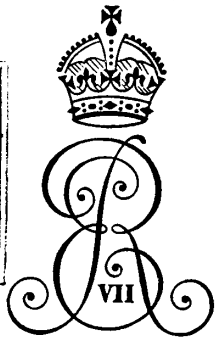
KING EDWARD'S HOSPITAL FUND FOR LONDON



EUROPEAN CONFERENCE

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NETHERLANDS
by Dr. J. B. STOLTE

SWEDEN
by Dr. A. ENGEL

FINLAND
Additional Paper
by Mr. O. VAUHKONEN

HOSPITAL ADMINISTRATIVE STAFF COLLEGE
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SWEDEN

The Swedish regionalized Hospital System

by

DR. ARTHUR ENGEL

Director General, National Board of Health

The rising costs of hospital care and shortage of medical personnel and especially doctors and nurses have focused the interest of the responsible medical and political bodies on rational hospital planning and organisation. It is worth mentioning that the consumption (or production) of all kinds of health care has increased with 3·2% each year during the years 1945–58. During the same period of time the total labour force occupied within the health service has gone up with 4·3% annually while the total expenditure out of public funds for health rose with 8·2% each year. Those costs correspond to 3·3% of the gross national product of the country. In fact, we are looking forward to a similar development in years to come but the increase is expected to be less pronounced. The share of the gross national product spent on health thus is calculated for the years 1970 and 1980 to become roughly 5 resp. 6½%. It should be observed that in Sweden there is only a small sector of private expenditure for health (22 U.S. $ per capita against 105 $ in the U.S.A.*) and that such social services as care for alcoholic addicts and the welfare of children and the aged are not included. Further on, neither investments nor running costs of water supply, sewage disposal or labour protection are included.

The health services in this country are well developed and hospital facilities especially well provided for. There are hospital beds (cottage hospitals and nursing homes not included) for somatic diseases corresponding to 7·2% of the population and for mental diseases to 6·3% (mental deficiency included). Taking this into consideration the expected increase in expenditure for health at the first glance might appear as an exaggera-

* Facts on the major killing and crippling diseases. National Health Education Committee, Inc. 1961.

tion of the future need. I am, however, convinced that medical science and technology will continuously furnish practical medicine with new and certainly more expensive weapons against disease that will require more and more personnel for its operation. I also believe in an increasing public demand for health services of different kinds not least in prevention, health control and medical advice in many situations of life. In Sweden with its extremely low birthrate (13·85%) and long expectancy of life (for men 70·5 years and for women 73·4); the age distribution of the population is becoming an undesirable one from many points of view. One of them is the aspect of medical care. Recent studies of a royal commission on the future need of doctors, of which I was the chairman seem to reveal a very strong increase in consumption of medical care by high-age-groups. The following table demonstrates this relationship by means of an index calculated from the use of hospital facilities (frequency, length of stay) medical consultations of all kinds, number of prescriptions.

Number of consumer units in different ages.

Age	*General hospitals, TB and contagious diseases*	*Long term diseases*	*Mental diseases*	*Ambulatory care*	*Total*
0– 9	0·63	0·00	0·00	0·35	0·4
10–19	0·47	0·02	0·01	0·27	0·5
20–29	0·78	0·02	0·27	0·53	0·5
30–39	0·82	0·03	0·49	0·73	0·6
40–49	0·90	0·09	0·90	0·83	0·8
50–59	1·29	0·21	1·30	1·24	1·2
60–69	1·74	0·69	1·87	1·68	1·6
70–79	2·00	2·09	2·15	2·07	2·0
80–	1·37	6·85	3·01	2·30	2·4

The figures of the table (the so called consumer units) show the percentage of medical care in the different age groups in relation to the percentage for the whole Swedish population according to each type of care. The last column shows those figures for all types of medical care together. A person between

10 to 19 is only counted as half a unit, a person about 50 is one unit, etc.

No doubt our ageing population will require a volume of medical care that is suprisingly high and which the health authorities should consider and plan for in time. The unequality of the demand for health services in different age groups has brought the Swedish National Board of Health to start operating with 'consumer units' instead of number of inhabitants in the planning for the future medical care.

Against the background here briefly outlined it is quite clear that the Swedish health policy must find ways and means to use its resources in a rational over-all health organisation favouring preventive measures, domiciliary and out-patient services and trying to make intensive use of the hospital beds. Great concern has especially been taken in the planning for hospital care with the view of providing easy access for the population to specialised medical treatment. As Swedish hospitals to a large extent are offering ambulatory specialised care through their out-patient departments there is an extra demand from the public for a decentralisation that has to compete with the necessity of a certain centralisation to arrive at rational units.

It goes without saying that medical care of general character, however, does not need to be centralised as is the case of highly specialised services. Forty thousand inhabitants may constitute a reasonable population to set up hospital departments of internal medicine and surgery with X-ray departments and anesthesiology (Swedish normal hospital) while the most advanced specialties (neurosurgery, thoracic surgery, etc.) should roughly have 1 million inhabitants to serve. Without a sufficient population basis you cannot organise hospital departments of an optimal size and effectivity. The specialist himself certainly demands a clientele large enough to give him necessary experience and routine.

During the last 15 years the requirement of hospital beds was eagerly studied. Attempt has been made to estimate the number of beds in general and of different specialties in relation to population, so called *bed quotas*. As has already been pointed out

these figures are highly dependent on the composition of the population according to age groups. They must further vary with the prevalence of disease among the population in respect of the total pattern as well as of the frequency of the individual diseases. Many other factors are also involved, e.g., social and economical. Health insurance schemes thus can have an effect in either raising the demand for hospital beds as is the situation in Sweden with completely free hospital care and lesser benefits for ambulatory and domiciliary care, or bringing them down where consultations are favourably covered by the insurance. The housing situation in certain areas may influence the tendency to hospitalisation as well as a strong family tradition (Israel) may be effective in the opposite way especially in the case of old people.

