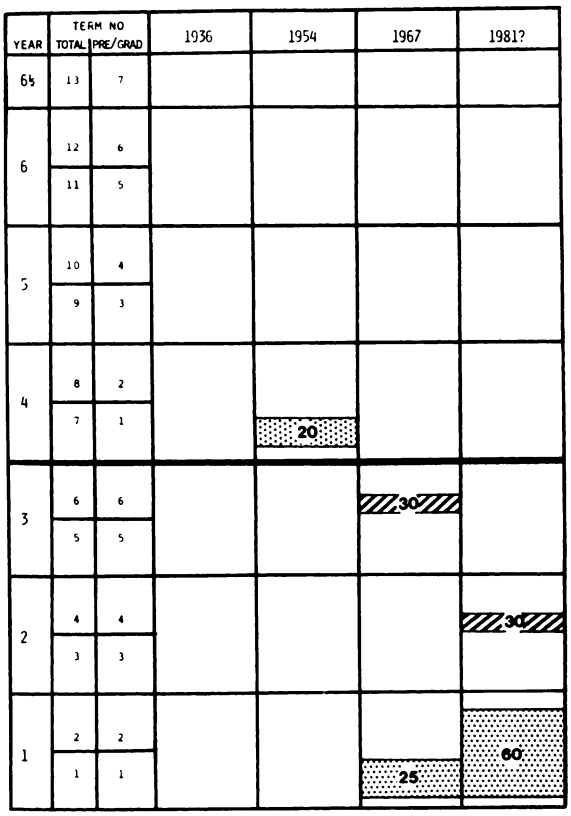

FIG 2.—Psychology teaching to undergraduates in the three Danish medical schools. PRE: pre-graduate; GRAD: graduate. The area shaded with dots represents lectures, the area shaded with lines clerkships.

Medical psychology

The teaching of medical psychology was introduced into Danish medical curricula in 1967 as a major course (Fig 2). This has also—so far—been the major opportunity of teaching behavioural science in general, because subjects such as social medicine and occupational medicine have very few curriculum hours, and the subject of hygiene mainly deals with classic environmental health hazards and methods of disease prevention.

Indeed, the intentions behind introducing medical psychology preclinically were to counterbalance the knowledge and the attitudes of the basic sciences. One of the original ideas of integrating aspects of normal psychology and normal physiology has never really been possible. Consequently the content of medical psychology has been separated into: (1) areas where the science of psychology contributes to the understanding of the functioning of man; (2) particular areas of psychology relevant to biology; and (3) orientation to clinical psychology, also introducing psychiatry as a separate discipline.

This means that the content covers perception, attention, arousal and sleep, models of information gathering and elements of learning psychology. Of particular biological relevance are conditioning from a psychological viewpoint, studies of animal socialization, and brain function as measured by psychological means. The theories of the Russian neuropsychologist, Luria, are presented. The course in year three at the University of Copenhagen is extensive and very clinically oriented. One full week is devoted to this part of medical psychology. The course is built around a core of development psychology, starting with psychological issues in pregnancy and infancy, moving on to hospitalized children and other problems with children and adolescents. The adult phase deals with interviewing, psychosomatic reactions and family dynamics, stressing the importance of team-work for the health care professional. The course continues with the process of ageing, death and dying. The final section

