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Dr D. Stampar (*rural general practitioner, Yugoslavia*): My first duty is to thank the College of General Practitioners for the honour of inviting me to visit your country, to see all the interesting medical practices, and to speak here today. My colleagues and I have been very welcome wherever we went. I should like to say thank you to everyone for their kind generosity. Their efforts were untiring and their kindness overwhelming, and I thank them so much.

In Yugoslavia there are about 15,000 physicians,* out of these 50 per cent are general practitioners.† The doctor-patient ratio varies and the general problem of an inappropriate distribution with concentration in urban areas occurs, even in Yugoslavia. Ninety-eight per cent of people have health insurance, and 5.14 per cent of national income is spent on health protection.

In rural and suburban areas complete basic health protection is provided by general practitioners; in urban areas protection of infants, school children, women and occupational health protection is provided by special clinics and specialists. The general practitioner has a direct access to laboratory and hospital facilities.

In order to understand the role of the general practitioner in Yugoslavia, a short account of the principles of the organization of the Health Service will be given.

The organization of the Health Service is based on the following basic principles: integration of preventive and curative medicine on the level of basic health protection; decentralization of health service; participation of the population in solving local problems, health committees and the like; independence of health institutions; independent financing; collective management; planning and drawing up of working programmes; continuous evaluation of the work done; remuneration of health workers according to the results of their work; free choice of physicians and health institutions within a fixed territory.

*Figure for 1964

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1961	*Male*	*Female*	*Remainder*
Total ..	9166	3533	Hospital interns
G.P's ..	4912	1994	and public
Specialists..	3341	1537	health doctors

Health protection is provided by the following institutions: health, general practice units, occupational health units, dispensaries for occupational health, public health centres, medical centres, hospitals (general and specialized), institutes for health protection at the city, district, republic and federal level, special institutions, institutes of immunology, rehabilitation institutions, institutes for the control and analysis of drugs, et cetera, spas, climatic resorts, pharmacies and first-aid stations, and emergency health service. Since the three types of health institutions within the scheme, i.e., health unit, public health centre and medical centre differ in many respects from the similar institutions in other health services, their task and scope of work will be seen from the schemes.

Medical education

The problem of training of undergraduates has been discussed more and more in recent years and it has been recognized that the curriculum has become inadequate and insufficient. The training of undergraduates in clinical medicine is still carried out mostly at the university hospitals, at the beside, or outpatient departments by university specialists and superspecialists, in an environment and conditions in which the future general practitioner will hardly ever work.

The teaching at the bedside influences the student to think that disease is only a clinical phenomenon. Further, the student is not able to realize that the hospital patients are selected, mostly severe cases, that the hospital patients are just in a phase of biological development of disease and that the hospital treatment is for the most part treatment of an episode. Disease is not only a clinical but also an epidemiological and social phenomenon. This fact is of utmost importance, because at the bedside the student cannot be taught to understand and acquire an epidemiological and social approach to disease. On the one hand the great bulk of human illness occurs in forms which do not call for hospital care and therefore they cannot be shown to students at the bedside. On the other hand, the morbidity of the health centre headed by the general practitioner presents an unselected, that is to say, a natural morbidity quite different from that of a hospital.

Another aspect should be emphasized, that is that the prevention of disease is a fundamental component of medical practice, that the hospital patients must be given after-care in the context of the physical and the emotional background at home and at work, and that there must be a continuity of medical care. All these things students cannot be taught by hospital specialists, but for the most part they can be taught by adequately trained general practitioners. It is well known that inadequate training of medical students results

in the frustration for the young general practitioner once he starts his practice.

Following these considerations, the late Andrija Stampar, dean of the School of Public Health at Zagreb in 1953 extended the teaching basis to the community-based health service, to the health centres in charge of which were general practitioners. He started full practice summer vacation courses in rural areas for students who had completed the third year of study. The objectives of the training were to give an opportunity to students to study the impact of all environmental factors on health and disease, to acquaint them with the complexity of health protection, with integrated comprehensive medical practice in general and the role and scope of the work of the general practitioner.

Another aspect of training of undergraduates by general practitioners was started by A. Vuletic in 1961 for the students in their last year. At present they work under the leadership of masters (specialists) in general medicine, who take students in groups of two for a fortnight. The objectives of this training are to acquaint students with the practical application of the integrated comprehensive medicine in the conditions they will meet as general practitioners.

An unsigned inquiry has shown that both the students and general practitioners were satisfied with both methods of training. Another analysis at the Medical Faculty at Zagreb showed that among two thousand questions at the examinations of clinical subjects there was not a single one on preventive and social aspects of disease. In addition, Addison's disease was questioned five times more than cardiac infarction and disseminated sclerosis four times more than the neuroses.

For all these reasons the curriculum has been revised with more emphasis on preventive and social aspects of disease.

Training of general practitioners

In the past, training of general practitioners was left to the ambition and interest of individual physicans. There were shorter or longer seminars, lectures, refresher courses and the like, carried out by medical associations or medical faculties. For general practitioners in rural areas a continuous education was limited mainly to reading medical periodicals and textbooks.

However, since basic health protection depends mainly on the quality of general practitioners, it has become urgent to find out ways of improving the quality and thereby the authority of general practitioners, more particularly because the specialists have taken over many of the classical responsibilities of general practitioners.

In some parts of the country the general practitioners have become, so to speak, ' traffic policemen '.