The value of minimum standard rates for hospital beds '*bed quotas*' is—that must be frankly underlined—a limited one. If the figures are related to age groups (consumer units) they are more reliable as a base for hospital planning but there is still much criticism left. However, if we take them with a pinch of salt they are in our experience indispensable in hospital planning as a crude guidance. I will here below present the Swedish figures as used for hospital planning inside the counties by the National Board of Health and the special Commission on Hospital Planning and Equipment. They are entirely based on the experiences from the last 15 years hospital planning and they have been revised from time to time. Prominent causes for revision have been the marked decrease of infectious diseases and increase of diseases related to old age.

Hospital beds in relation to population as recommended by the Swedish National Board of Health. (The most specialised services not included, cf. page 11.)

	Beds per 1,000 *population*
Somatic hospitals	
Non-specialised (residual small hospitals)	0·2
Surgery	1·3 à 1·4
Medicine	1·4 à 1·5

	Beds per 1,000 population
Gynecology	0·3 – 0·4
Obstetrics	0·5
Otorhinolaryngology	0·15 – 0·19
Ophthalmology	0·12
Pediatrics	0·3
Orthopedics	0·3 – 0·4
Long term care	0·25
(in nursing homes)	(3·75)
Lung diseases (decreasing)	0·4
Contagious diseases (decreasing)	0·2–0·3
Psychiatry (minor psychiatry)	0·3
Total	5·72–6·26

	Beds per 1,000 population
Mental hospitals and institutions for mental delinquency	
Mental hospitals	3·6
Mentally deficients with other handicaps, delinquents and low grade deficients (idiots)	0·3
Nursing homes for mentally diseased	1·0
Mentally deficients:	
nursing institutions (externat schools excluded)	1·2
Total	6·1

The new hospital plan for England and Wales*, presented by the Minister of Health to Parliament, January 1962, presents the existing ratios of hospital beds and assesses the needs for 1975. The provision of beds which ought to be made by 1975

* Her Majesty's Stationery Office, London, Cmnd 1604.

is in comparison with the Swedish estimates surprisingly low and lower or the same as the present available number.

	Per 1,000 *population*
Acute beds	3·3
Maternity beds	0·58
Geriatric beds	1·4
Beds for mental illness	1·8
Beds for mental subnormality	1·3

Similar studies are reported from Norway (personal communication by Dr. Evang), Czechoslovakia and U.S.S.R. (cfr. WHO Techn. report series No. 215).

One hundred years ago there arose on the ground of the historical Swedish counties a new regional system of self-government, the county councils. This competent body is a small locally elected parliament meeting as a rule once a year and having the right to impose a specific duty on the inhabitants of the county. An executive committee is carrying out the resolutions taken by the county council in session. A county has in average a population of about 250,000. Their appropriate size has together with a very well manifested interest in providing the best facilities for hospital care—their main responsibility according to the national law regulating their activity—have offered excellent capability of development. The high standard of hospital care in Sweden is thus to a great extent the merit of the county councils. It is a well established fact that a population of 200,000–250,000 is enough as a base for a modern well-specialised hospital. Our so called central hospitals (one for each county) have proved it. Those hospitals have up to 13 specialised departments and several laboratory and other technical services. The recommended pattern—realised in several counties—is:

Departments with wards
Internal medicine
General surgery
Pediatrics
Gynecology and obstetrics (women's clinic)
Ear, nose and throat

Ophthalmology
*Neurology
*Dermatology
Orthopedics
Minor psychiatry
Child psychiatry
Rehabilitation clinic
Long term diseases
Other services
Radiology
Anesthesiology
Physiology
Biochemistry
Microbiology
Pathological anatomy

Around the central hospital and its many specialised outpatient departments as the very core of the hospital system there are grouped so called normal hospitals with internal medicine, general surgery, radiology and anesthesiology represented. In some places there are also departments of gynecology and obstetrics as well as of pediatrics with much importance placed in their participation in the MCH-Welfare of the area. As already mentioned 40,000 individuals seem to be a reasonable population for such a normal hospital. Here I feel justified to inform that the policy of the National Board of Health, supervising the whole field of medical care, is to eliminate the small hospitals or to transform them into normal hospitals. In very remote and sparsely populated areas only a one-doctor hospital or a cottage hospital may exceptionally be accepted. Good roads and every fifth Swede a motor-car owner seem to neutralize the local resistance our policy sometimes meets with.

The success of the county hospital scheme has convinced the public and reluctantly the medical profession of the advantage of having the county councils as responsible for all medical care including individual preventive measures. The county councils will therefore according to a parliamentary act of 1961 take over the district doctors and their stations (today serving a population

* In larger counties only.

of about 6,000 in a rural area). A better integration between medical care inside and outside the hospital will thereby be achieved. It is to be expected that the County Council will in a near future become responsible for the administration of the mental hospitals now run by the State—a process already developing on a voluntary basis. The state will thereafter be responsible for—apart from its over-all planning, supervising and controlling functions—only for environmental sanitation and probably a few small branches of highly specialised institutional services (criminal psychopathics, the blind, the deaf and complicatedly disabled individuals). The responsibility for environmental hygiene, however, is divided between the smallest administrative units (the communes) and the state. The desirability of congruence between local communes and rural health districts has been claimed and from the public health point of view it has repeatedly been advised to have both not smaller than 8,000–10,000 inhabitants, and with two or three district doctors working at one station which under these conditions could be better staffed and equipped and acting as the local health centre.

I have tried to visualize the hospital organisation inside the counties and to present the counties newly acquired over-all responsibility for medical care including individual preventive medicine. Experience has shown that these self-governing territories have been capable of building up highly differentiated hospital facilities but otherwise it is full evidence that they are not large enough to support such specialities as neurosurgery, thoracic surgery, radiotherapeutic cancer clinics, virus laboratory, etc.

