

General practice in Croatia, Yugoslavia

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SUMMARY. The position and importance of general practice in the Yugoslavian Health Service is being reviewed in a study of the working conditions, the composition and relationship of the primary health care team, the workload, and the opinions of the patients in Croatia, Yugoslavia.

We found that many practices had barely half the recommended equipment, that the average workload was 40 patients a day, and that many general practitioners expected others to improve their organisation rather than undertaking it themselves.

Those general-practitioner teams which we rated highly were also the most popular with patients. The job satisfaction of nurses varied and was highest when the doctors in the team did not have a high need for status for themselves.

We consider general practice to be of crucial importance in the total system of health care in our country and believe that general practitioners should have the same status as specialists.

Introduction

Every health care system includes a doctor of primary contact. This doctor often also acts as the point of entry to other levels of health services. In addition he is approached directly by patients for consultations or check-ups for any episode of illness or injury.

Primary contact doctors are not necessarily general practitioners who give continuous and comprehensive care for a defined population. In Europe today there is a dilemma as to whether it is better to have a system in which general practitioners are primary contact physicians and also the point of entry for other specialists, or whether patients should go directly to specialists (Backer *et al.*, 1973).

In Croatia the general practitioner is the doctor of first contact, except in certain cases such as children's clinics or dispensaries. At present we are facing changes (Novosel, 1972) in the organisation of general practice.

History of general practice in Croatia

Between the two-wars (1918–1941) Croatia, as a part of Yugoslavia, was a relatively undeveloped country (Vuletic *et al.*, 1972; Skupnjak and Novosel, 1974). Andrija Stampar (1940) worked out a rational and economic way to develop a health care system which might help to solve some of the most prevalent health problems such as communicable diseases (tuberculosis, venereal diseases, malaria) and a high infant mortality rate. The total number of doctors in Croatia was small and in addition most of them worked in cities. Of 1,700 doctors in Croatia, only 300 were working in rural areas (the total population of Croatia being four million inhabitants living mostly in rural areas). The remaining 1,400 doctors worked in urban areas serving less than 500,000 inhabitants.

One solution was to try to create a system which could best meet the needs of many sick people, while at the same time trying to prevent more illness. Stampar's idea was to ensure comprehensive care in institutions which would provide both curative and preventive care

simultaneously. In the so-called community health centres (*Dom narodnog zdravlja*) such care can be provided through four main disciplines:

- (1) General practice,
- (2) Dispensaries*,
- (3) Epidemiology,
- (4) The hygiene department.

Dispensaries do not exist in the smallest health units (health stations). The function of dispensaries is performed by special consulting services (consultation room for women). After the Second World War these institutions remained and the medical centres were established. Special services were added (in the form of hospitals) to the primary health care units (community health centres). In this way primary and secondary health care were united at the same place.

It is attractive having such institutions, but it is not easy to arrange inpatient and outpatient care together under one roof. We also believe that a hospital orientation could prevail if the directors of medical centres do not have a master's degree in public health i.e. if they were specialists of some kind such as surgeons, or ophthalmologists (Šimunic and Novosel, 1973). General practice might then be neglected. But if in the medical centres the leading doctors are trained in public health, the setting is better for general practice. This is one of the outcomes shown by the study *Patient-orientated behaviour in general practice* carried out in Croatia in 1972 and 1973 (Novosel *et al.*, 1974).

Nowadays Croatia differs greatly from the time when Andrija Štampar first established health centres and community health centres. The type of pathology has changed. Communicable diseases and high infant mortality rates are no longer important health problems. Instead, we are now facing the same health problems as the developed countries: cardiovascular diseases, diabetes, psychiatric problems, and industrial and traffic injuries. Also, the number of health workers has increased greatly in the last 20 years and the health insurance system has much improved. Much of the population has left rural areas and Croatia has become industrialised. Communications have improved making it easier to educate the average citizen (Blčić *et al.*, 1974).

We can see that the average caseload in general practice is about the same as in occupational medicine, the dispensaries, and specialistic (polyclinic) services. In addition, general practitioners do home visits as part of their regular work. Of all European countries, specialist services (if we consider dispensary service as specialist work) are used the most in our country. At the