In these days of superspecialization of medicine, a new profile of the general practitioner is needed as a specialist in family medicine; legal provisions were made in 1960 for specialization in general medicine. At the same time, a three-year course has been organized by the School of Public Health in Zagreb in the form of in-service training in groups (15-20) three times, three hours a week, with a six months full-time training. However, there are general practitioners who have undergone, or are undergoing, a three-year, full-time individual training course, carried out in the classical way, that is, they are away from their practice and are individually trained in various hospital departments and institutes.

The evaluation of the in-service training of general practitioners was presented by A. Vuletic at the International Conference of General Practitioners in London in 1962, and in Montreal in 1964, so that there is no need to go into this matter, but just mention it briefly.

I think it would be of interest to you to know how the training of these general practitioners has reflected itself in the quality of practice, what improvement in their income and social status has occurred, if any, and what other results have been achieved; and what is the trend for the future training of general practitioners for a Master's degree. As one of the students who have completed the course, I am going to try to answer these questions.

In the first place, there has been formed a new profile of the general practitioner, different from that which existed before the specialization in general medicine. The general practitioner's attitude before was predominantly curative; waiting in their offices for sick persons to come if they wanted, and to stop coming when they desired. The initiative was with the patients, more particularly in the cities. After the completion of the course the students have acquired the philosophy of modern, comprehensive, integrated medicine. Consequently, they are dealing also with primary, secondary and tertiary prevention, that is with health education, immunization, vaccination, with the survey of population groups for early detection of diseases, in addition to their curative work. They have formed positive attitudes about the new role of the general practitioner in the health service and have gained knowledge of how to study and solve health problems and how to plan health protection.

The relation between the specialists in general medicine and other specialists has changed in a positive manner. This is due to the greater competence of the general practitioner resulting in a subjective feeling of more independence in dealing with specialists during consultation.

These Masters of General Medicine are regaining some of the position lost to other specialists because the public has regained confidence as they now render better family care. A further result of the course is more satisfaction in their work and that they call for consultation in a much lower proportion than before (10—20 per cent). There is an evident financial effect of such a work for the health units, and this is the reason why, according to the regulations, the new posts in the general practitioner units in Zagreb can be occupied only by Ms.G.M. or the students undergoing the course for it. The income of Ms.G.M. are at present level with other specialists, and in some cases even higher, taking into consideration that they get extra payment for home visits. As to their social status, it has already been mentioned that the status is at present equal to that of other specialists.

The further result of the course is that the Ms.G.M. have acquired the habit of continuous training in groups and in self-training. Four years ago they organized a section of general medicine where intensive work has been done at its monthly meetings, and they are holding as a matter of routine a symposium every six months on general medicine in various cities of the country. Further, as already mentioned, they participate successfully in the training of undergraduates, and it is hoped that they will soon participate in the training of interns and of the general practitioners undergoing specialization.

Last, but not least, the course has stimulated research work in general practice which hardly existed before. Every student of the course is entitled also to prepare a thesis on an important health problem. If the thesis is estimated by three professors as satisfactory, it qualifies him for obtaining a Master's degree in general medicine, in addition to the diploma of specialization, if he passes the examination for it.

In our general practice units we are collecting statistical data in order to get an insight into the most urgent needs and to make possible realistic planning of health protection of the population.

Having completed the course in methodology of research work, Ms.G.M. are able to study the health conditions of the population, which is carried out in a different way to that in a hospital or laboratory. General practitioners observe the phenomena in a total environment and the multiple causative factors leading to disease. In this connection it might be of interest to mention the recording system implemented in Zagreb since 1961. Each inhabitant is provided with a health statistical card, at the basis of which a punch card is prepared with all important coded data, and 38 holes which represented the groups of diseases from the inter-

national classification of disease.

All migrations are followed continuously. The inhabitants have their individual cards in the family folders with the data on socio-economic and the housing conditions, and on some characteristics of the family morbidity. The further data are supplemented during the regular visits of the family nurse and the doctor.

The general practitioner contacts with the specialists on the history of disease form, where all the findings both of general practitioner and specialist are noted. The admission to the hospital or consultation of the specialist is followed by a ticket. In this way it is easy to see how many patients were treated by general practitioners and how many patients were in need of an additional examination by specialists. Such a system might enable evaluation of the effect of work of the general practitioner, if the morbidity pattern is being changed in a period of observation, taking also into consideration factors not depending on him.

The training of medical students has been changed since 1953 and 1961 respectively. Education has been extended also to the community based health centres (G.P.U., etc.) in addition to the teaching at the bedside. The students are learning and working in the same conditions as they will work as future general practitioners and Ms.G.M. are their teachers.

For better understanding of the new profile of the general practitioner, a brief account of the organization of the health service in Yugoslavia is given.

The three-year courses for M.G.M. have raised the social status and increased the income of M.G.M., so that this is now level with those of other specialists. The courses have stimulated research work in the field of general medicine.

DISCUSSION

Dr McClay: Can you tell us what proportion of home visits to office consultations you make?

Dr Stampar: It depends mostly on the communications. Throughout rural areas it is not so easy to visit as in town, so the proportion may vary. I think the proportion in the towns would be one-tenth, and in rural areas it depends on communications. But we do not spend so much on home visits; we spend much more time in our surgeries. We spend six to seven hours in our surgeries.

Dr McClay: Can you tell us a little about the training of the general practitioner and his place in the organization of the treatment of accidents and the prevention of accidents?

Dr Stampar: You mean in accident training?

Dr McClay: Yes. First-aid.