Also in our country as everywhere, new branches of medicine first emerge at the teaching hospitals. Exceptions, however, exist and there are a few examples of even world-famous clinics for new, highly specialised disciplines established at municipal non-teaching hospitals around a professional of high competence and strength of will. In 1956 I was appointed by the government as a one-man commission to study the need of resources for the most specialised hospital services and to advise on a suitable organisation to provide this care on a nation-wide scale. Medical reasons are not the single justification for a

rational organisation. Sound economy in the use of medical personnel and of available funds interfere, too. Equipment and running costs are, as is well known, extremely high for those services indicating a concentration to units of a sufficient number of beds. Large units are further on indicated to secure a clientele large enough for practical and scientific studies and for teaching purposes. Each large and highly specialised hospital should be regarded as a potential teaching hospital for education and training of doctors, not least the post-graduate training of specialists. It is an important task to balance the factors speaking in favour of high centralisation against those indicating decentralisation, based among other factors on an understandable wish of the public to have medical facilities within a convenient distance. In spite of excellent communications the last mentioned circumstance must be duly considered in a hospital plan of a country like Sweden so sparsely populated in its northern wide area. Strong local political forces will immediately remind the hospital planner should he forget to implement this basic psychological factor.

Elements necessary in hospital planning are:

The number of people you have to plan for;

Demographic character and distribution of this population;

Total needs of beds;

Optimal size of the different departments of the hospital;

A site of the hospital with a guarantee for best communication facilities for an optimal number of inhabitants.

I have above described the hospital organisation of the Swedish county. The terms of reference of my commission now required a higher organisational level for let us call them superspecialities. Regionalised hospital systems of this kind exist in the United Kingdom since the introduction of the National Health Service. England and Wales thus have 14 hospital regions of 1,500,000 to 4,500,000 inhabitants and Scotland five with a population varying from 200,000 to 3,000,000. The guiding principle was independent and complete medical

service inside each region. The system of France is a very logic one. The 'Centre hospitalier regional' is serving five or six 'departements' with a total population of 2,250,000 to 2,700,000. There is also a requirement that nobody should be living more than 120–150 kilometers from his regional hospital. There is one 'centre hospitalier' in each departement (450,000 inhabitants on average) organised in the whole as a Swedish central hospital. As early as 1947 the master plan for hospitals and related facilities for Greater New York recommended one 'central hospital' with neurosurgery, plastic surgery, thoracic surgery and ophthalmology for each million of population of the city. Massachusetts calculated in 1954 for their 4,500,000 inhabitants four regional hospitals with every speciality.

I held a series of hearings with representatives of the most specialised branches of medicine demanding their opinion on the need of hospital beds for their different specialities, the optimal size of departments, etc. By means of an enquête to the hospitals the present activity within the following branches was analysed: neurosurgery, thoracic surgery, plastic surgery, radiotherapy, neurology, dermatology, urology and child surgery. Waiting lists were also required.

The estimated standard figures arrived at were the following:

	Beds per 100,000 *population*	*Unit size*
Plastic surgery	5·5	60 beds
Thoracic surgery	5·5	50–75 beds
Neurosurgery	4·1	40–45 beds
Radiotherapy (cancer clinics)	8	100–150 beds (at least $\frac{1}{3}$ for gynecological cancer)
Neurology	12–16	60 beds
Dermatology	15 (rural areas) 30 (big cities)	50–60 beds
Urology	(undetermined)	60 beds ($\frac{2}{3}$ male patients)

	Beds per 100,000 children *under* 15 *years of age*	
Child surgery	100 (densely populated areas) 20 (sparsely populated areas)	50 beds

The four first mentioned specialities seem to be leading for the size of the region because here a strong centralisation is most indispensable. The majority of cases belonging to neurology, dermatology or urology can and should be taken care of in departments of internal medicine and general surgery of county central hospitals whereas the recommended regional unit should provide for treatment of the most complicated cases. As regards child surgery the requirement of beds is high in the large cities where all children with surgical diseases are expected to consult child surgery department. In other areas it has been found most practical to leave to the general surgeon to take care of the majority of children, representing as a rule emergency cases. Only those cases which need the experience and the technical skill of the child surgeon have to be sent to him.

From the above mentioned calculations it was apparent that in accordance with experience from abroad about 1 million inhabitants would be necessary for setting up a hospital with the specialities we had in mind and with enough number of beds to constitute a desirable unit.

The next step of procedure was to nominate those among the large hospitals which seemed to become most suitable as regional hospitals. The five teaching hospitals (Caroline Hospital, Stockholm, University Hospital, Lund-Malmö, Sahlgrenska Hospital, Gothenburg, Academic Hospital, Uppsala, and Umeå Hospital at Umeå in the northern part of the country) are from the beginning predestinated. In order to draw up the borders of the regions required for Sweden's 7,500,000 inhabitants an expert in economical geography was summoned to study the problem from the point of demographic and economic development as well as a problem of transport. It was from the beginning clear that if possible a county should

not be divided between two regions and that we had to be prepared to the vast sparsely populated Umeå region a smaller number of inhabitants than the ideal 1 million.

The geographer, Dr. Godlund, has published his studies separately*. The reader interested in the details is referred to this paper. Here shall only be remarked that these potential regional hospital sites were earmarked by me and analysed by Dr. Godlund from his special points of view, taking into consideration the population and transport situation in the year 1955 (the last available figures when the study was made) and its probable development up to 1970. The result as it appeared in the report of the commission took the form of two alternative proposals.

1. Six regions (see fig. 1–2) immediately, with Linköping Central Hospital as regional hospital.

2. Seven regions (see fig. 3–4) with Örebro Central Hospital as the seventh Regional Hospital from 1970.

The counties were supposed to collaborate in the regionalisation plan on a voluntary basis. The county in which the regional hospital is situated should run the regional hospital and the other counties should pay for the real costs of the treatment of their patients, i.e., for running as well as investment costs.

