

# How do academic heads of departments of general practice organize patient care? A European survey

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## SUMMARY

**Background.** Compared with other clinical disciplines, academic general practice is in a difficult situation with respect to patient care. There are at least three different possible models of working arrangements for heads of departments of general practice: to work in a surgery in a medical school; to work in a surgery in the community, separate from a part-time university post; or to work part-time in a surgery in the community, separate from a university post.

**Aim.** A study was undertaken to explore these models and to gain an understanding of academic teachers' organization of patient care in Europe.

**Method.** A total of 77 heads of departments in universities in 12 European countries were sent a questionnaire enquiring about important characteristics of their department, the number of patients they treated per week and how they allocated their time.

**Results.** Sixty nine heads of department (90%) responded. Of respondents, 55% worked part-time in a surgery, separate from a university post, nearly one third worked mainly in a surgery, separate from a part-time university post, and 16% worked in a surgery in a medical school. Those working in a surgery with only a part-time university post spent most time in patient care compared with those working in other models (mean of 57%). Respondents working in a surgery in a medical school spent most time on administration (34%); they spent 22% of their time on patient care and 20% on education. Respondents working in a surgery in a medical school spent 25% of their time on research, those working in a surgery separate from a part-time university post spent 12% of their time on research, and those working mainly in a university with a part-time practice post spent 24% of their time on research. Those working mainly in a university post spent only 17% of their time in patient care.

**Conclusion.** Working in a surgery in a medical school represented a well-balanced model of time allocation between patient care, research and education and seemed to be a good approach for the integration of general practice into medical schools. Working part-time in a surgery with a university post is an appropriate model for academic integration, but patient care seemed to be neglected. Those doctors working mainly in the community with a part-time university post were able to provide continuity of care and to come into close contact with the everyday problems of general practitioners. However, they might have to struggle for academic recognition.

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## Introduction

IN nearly all European countries general practice has achieved increasing recognition by universities.<sup>1</sup> One important feature of this development has been the establishment of chairs of general practice or at least academic units in many medical schools. Most reports and discussions about academic general practice have focused on research and educational aspects.<sup>2,3</sup> With some exceptions,<sup>4</sup> little attention has been directed to the question of patient care by academic general practitioners. In clinical disciplines, patient care by doctors working in academic departments is a highly important issue as these departments are usually the first to implement innovations.

Since the clinical work of general practitioners is strongly based in the community, academic general practice is confronted with the question of where it should take place. If this occurs in a surgery outside the medical school there might be a clear separation of the two areas of activity with little contact between the two. Alternatively, patient care by academic general practitioners could take place within the university, for example, in an out-patient clinic, in which case the discipline is at risk of losing its point of reference and relevance for normal general practitioners.

In order to examine and explore different models of patient care in medical schools, heads of departments of general practice in 12 European countries (including Israel, according to the World Health Organization definition of Europe) were surveyed about their own patterns of work. Countries without an academic establishment of general practice (for example Austria) were not included.

## Method

The names and addresses of the heads of general practice departments were obtained via important organizations in general practice (for example the Royal College of General Practitioners, Societas Internationalis Medicinæ Generalis, European Academy of Teachers in General Practice and the European General Practice Research Workshop) or official lists. This procedure guaranteed high reliability in identifying most departments of general practice. In a semi-structured questionnaire respondents were asked to provide data about important characteristics of their department or unit, the number of patients respondents treated per week and how they allocated their time.

Three idealized models were described to cover the broad variety of institutional forms of general practice at medical schools. Respondents were asked which model best fitted their situation.

In the first, 'integrated' model, patient care and the academic institution are fully integrated, that is, the head of department's surgery is inside the walls of the university, or the surgery is a branch of the university. The practice and the doctor(s) are funded by the university.

In the second model, patient care and the academic institution are separate. The head of department runs his or her own surgery (alone or within a group practice). The practice makes up the

major or at least the larger part of the head of department's income. University tasks are undertaken in the form of a part-time post. This is the 'separate, main area: practice' model.

In the third model patient care and the academic institution are separate as in the second model but the head is, above all, responsible for the department and works only on one or two days in a practice, which is mainly run by a partner. The head of department is exclusively paid by the university and receives, in general, no income or only a small income for patient care in the practice. This is the 'separate, main area: university' model.