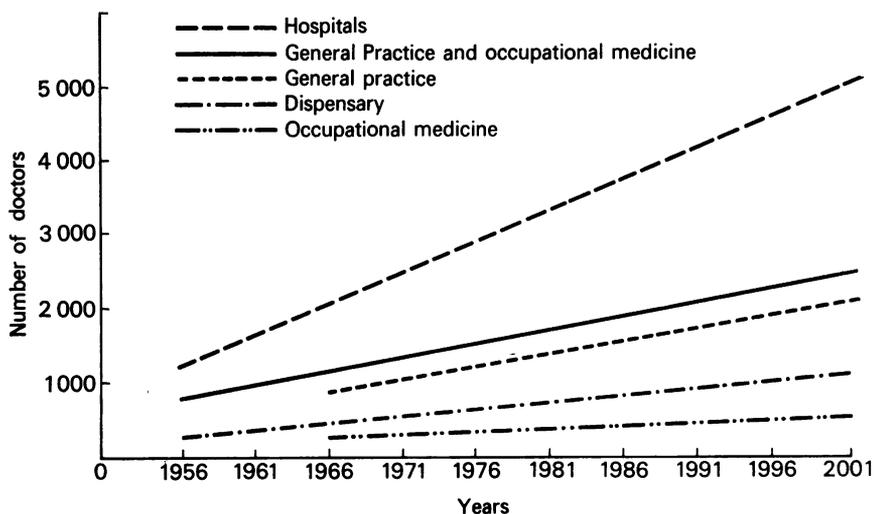


Figure 1

Estimates of the increase in the number of doctors in Croatia from 1956–2001

*Dispensaries as part of community health centres provide care for small children, preschool children, schoolchildren and adolescents, and care for mothers, pregnant women and women generally, and anti-tuberculosis treatment.

same time there are big differences among various areas of Croatia in their use of primary care services. The number of general practitioners is not high enough when compared with the number of specialists in dispensaries and hospital clinics. The number of inhabitants per general practitioner does not fit the proposed standards. Figure 1 shows our estimate for the next 25 years (Bartolovic *et al.*, 1973). We expect to have 2,230 inhabitants per general practitioner by the year 2000. At the same time the number of patients with degenerative and chronic diseases is expected to increase. So, the future seems bleak for general practice unless some radical changes are made.

However, new laws are being passed to improve the status of general practice (Vuković, 1972). More medical students graduating from medical school are becoming general practitioners. Twelve years ago a specific training was introduced in Croatia consisting of postgraduate study in general practice (Vuletic *et al.*, 1971; Barath, 1971). In Croatia there are almost 300 specialists now compared with the total 1,100 general practitioners. The general practitioner's primary contact role, is very important in the total system of health care. We still firmly believe that the general practitioner is the only doctor who can integrate all medical activities for a patient and his family. General practice is, we think, the best choice from the economic point of view as well.

In spite of the problems in our general practice, the recent study *Patient-orientated behaviour in general practice* (Novosel *et al.*, 1974) illustrates the situation and we summarise here the main findings.

The main aim was to find out from a representative sample of general practitioners in Croatia, the real physical and psychosocial work which these teams did. How far do conditions accord with the legislation of Croatia by which general practitioners are obliged to deliver primary care to the patients?

Our main objective in this study was to compare the theoretical role and real role in practice of general practitioners and their teams (Novosel, 1971).

Other studies (Beloff and Willet, 1968) showed that theoretical and real roles often do not correlate highly (Robinson, 1973). We were particularly interested in the setting of general practice to define ideal and real attitudes of the team members (Parker, 1972) in relation to the patients as well as the determination of main factors affecting the behaviour of the teams (Kohn, 1966).

As for method, our model included psychosocial characteristics and conditions of teams, the opinions of patients and the physical conditions in which the teams worked (Barath, 1972).

We identified a representative sample of general-practitioner teams in Croatia, developed a series of questionnaires to find out the teams' attitudes, demographic and personality characteristics and working conditions, patients' opinions on the teams' functioning as well as testing the observing procedures. We wanted to examine the behaviour of the teams towards patients in a selected period (usually three days) of working time (Robinson, 1965).

A special problem was to select patients who were to be interviewed in their homes. Twenty patients using each team's services were studied for each general-practitioner team separately. Having 50 teams we interviewed 1,000 patients in all, always having physicians (doctors) assigned a special territory and keeping special files of their patients. We included people who attended a doctor within 15 days from day A until day B, both these days included.*

The frame size was defined as the total number of visits. Our procedure was to extract a sample of 20 patients who were interviewed for every general-practitioner team. This was rather complicated, because we needed patients who knew the doctor (and other members of the team) and who could tell us about their behaviour. At the same time we had to avoid in our sample having mainly patients with chronic diseases (Purola *et al.*, 1968).

We have tried to summarise the main results which seem to be the most important and which give the reader an up-to-date view of our general practice.

Physical working conditions

The general-practitioner teams barely had half the minimum equipment according to our recommended standards. Rural areas are significantly better equipped†, but sanitary equipment was more frequently satisfactory in urban areas.

*The A day is the nearest in time to the day of interviewee's arrival at doctor's office, i.e. $B = A - 14$
†In urban areas a portion of responsibility is taken over by the dispensaries.

The average workload was about 40 patients a day (Figure 2). The urban daily caseload approached 50 patients, and the average time taken per patient in the doctor's office was about five minutes. This is the time spent by patients in the presence of the doctor (the time from entering and leaving the doctor's room). This means that patients spent the rest of the time with the nurse (or other member of the team),