Additional recommendations were that the co-operation between the counties should start with the following clinical branches: neurosurgery, neuromedicine, thoracic surgery, plastic surgery, urology, child surgery, radiotherapy, dermatology and rheumatology† and special cardiology. Further on, 'jaw units' and units for renal diseases including artificial kidney treatment were recommended on.

The following laboratory services were proposed: pediatric X-ray departments, virological, allergological and blood-coagulation laboratories, laboratories for hormone analysis, for cytology and for isotope diagnostics.

As might be observed from the list, specialisation in the

* Godlund: Population, regional hospitals, transport facilities, and regions. Royal University of Lund, Sweden. 1961.

† Against my recommendation.

surgical field has been largely embarked upon whereas great concern has been taken not to break up internal medicine too much. I always felt that specialisation in medicine should mainly be based on technological grounds. This attitude seems to me to guarantee the integration of medical care of the individual in the best possible way. I therefore suggested that cardiology in principle should be kept under the department of internal medicine, but that small technical unit of about 30 beds should be arranged for the advanced diagnostic procedures (catherisation on the arterial side, etc.). This unit should closely co-operate with thoracic surgery, chest clinic and laboratory of clinical physiology. Endocrinology with its very close connections to metabolism will also remain inside internal medicine and here again the technical provisions will be offered by a special agency, the hormone laboratory.

Another matter of concern has been the independency of the new specialities. From the emerging young specialist there is a strong demand for separate departments for each specialty while the old clinicians are in favour of having them as subdivisions of departments of medicine and general surgery. My own attitude and my recommendations are on reasons already mentioned favouring independency of surgery branches and subordination of most of the new offsprings of internal medicine.

The plan was with slight modifications presented by the cabinet to Parliament in 1960. The main change, made in the cabinet bill, was that already from the start seven regions should be established. Parliament accepted the plan. Its application in practice has up to date gone very smoothly. The counties of each region have set up a joint agency of co-ordination advising the county councils with which the final decision lies.

Through this act of Parliament, Sweden has a regionalised hospital system with regional hospitals, county central hospitals and peripheral county hospitals called normal hospitals. The philosophy of the system seems to be very popular and a fruitful basis for further planning in the field of medical care. Thus, it has been recommended on the regional level to organise the following services.

1. In addition to the child psychiatry department, special homes for the treatment of mentally disturbed children.

2. Institutions for the treatment and education of children with cerebral palsy.

3. Highly qualified audiological laboratory.

4. Foniatric clinic.

5. Rehabilitation centre for neurologically disabled attached to the department of neuromedicine.

6. Departments of child neurology.

No doubt there will be other activities added in the future.
Stockholm, 23 October, 1962.

Arthur Engel, M.D.

Director-General, National Board of Health

ON EDUCATION AND TRAINING OF HOSPITAL ADMINISTRATORS IN SWEDEN

Leading administrative posts in Swedish hospitals

Hospitals in Sweden are owned and administered either by the state or by regional authorities—county councils or, on equal level, the largest cities (Stockholm, Gothenburg, Malmö).

As a rule, each hospital has a Board of Governors appointed by the owner. This board is responsible for the running of the hospital.

The high executives of the hospitals are the director (large hospitals) or the managing doctor (small hospitals). The hospital directors are at present recruited by laymen but the post can legally be held also by a physician. In a hospital with a layman as director, one of the doctors is appointed as chief medical officer. In the case of a managing doctor as head of the hospital, he is assisted by a hospital secretary to assume responsibility for lay administration, especially in respect of finance, male staff, stores, equipment supplies, transport, etc.

In each hospital a matron is the chief of the nursing personnel aided by assistants.

Present training of hospital administrative personnel

No special requirements for holding any of the mentioned administrative posts are prescribed.

As a rule, the lay hospital directors have a training at university level (faculty of law or faculty of economics). Hospital secretaries sometimes have a diploma from a higher commercial school or college or from an institute of sociology (not on a university level), others have a very poor training. None of these educational lines gives a specialised training adopted to hospital administration.

Voluntary perfection courses of short duration have, however, been arranged for hospital executives, doctors as well as laymen.

For matrons only, there exists an acceptable voluntary training of eight months duration at the Swedish post-graduate school of nursing.

From the side of the hospital owners, the administrative personnel, and the medical authorities there is a strong demand for better training facilities for administrative personnel. Especially as it has been claimed that the large hospital as a big enterprise nowadays needs a rational running from the economical and medical point of view.

Training and education of the different groups of the administrative personnel should be brought up to such a high level that participation in applied research could be anticipated.

Proposed educational programme

A special commission appointed by the King has newly presented its report including a very far-reaching proposal on the education of hospital administrators.

This commission suggests a new educational agency coordinating training and research in the principal paramedical subjects of the proposed training programme, i.e., a special Institute of Hospital Administration connected to the medical faculty of a university. The studies should in the first place end up with an academic degree called Bachelor's Degree of

Hospital Administration. Advanced training up to a Doctor's Degree in Hospital Administration is foreseen.

Teaching in non-medical subjects will take place at the faculties of law, philosophy and science. The main topics are here propedeutic studies in law, statistics, sociology and enterprise economics. Before entering these studies the applicant should have a three months practical administrative training at a hospital. The whole training would take four years.

This programme is now under discussion. It has been heavily criticised and that is the reason why I do not go into details. When we are meeting at the end of November I hope it will be feasible for me to summarise this criticism and present to the conference what probably will come out as a final result of the proposal.

Stockholm, 23 October, 1962.

Arthur Engel, M.D.

Director-General, National Board of Health

FINLAND

HELSINGIN SAIRAANHOITAJAOPISTO

(Helsinki College of Nursing)

Department of postbasic education

1962–63

DIVISION: NURSING ADMINISTRATION

PURPOSE

To prepare nurses for administrative positions in hospital or in public health nursing service.

The studies lead to the competence of a director of nursing services either in hospitals or in public health.