## Results

In 1993 a total of 77 heads of departments or units of general practice were approached, and 69 completed questionnaires were received (90%). Respondents reported that in 38 cases (55%) they operated mainly according to the third model, that is, that academic tasks and patient care were separate, a greater proportion of their time being spent in the university. Nearly one third of respondents (20, 29%) followed the second model where patient care was the major part of the respondent's workload. Eleven respondents (16%) reported that their departments were organized according to the first model, where there was a spatial and functional integration of patient care and university. In some European countries there was more than one model of patient care (Table 1). Compared with other European countries, there are few British medical schools without departments of general practice, some of them providing postgraduate education only (vocational training and continuing medical education).

From a list of six activities, respondents were asked to estimate how they allocated their time for each activity during the week. For those working according to the second model, 'separate, main area: practice', patient care took up the greatest proportion of their time (mean of 57%) compared with 22% of time among those working in the 'integrated' model, and 17% of time among those working in the 'separate, main area: university' model (Table 2). Meanwhile, administration accounted for a mean of 34% of time among heads of department working in the 'integrated' model and only 10% of time among those working in the 'separate, main area: practice' model. Those working in the 'integrated' and 'separate, main area: university' model, spent approximately a quarter of their time on research, and those working in the 'separate, main area: practice' model spent 12% of their time on research.

The mean number of patients treated per week by the heads of department showed large variation (from 0 to 300 patients) (Table 2). Part of the variance is explained by the model of working, those spending more time in the surgery seeing more patients than those spending more time in the departments of general practice.

The influence of working model on patient care and the other duties of the heads of department can also be illustrated just in the United Kingdom and Eire. The seven heads of department working in the 'separate, main area: practice' model reported treating a mean of 109 patients per week, the 16 working in the 'separate, main area: university' model reported treating 54 and the seven working in the 'integrated' model reported treating a mean of 39 patients per week. The mean proportion of time spent on patient care varied accordingly: 55%, 22% and 19%, respectively. Among those working in the 'separate, main area: university' model, research accounted for a mean of 22% of their time, 20% for those in the 'integrated' model and 11% for those in the 'separate, main area: practice' model. In the 'integrated' model, administration accounted for a mean of 42% of respondents' time, in the 'separate, main area: university' model 29%, and in the 'separate, main area: practice' model 11% of time was taken up with administration.

Part of the variance between departments may also have been influenced by country-specific characteristics. The three heads of department in Norway and the four in Sweden working in the 'separate, main area: university' model spent a mean of 8% and 9%, respectively of their time on patient care, which was less than other countries working according to this model. Respondents from Norway spent 32% of their time on research and respondents from Sweden spent 31%, percentages that were higher than most other countries. The mean number of patients treated per week by doctors in the 'separate, main area: university' model was high in Belgium (39) and Germany (38) but was highest in the UK and Eire (54). Heads of department in Germany working in this model reported that they spent a mean of 33% of their time on research and 12% on patient care.

Levels of staff and staff mix in the departments of general practice varied widely (Table 3). Some departments were almost single-handed settings, others employed up to 60 part-time doctors for postgraduate education. Departments in the 'integrated' model and those in the 'separate, main area: university' model represented an established personnel structure with full-time doctors, secretaries, nurses and psychologists (or other scientists). The large standard deviations (for example, for part-time doctors

**Table 1.** Model of patient care reported by the heads of department in the 12 European countries.

Country	Number of department heads				
	Contacted	Responding	Working according to model		
			Integrated	Separate, main area: practice	Separate, main area: university
Belgium	7	6	0	2	4
Denmark	3	3	0	3	0
Finland	5	3	0	0	3
Germany	5	5	1	1	3
Iceland	1	1	0	0	1
Israel	2	2	0	2	0
Netherlands	4	4	0	0	4
Norway	4	4	1	0	3
Portugal	4	3	0	3	0
Sweden	6	6	2	0	4
Switzerland	5	2	0	2	0
UK and Eire	31	30	7	7	16
Total	77	69	11	20	38

**Table 2.** Proportion of time spent undertaking various activities, and number of patients seen per week and number of hours spent on patient care each week, as reported by heads of department working according to the three models.