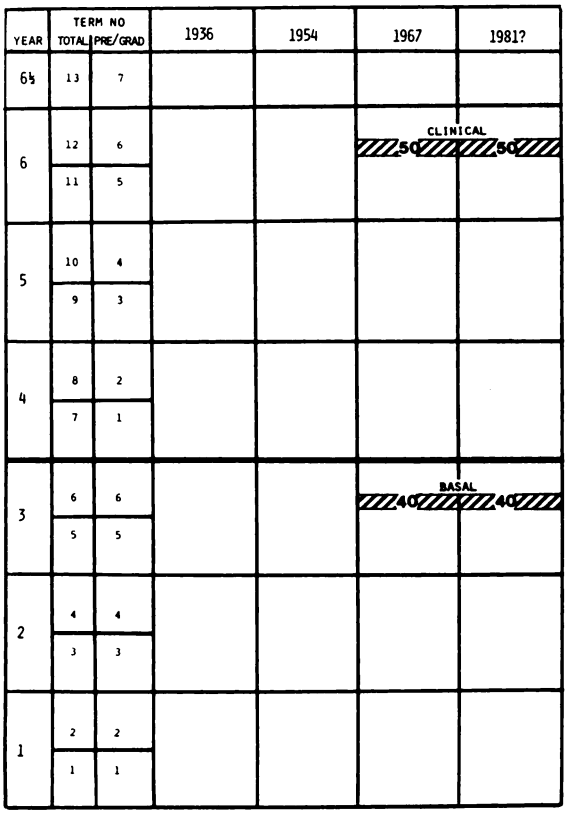

FIG 3.—Sexology teaching to undergraduates in the three Danish medical schools. PRE: pre-graduate; GRAD: graduate. Shaded areas represent one-week intensive courses.

takes up the question of patient roles, patient information and ethics.

Human sexuality

In Copenhagen there are two courses in human sexuality, in year three and year six, each of 30 hours in a one-week schedule (Fig 3). Similar, although less comprehensive, courses are given in Odense and Aarhus. Although these courses have a close connection with psychiatry and most teachers are psychiatrists, they are not included in the table of psychiatric teaching, both because they are elective—though very popular—and because they are negotiated separately with the curriculum committee. In year three the biological aspects are underlined. The physiology of sex, contraconception and the doctor's role in sex education in society are covered. In year six the students are introduced to clinical sexology, sexual minorities and the treatment of psychogenic sexual dysfunctions.

Teaching methods, evaluation—and the future

There are three key teaching methods: the lecture, the clerkship and the small-group teaching in medical psychology and during the clerkship. The lectures in psychiatry, based on a dignified tradition, follow the development in higher education. To the extent that the individual teacher cares, feels competent with technology and finds it effective, various aids are used, from slides and transparencies to tape demonstrations and films. Quite frequently some part of the lecture is left for the presentation of a volunteer patient. Handouts are distributed generously.

All psychiatric teaching centres have a pool of videotape material. Teachers share the experience that it is difficult and time-consuming to produce audio-visual materials of such a quality that repeated use is encouraged. *Ad hoc* video-taping and closed circuit television is preferred. Still, the live patient is the number one choice at most places.

Role-play is to a limited extent used in the courses in medical psychology and sexology. In most of the psychiatric teaching it is hoped that the active role of the student will be question-raising and participation discussion.

A special problem that is constantly under experimentation is the format of the clerkship. It is difficult to find the optimal balance between clerkship obligations and teaching opportunities, which in this context means finding enough learning incentives for the clerks in the clinical environment.

The evaluation—as mentioned—is a graded written examination at two of the universities and an oral clinical examination in Odense. The written evaluation consists of essay-type questions, some of which contain short clinical vignettes. Occasionally, more elaborate clinical cases are the bases on which the students are requested to solve problems and to formulate theoretical considerations. Most of the questions are of a very practically oriented nature. The opinion of the psychiatric staff about the present evaluation of the teaching programme is one of contentment: with few exceptions the students perform on a high level.

A new curriculum at the University of Copenhagen Medical School is expected to operate from 1984. In this the status of psychiatry is further improved. The number of allocated curriculum hours is particularly increased in medical psychology in the preclinical period. It is suggested that a number of psychiatric case presentations be incorporated in this early teaching. The clerkship period is doubled from four to eight weeks. It is planned that almost all the theoretical psychiatric teaching will take place during this time. The extended period of exclusive psychiatric teaching presents opportunities for excursions to institutions and other community services. A better integration

with social medicine is expected to improve the understanding of social psychiatry (Betænkning, 1980).

The new plans allow for more elective periods, from which psychiatry and particularly its subspecialties may benefit and future researchers be motivated. More space is allowed for independent study programmes, so that dissertations can replace the ordinary teaching programme and subsequent evaluation.

Of importance for the overall place of psychiatry in medicine is the plan for a special course in patient interviewing and doctor-patient relationships through a joint enterprise between psychiatrists and other clinicians. Interesting liaison teaching is planned during the clerkships of surgery and internal medicine. It is suggested that psychiatric case presentation clinics should take place on the somatic wards. The patient would be selected from the somatic wards and provide background for teaching about the psychological or psychiatric aspects of illness. This opens up the kind of holistic medicine that psychiatrists have emphasized for years—though often amongst themselves. The new liaison teaching may, in addition to benefiting the prospective physician, also stimulate collaboration between psychiatrists and other clinicians in the future care of the common challenge, our patients.

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