STUDENTS

Graduate nurses with the competence of a head nurse, a public health nurse or a nurse-midwife and a minimum of two year's work experience on the field their competency indicates.

LENGTH OF STUDIES

One academic year beginning in September and ending in May.

PROGRAMME

Administration of nursing services*
Public health
Nursing
Psychology
Principles of education
Sociology
Social policy
Finnish
English

* The students are majoring either in administration of hospital or of public health nursing services according to their speciality.

ADMINISTRATION OF HOSPITAL NURSING SERVICES

REQUIREMENTS

All students are expected to include in their programme of studies the following courses:

	Total number of hours		*Number of hours*	*Term*
Administration of hospital nursing services	600	General administration	16	A
		Management of nursing services	68	A–S
		Leadership in nursing	32	A–S
		Supervision	32	S
		Hospital planning and construction, nurses' part	32	S
		Field experience	420	A–S
Public health	60	Public health, advanced course	32	A
		Vital statistics	16	S
		Physiology of work	12	S
Nursing	40	Modern trends in nursing	24	A
		Nursing education	16	A
Psychology	36	Clinical psychology	24	S
		Social psychology	12	A
Principles of education	24	Special course applied to adults	24	A
Sociology	64	Social organisation	8	A
		Sociology of illness	8	A
		Hospital sociology	8	A
		Research methods	24	A
		Research seminars	16	S

	Total number of hours		*Number of hours*	*Term*
Social policy	16	Social security	8	S
		Work and employment policy	8	S
Finnish	32	Communication	32	A
English	32		32	

In addition to the above-mentioned requirements the students are expected to include at least two of the following courses to their programme:

	Number of hours	*Term*
Clinical nursing, advanced course	24	A
Clinical physiology	16	A
Developmental psychology	16	A
Group work	16	S
Health education	12	A–S

A=autumn term
S=spring term

GENERAL INFORMATION

The College of Nursing consists of two departments: the department for basic nursing education—School of Nursing—and the department for postbasic nursing education.

PURPOSE

The School of Nursing offers basic nursing education which leads to State registration as a professional nurse on staff nurse level.

The department of postbasic education offers programmes for professional nurses in order to prepare them for senior positions in special fields of nursing and for administrative and teaching positions in nursing.

For this purpose there are five teaching divisions in the postbasic department. One is for clinical and one for public health

nursing. Two other divisions offer advanced programmes in nursing administration and in nursing education. The department is also offering professional education in medical and psychiatric social work.

In addition to these regular programmes, refresher courses for public health nurses and for hospital nurses are arranged five times a year.

HISTORY

The Helsinki School of Nursing (basic education) was started in 1889 and was taken over by the State in 1930.

In the 1920's postbasic courses for nurses were arranged under the auspices of private organisations.

When the responsibility for nursing education was taken over by the State a *State College of Public Health Nursing* was established in 1931. Courses in administration and education were to begin with, arranged at the Helsinki School of Nursing. Out of this in 1947 a separate *Postbasic College for Nursing Education* was established. In 1951 these two State institutions offering postbasic education for nurses were combined.

The last change took place in 1958 when the former Helsinki School of Nursing and the Postbasic College joined and formed the present *Helsinki College of Nursing.*

ADMINISTRATION AND FINANCE

The College of Nursing is financed by the State. It has a full-time director and a board, consisting of representatives of senior members of the teaching staff, experts in education, medicine, nursing and social work. The State Medical Board supervises the College through a Director of Nursing Education subordinate to the chief of the department of Public Health.

TEACHING STAFF

The director of the College bears the responsibility of the total teaching programme of the College. She is assisted by two directors, one for basic and one for postbasic education. The ordinary teaching staff consists of 28 full-time nurse-teachers with advanced studies in their teaching subjects. Also two full-

time teachers experts in social sciences and in nutrition, belong to the teaching staff.

In addition a number of part-time special lecturers—many of them university teachers—are employed as well as field supervisors.

THE SCHOOL OF NURSING

According to the amendments in legislation the school offers since 1957 a 2½ years' programme for basic nursing education.

Entrance requirements for basic students are: 19–29 years of age and university matriculation (Baccalaureats). Aptitude tests are arranged for applicants.

* THE DEPARTMENT FOR POSTBASIC EDUCATION

TEACHING DIVISIONS

Clinical nursing. Instruction is offered in the following branches of nursing: medical, surgical, operating room, pediatric and psychiatric nursing. The students can choose one of these specialities for their major subject. Ward administration is included in the programmes. The studies give the competence of a head nurse.

Public health nursing. Programme is offered in generalised public health nursing, which includes also industrial nursing. The studies give the competence for public health nursing positions.

Medical and psychiatric social work. This division gives education in social work and in its application in the field of public health. The studies lead to the competence of a medical and psychiatric social worker.

Nursing administration. In this division, offering advanced programmes, the main subject is administration and the

* Every nurse, who graduates from the basic school is registered in the State Medical Board as a registered professional nurse. According to the completed postbasic studies and passed examinations the State Medical Board gives the nurses competence for special nursing positions, mentioned above, and keeps registers of nurses according to their competence.

application of administrative and supervisory principles either in clinical or in public health nursing services. The studies give the competence for administrative positions in nursing.

Nursing education. Teaching in this division is centered on principles of education and teaching. The students may choose between their application in teaching clinical nursing or public health nursing or midwifery. The studies give the competence for teaching positions in nursing.

Besides these ordinary studies leading to a competence, *refresher courses* are arranged. Both types of refresher courses (public health and clinical nursing) offer a six-weeks' programme covering background subjects and current trends in either field of nursing.

CURRICULUM

All divisions have a programme of nine months' length—one academic year. The year begins in September and ends in May. Class teaching is supplemented with field instruction. Only the division of nursing education has a different arrangement: between the two terms at the college, the students practise teaching as interns in schools of nursing in different parts of the country in a period of two terms.