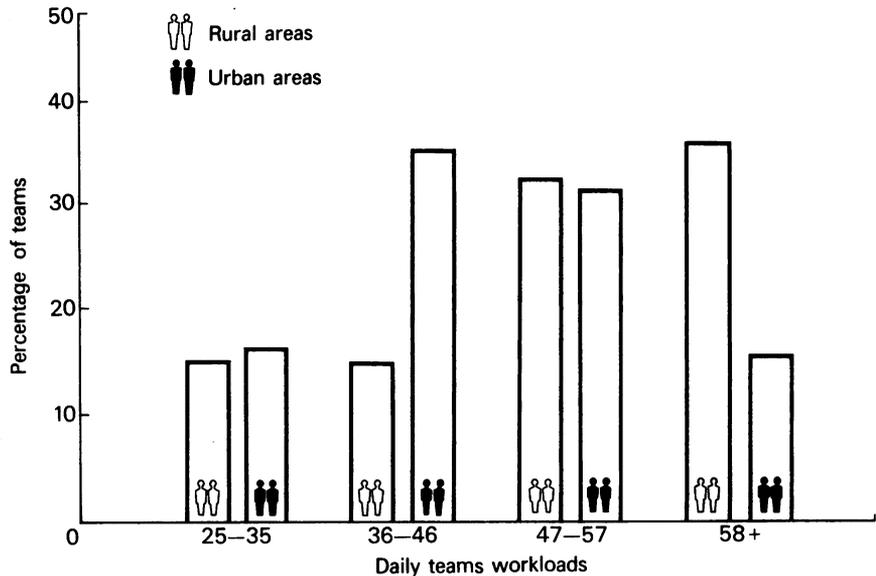


Figure 2
Average daily team workloads in urban versus rural areas

A similar result was obtained in another study carried out also in 1973 but on a different sample of 80 doctors in Croatia (Grahovac, 1973).

Referrals

In our study only 14 per cent of the patients in urban areas and ten per cent in rural areas were referred to specialists. The composition of the teams was not satisfactory (Table 1). Most teams had to share a district nurse, especially in urban areas.

Asked their views about team composition, the team members expressed a variety of requests. Most of them would like to have an office nurse and a full-time, multi-purpose public health (district) nurse. None of them wanted to have a hospital attendant (poorly qualified staff, now increasingly disappearing, but still existing in rural areas) or a not fully qualified midwife. The midwife who is well qualified and functions as a "visiting midwife" was appreciated in some rural areas.

Activities of the teams

What the team does, and what team members think should be done, differ considerably, particularly for the nurse's work. Doctors often said that a large part of their work could and should be done by nurses, but nevertheless, we found that in their practices this did not happen.

Some of the reasons are in the lack of initiative to improve the organisation which would lift some work from physician's shoulders and give the nurse greater importance.

For instance, nurses might do more health education, particularly providing talks for groups of patients with chronic diseases. Only two physicians in the sample stated that their nurses collaborate with them in this work.

TABLE 1
COMPOSITION OF PRIMARY HEALTH CARE TEAMS

<i>General practitioners' team composition</i>	<i>Number of teams (Sample=50)</i>	<i>Number of members in the team</i>
1. Physician and office nurse	13	2
2. Physician, office nurse and public health nurse	13	3
3. Physician, hospital attendant	10	2
4. Physician, office nurse, public health nurse and 1 or more health personnel	14	4 or more

We also found that physicians themselves are often not happy with their daily activities, but have not the courage and strength to make changes. Most of them rationalise, of course, saying that someone else (mother institution, system of paying, insurance agencies) should do something to help. Only few feel that they themselves should improve their own situation by introducing better methods of organisation, such as appointment systems, more group work with chronic patients and starting small research projects.

The personality characteristics of team members were significantly associated with the behaviour of the doctors and their behaviour towards other health staff in the same team. The nurse's self-esteem depended on was highly correlated with a feeling of acceptance by the physician. The negative correlation between the physician's need for status and patient's opinion about physician's interest in them and their family, and between public health nurse's interest and knowing the patients and their families is also interesting. Further, these correlations signify that the public health nurse receives lower rating by patients when their physician's need for status is greater. The same was found for nurses themselves.

Another study (Barath, 1971) carried out in Croatia has shown that general practitioners could be less or more "patient orientated".

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WEEKLY CHEMOPROPHYLAXIS IN CHRONIC BRONCHITIS—A GENERAL-PRACTITIONER STUDY

A large general-practice study was organised: 6,521 patients from all areas of the United Kingdom received one 2 gram tablet of sulfametopyrazine ('Kelfizine W') weekly for periods of 2 to 6 months during the winter of 1973-74. By way of control, the frequency of acute attacks in the previous winter of 1972-73 was compared with that for the study winter (1973-74) in a large randomly-selected group of 1,120 patients; the average frequency of exacerbations per patient was 4.2 for the winter of 1972-73 and 0.42 for the winter of 1973-74. This ten-fold reduction cannot be attributed to mildness of the weather, since the previous two winters were comparably mild.

Of the 6,521 patients, 4,129 (63 per cent) required no additional antimicrobials after the commencement of weekly sulfametopyrazine; the difference between this group and the remainder who derived less benefit is highly significant ($P < 0.0001$). There was a highly significant reduction in sputum purulence ($P < 0.0001$) and quantity ($P < 0.0001$) in 2,956 and 3,279 patients respectively over the trial period.

Side-effects occurred in 2.5 per cent and were mild. The value of weekly 2 gram doses of sulfametopyrazine in chronic bronchitis is considered to have been confirmed by these results.

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