STUDENTS

The students are professional nurses with a minimum of one year of practical experience after previous studies, be it basic or advanced. Baccalaureats are preferred. Aptitude tests are arranged for applicants on all levels of education.

FACILITIES

The college has its own building, where in addition to classrooms, laboratories, offices and a library, also a dormitory is available. Students do not pay a tuition fee, but pay for food and lodging. A free health service is available for all students.

NETHERLANDS

The Hospital Service in the Netherlands and the Management of its Hospitals

by

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It is rather difficult to describe the hospital situation in a country in such a way that comparison with the situation elsewhere becomes possible, the over-all organisation of medical care being so diverse. The components of medical care are closely interrelated, as they are of course with the social conditions in general. Only the complete picture would do to prevent misunderstandings. It would be prohibitive in length however.

Therefore I will have to confine myself to highlighting some points that seem vital to me in order to understand the organisation and scope of the hospital service in the Netherlands.

The Netherlands are very densely populated. In 1960 they numbered 344 inhabitants per square kilometre, making for about 11·5 million in total. Some 10% are less than five years old, 9·1% are 65 and older. The expectancy of life at birth was 71 years for males and 73·9 years for females. The death rate in 1960 was 7·6 per 1,000 inhabitants, the birth rate 20·8. Only 27% of the deliveries took place in hospital, 22 of them under supervision by a doctor and five under supervision by a midwife.

It is estimated that of any 1,000 inhabitants about 33 are under medical treatment each day; three of them are in a mental hospital, 20 are taken care of by the family doctor, 10 by a specialist. About 35% of those who are under the care of a specialist are in a hospital. There were 4,350 family doctors and 3,750 specialists in 1960 (as against 4,550 'other' physicians, 2,500 dentists and 900 midwives). The family doctor is able to take care of many patients in their own homes because of an

excellent system of district nursing care run by the so-called 'Cross-organisations'. In the majority of cases the patient comes under specialist care only by referal to him through the family doctor. The distribution of family doctors and specialists over the country is rather equal. In 1900 there was one physician in every 2,540 inhabitants, in 1930 one in 1,720 and in 1961 one in 900. In 1942 there was one specialist as against every four family physicians, in 1961 they almost equalled them in number.

In 1953 about 3·6% of the national income was spent for health care, as against 4·4% in 1958.

In 1959–60 about 6·5% of the family-expenses were for hygiene and medical care (1·6% for hospital care). The percentage has been slowly increasing for the last decade (6·3% in 1955–56).

Employees with an income under f. 7,450 a year are compulsorily insured against the cost of curative medical care with the 'sick funds', private insurance companies on a non-profit basis of which there are 115. Self-employed with a similar income can insure themselves voluntarily. All people of 65 years and older may insure themselves with the same sick funds at a substantially reduced rate if their income is under f. 3,590 a year. In 1961 about 73% of the population were insured with the sick funds*. The insurance covers the cost of medical care almost completely. There are virtually no medical indigents. In 1959 the sick funds spent f. 616 million; f. 83 million went to the family doctors, f. 98 million to the specialists and f. 205 million to the hospitals.

Of the 27% who are not insured with the sick funds at least three-quarters have taken some kind of insurance against the cost of curative medical care with commercial companies.

In 1959 there were 35,000 beds in mental hospitals, 6,000 in TB hospitals and 53,500 in general and special hospitals†. The

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* They represent 55% of the national income.

† When the word 'hospital' is used in the Dutch literature these general and special hospitals are meant.

beds in the mental hospitals are used throughout the year to almost full capacity, although there is a shortage of nurses*. The TB hospitals have to turn into other directions to keep their accommodation to good use. Some have been closed, but others have taken on the treatment of pulmonary disease, of chronic disease or they have turned to rehabilitation†.

There were 276 'hospitals' (225 general and 51 special ones) in 1959, the last year statistics have been published about. Although there were still 105 hospitals with less than 100 beds the small hospital, particularly that with less than 75 beds seems to be on the way out. There are almost no very large hospitals; only six had 750 or more beds in 1959. About 20% of the hospitals (with about 25% of the beds) are run by government or local authority. The other ones are private or voluntary hospitals, run as non-profit institutions.

In 1959 the over-all occupancy rate was 88·74% (in the general hospitals it was 90·64%). The occupancy rate in the small hospitals was substantially lower. The average stay in hospital per case has been about 20 days for the last seven or eight years. It is of interest in this respect that diagnostic work-up is done in the out-patient department in the great majority of cases. The percentage of patients who died in hospital has been about 3·5% in the last decade. It has been increasing steadily but slowly, showing that relatively more people are coming to hospital to die.

The use people make of the hospital accommodation may be expressed in the amount of days spent in hospital per inhabitant per year. In 1959 it was 1·62 days as against 1·42 in 1957 and 0·85 in 1948. This figure has been increasing continuously throughout the period after World War II, due on the one hand to the growing amount of hospital beds available and on the other hand to the fact that the sick fund insurance had removed the financial barrier. The absolute and the relative amount of hospital beds are still increasing in spite of restrictions posed on

* Homes for the mentally defective and institutions for the morally insane are not considered to be hospitals in the proper sense. Neither are the boarding schools for the training of the blind and the deaf.

† The mortality and TB morbidity are amongst the lowest in the world.

the hospital building programme by the government in order to divert most of the building facilities to house-building, this having got the highest priority. On January 1, 1960, there were 4·68 beds per 1,000 inhabitants in the Netherlands. Some authorities on the subject think that this should be almost sufficient at the present high occupancy rate. It seems doubtful however that this occupancy rate is right in the long run. There is little doubt that the pressure for more hospital beds has eased somewhat in the last two or three years. This could indicate that the saturation point is almost reached, at least with the present condition of medical care. Of course the possible influence of future medical discoveries cannot be taken into account. Three points are of interest however. The first is that the distribution of hospital beds over the country is rather uneven. In the Northern provinces of Groningen and Drente there are $3\frac{1}{4}$ beds per 1,000 inhabitants, in Zeeland 6·0. The second point is that there are as yet but a few hospitals for chronic sick or nursing homes. The problem does not lie with building but with staffing them. Nevertheless their number is increasing, easing off the load on the hospitals. The third point lies with the inherent tendency of the Dutch to arrange every aspect of life according to creed. In the hospital field (as with the 'Cross-organisations') it makes for a tendency to provide two or three or even more hospitals in a given area, each to take care of the members of a religious group. In the whole there are the three larger groups: the Roman Catholic one, the Protestant one and the non-denominational (often called 'Humanistic') one, the Protestant being divided into several sub-groups. They all have their hospitals and it will happen that a religious group is trying to provide for more beds although there are plenty of beds in the area. In the years after World War II the government has been able to keep this movement in check up to a certain point by exercising its power to withhold allocation of building permits. There is a strong tendency to set up legislation to make the running of a hospital without a license unlawful, but a law in this respect has not yet been passed.

The steady increase of hospital usage is particularly due to an increase of the number of admissions into hospital. The next

table does show this for those who are insured with the sick funds.

	admissions 100 *ins. pers*	*pat. days* *admission*	*cost* *pat. day*	*cost* *ins. pers.*
1951	6·35	16·7	f. 8.80	f. 9.35
1955	7·34	18·5	f. 12.54	f. 17.05
1959	8·16	18·7	f. 17.17	f. 26.15
1961	8·40	18·7	f. 19.85	f. 31.20

Hospital usage varies from district to district. The admission coefficient (number of admitted patients per year × 100: number of inhabitants in the district) varies between six and nine, whereas the over-all coefficient for the country was 7·96 in 1959. The reasons for the variation are unknown. Possibly sociological factors are at work, as in many districts the situation has remained virtually the same through the last 15 years.

The rising cost of hospital care as shown by the table has caused quite a lot of anxiety, although the reasons for the phenomenon are obvious. Devaluation has been partly responsible*. Wages have gone up too, of course, but in the hospital field the increase has been even far more important than elsewhere because of the backlog caused by the influence of the 'charitable' atmosphere in former years, because of the shortening of working hours, because of the relative increase in personnel made necessary by the greater intensity of the work and because of the fact that the religious orders provide far less a percentage of the workers than formerly. Then again depreciation is taking a larger toll† as the building of hospitals like any building is becoming more costly every year. The cost is estimated roughly to be between f. 65,000 and f. 75,000 a bed at the moment (about f. 200 to f. 225 per cubic metre). It is of interest in this respect that the building of most hospitals is financed with money lent from the public or from insurance companies and the like against a normal interest. In only a few

* Between 1948 and 1958 it may be estimated at about 35%.

† In the price of a patient-day the older hospitals can only include part of the depreciation (rebuilding value) where as with the newly built hospitals almost full depreciation is included. The tariff varied from f. 6.90 to f. 26.35 a day (1.1.1960), depreciation accounting for up to f. 8.00 a day.

cases local authorities or the government subsidise a hospital to a certain extent, but in most cases the hospitals have to make do with their income from payments by in-patients (in most cases covered by insurance) and from out-patients (mostly for the use of laboratories, X-ray department, out-patient-operating theatres, etc.).

The ever rising cost of the hospital service is also shown in the increasing percentage it gets of the total amount of money spent by the sick funds, as may be seen from the table below:

	1948	1953	1959
Hospital service	17·9	27·0	29·1
TB hospitals	5·3	5·6	2·7
Specialists	11·0	15·0	14·7
Family doctors	15·2	17·1	13·1
Dentists	5·6	5·9	7·0
Drugs and appliances	16·3	14·9	14·0

It has to be taken into account that the salaries of the physicians and surgeons working in a hospital on the 'doctor-in' basis are included in the cost of the hospital service.

The doctor's fee is included in the cost of a patient-day only in some of the hospitals (the 'all-in' or 'doctor-in' situation). The doctor in these cases is paid a fixed salary by the hospital*. In more hospitals this is only the case in regard to the sick fund patients, whereas the doctor charges the private patients directly. In still some other hospitals the hospital and the doctor both charge all the patients separately (the 'all-out' or 'doctor-out' situation). Both in the 'doctor-in' as in the 'doctor-out' situation the hospital may be a closed one, only admitting patients for those doctors who are on its staff or an open one, where the patient is quite free to have any licensed doctor of good repute. Most hospitals are closed for a greater part and open for a small one, particularly that for the private patients. More and more hospitals are joining the group of (at least partly) closed hospitals. About one third are still completely open.

The doctors in the hospitals are either specialists or trainees in the various specialisms. Only 70% admit family doctors and

* Virtually all mental and TB hospitals are run on the 'doctor-in' basis.

then in most cases only for (normal) deliveries.* In the closed hospitals the specialists are appointed as members of the medical staff by the board of the hospital or its equivalent.

Most hospitals in the Netherlands are private hospitals, run on a non-profit basis by boards. Many of these boards are self-perpetuating, some are appointed by the owners of the hospital (in most cases a religious order) or by a religious authority. In a few cases the owner, e.g., a religious order, runs the hospital himself. The boards consist of prominent citizens. Sometimes they still maintain an atmosphere of utter respectability but most of them have changed with the times and consist of people of many ways of life although the male element is still very predominant: there are industrialists and officials of labour-unions amongst them, lawyers and engineers, parsons and priests. Only very few doctors are board-members. The board is expected to indicate what the general policy of the hospital will be, it will appoint the major officers and the members of the medical staff, it will approve of the yearly budget and demand a periodical account of the state of affairs, both financially and functionally. Its predominant function is to see to it that the population served by the hospital really gets its due: the best possible care at the lowest possible cost. As the members of the board lack specific knowledge they depend upon their expert officers for guidance particularly as to development and planning. The final decision however is theirs.

The hospitals belonging to the State or local authorities may have a board, appointed by the authorities or they may come directly under an alderman or another official, who may be assisted by a committee of members of the city council.

The boards and committees are not depending solely on the advice of their own executives. They also may turn to their respective hospital associations. There are some nine such associations. Together with associations of hospital executives, e.g., of medical directors, of matrons, of nurses, of the heads of the departments of accountancy and economics (in many ways the equivalents of the 'secretaries' in Britain); they are bundled together in two larger associations, the 'Stichting Het

* In quite a few midwives are also admitted.

Nederlandse Ziekenhuiswezen'*, comprising the Protestant, the non-denominational and the public hospitals and their executive officers and the 'Centraal Bureau voor het Katholieke Ziekenhuiswezen†' through which the Catholic hospitals and their officials channel their combined efforts. Both have won a high esteem in the post-World-War-II-days. Their influence as a pressure group is becoming more and more apparent although lack of enough funds is still putting a drag on their performance. Only very few hospitals are not organised with any of them. Of the 276 general and special hospitals (1959) 112 were Roman Catholic (with 42·4% of the beds), 114 were non-denominational or public (with 40·5% of the beds), 49 were Protestant (with 17·0% of the beds) and one Israelic (with 0·1% of the beds).

At least some 80,000 people are working in the Dutch hospitals‡, 58,312 of them in the general and special hospitals (in 1959). The relative amount of employees is steadily increasing as is shown in the following table:

	1956	1957	1958	1959
Number of pat. / Number of employees	0·98	0·95	0·92	0·90
Number of pat. / Number of nurses	2·04	2·01	1·95	1·94

The number of employees does not include the doctors and the management, the number of nurses does include the student-nurses and the nursing-aids.

To co-ordinate the efforts of all these people 776 executive officers were trusted with the management of the 276 general and special hospitals in 1959. In 203 a medical director was in charge, either as a full-time official (62) or combining the job with medical practice (141). In 48 of the 73 other hospitals the board had a medical adviser. Some 29 hospitals had an 'economical director' on an equal rank with the medical director, in 191 an 'economist' of a slightly lower rank. In 15

* The Foundation of the Combined Dutch Hospitals.

† The Central Bureau of the Combined Catholic Hospitals.

‡ This is 1·8% of the total working force of about 4·5 million.

hospitals a priest or a parson is (one of the) director(s). In 65 hospitals the matron or a male head of the nursing service either is in charge or is of equal rank with other officials in the management. The situation in some of the Catholic hospitals is less clear in this respect, the Mother Superior sometimes being the only one in charge, sometimes however she is responsible only for the spiritual guidance of the nuns.

In the past two or three decades the composition of the managerial section in the hospitals has been strengthened considerably. More people have been enrolled to perform the complicated task in question. The medical influence in the management is still increasing as judged from the growing number of medical directors but the part in management taken by non-medical men, known as economical directors or economic administrators* has been growing rapidly. In most hospitals the head of the nursing department always has had an important influence on the day-to-day management of the hospital either because of the fact that she was in charge, which was relatively seldom, or through the medical director. The part taken by the priests and parsons in the management of the hospitals is diminishing rapidly as is that taken by the Mother Superior. This is probably caused by the change of the hospital service from a charitable enterprise into a public function.

An interesting development in the last decade has been the formation of executive bodies, called 'directorium', particularly in some of the larger hospitals. Day-to-day management in these hospitals is put into the hands of a body, consisting of the heads of the medical, the nursing and the economical 'services' (or 'departments'). In a few instances the head of the domestic service and the clerk of works (the head of the 'technical service') are included. The members of the directorium are jointly responsible to the board for the day-to-day management of the hospital. At the same time they have to supervise and co-ordinate the work of the employees in their respective 'services' or 'departments'.

* The word 'administrator' is used for the head of the 'administrative' department, administration being equivalent in the Dutch hospital to internal accountancy and statistics plus purchasing.

A somewhat similar directorium exists in some of the Protestant hospitals, consisting of the parson-director, the medical director and the matron (administrative nurse); in some cases there is a no medical director.

Selection of hospital administrators has been a haphazard affair until now. Most full-time medical directors have been recruited from the ranks of the general practitioners, some have been specialists, a few had some experience in the hospital field when in military service. Some were trained as assistant or adjunct of a medical director of a larger hospital. Most medical directors who combine their administrative jobs with medical practice only have had their in-service-training. The same holds true for the lay-administrators. More and more graduates from the faculties of economics are appointed to these jobs. Others come from the industrial field, having acquired managerial experience there. The nurses (matrons) come up from the ranks, acquiring managerial experience through increase of responsibility. Since about 10 years they may profit from training courses designed to enlarge their knowledge and acumen in coping with administrative problems.

Only in the last two years the problem of training for management in this special field has been approached more seriously. Although it is felt that possibly a graduate university course is needed, both in the medical and in the economical faculties, it was thought more appropriate to start with a post-graduate course, aiming at a more profound and extensive knowledge of the managerial problems in the hospital service in its various aspects. The course, sponsored by three universities (Nijmegen, Tilburg and Utrecht) and by both hospital associations, brings together both medical and lay-administrators and matrons from all over the country and from all kinds of hospitals, providing for a meeting ground where the different experiences may be interchanged. It was deemed necessary to have only the one course because of the small number of hospitals and because of the fact that in this way the experiences gained in the different fields could be put to a more general use.

The hospital situation has not yet reached a certain stability. Because of that it is far from easy to prognosticate and to plan

for the future. It is clear however that precisely because of this situation the training of competent hospital administrators with knowledge, imagination, and flexibility is vital. It is a fine thing that this fact has been ascertained and acted upon by the hospital-people themselves according to the cherished tradition of the Dutch who always have preferred private enterprise to governmental action. It is to be hoped and to be expected however that the State will assist the private efforts because of the consequences for the general weal.

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