	Doctors working in model		
	Integrated (n = 11)	Separate, main area: practice (n = 20)	Separate, main area: university (n = 38)
<i>Mean % (range) of doctors' time spent in:</i>			
Patient care	22 (5 to 50)	57 (30 to 90)	17 (0 to 40)
Undergraduate education	12 (5 to 30)	13 (0 to 40)	18 (2 to 45)
Postgraduate education	3 (0 to 7)	5 (0 to 25)	9 (0 to 35)
Continuing medical education	5 (0 to 10)	5 (0 to 20)	6 (0 to 20)
Research	25 (10 to 60)	12 (2 to 30)	24 (10 to 45)
Administration	34 (14 to 58)	10 (1 to 30)	25 (10 to 50)
<i>Mean no. (range) of patients treated per week</i>			
	34 (5 to 60)	126 (60 to 300)	35 (0 to 70)
<i>Mean no. (range) of hours per week spent on patient care</i>			
	12 (4 to 25)	29 (15 to 60)	9 (0 to 20)

n = number of department heads working according to model.

**Table 3.** Levels of staff and staff mix in the departments of general practice.

Staff	Mean no. of staff (SD) working in model		
	Integrated (n = 11)	Separate, main area: practice (n = 20)	Separate, main area: university (n = 38)
Full-time doctor	4.7 (2.4)	0.5 (0.9)	3.3 (2.4)
Part-time doctor	2.5 (2.4)	11.4 (17.2)	8.2 (8.4)
Social scientist/ psychologist/ statistician	2.3 (2.8)	0.3 (0.5)	2.2 (4.1)
Nurse	1.1 (1.6)	0.2 (0.7)	0.4 (0.8)
Secretary/technical personnel	3.1 (2.1)	1.3 (1.4)	3.2 (4.1)

n = number of department heads working according to model. SD = standard deviation.

in the 'separate, main area: practice' model) indicate large variations between departments even within one model.

In a final analysis, some of the results were correlated with the age of the head of the department but no correlation was found for number of patients treated, proportion of time spent on research and model of working.

An open-ended question asked respondents how they wished to improve the academic situation of general practice. Eight respondents referred to better premises and better technical and personal equipment, seven referred to more adequate payment, and 11 referred to the need for fewer patients in order to have more time for education and research. Two respondents wanted to see more patients and to have more daily patient contacts. Eleven respondents wanted better integration of undergraduate and postgraduate education (for example, health centres with high standards of patient care). The pressure produced by two 'full-time' jobs was seen as a problem by four respondents (mainly those working in the 'separate, main area: practice' model). Although not specifically asked, six respondents (one working in the 'separate, main area: practice' model and five working in the 'separate, main area: university' model) reported that they favoured the 'integrated' model for patient care. Seven respondents reported that they liked the 'separate, main area: university' model (with one exception their own model). The 'separate, main area: practice' model was favoured by one respondent. Three respondents preferred an ambulatory clinic setting as a model for patient care (similar to the 'integrated' model).

## Discussion

Teachers in general practice should be competent in caring for patients and organizing a practice.<sup>2</sup> Perhaps the most striking result of the present survey was that within one country several models of working arrangements by heads of department co-existed.

The first model, an institutional integration of university and practice, seems to represent good prerequisites for a continuous interaction between theory (research) and practical experience. Respondents working in this model reported a balanced allocation of time between patient care (a mean of 22% of their time), research (25%) and education (20%). Most of these departments were in the UK and Eire. Without being asked, several heads of department expressed a preference for this model. It is conceivable that a close integration of university tasks and patient care might, however, affect the confidentiality of doctor-patient contacts, at least as perceived by some patients and thus deter them from attending. Other institutional conditions could change the distribution of patients in a university practice and make it untypical.

The 'separate, main area: university' model, represents an academic approach that offers heads of departments adequate time for research (24%), but the reduced clinical work may cause dissatisfaction. Although these respondents reported seeing almost the same mean number of patients per week as those working in the 'integrated' model, these part-time doctors cannot provide personal continuity of care.

These disadvantages make the 'separate, main area: practice' model attractive. It guarantees, to a high degree, continuity of patient care which is a core feature of family medicine.<sup>5</sup> With respect to the doctor-patient relationship,<sup>6</sup> these heads of department represent the typical general practitioner. However, in a study about epilepsy care in general practice Freeman and Richards found no associations between personal continuity of care and quality of the doctor-patient relationship as perceived by the patient.<sup>7</sup> Good communication was more important for high quality care. If the conclusions of Freeman and Richards' study apply to other chronic conditions, the value of personal continuity of care should be reconsidered. The 'separate, main area: practice' model provides an opportunity for two part-time jobs and thus might protect against burnout, a possible effect of a lifetime spent doing the same job.<sup>8</sup> But there are indications that this model might impose too great a workload on the heads of

department. It restricts time for research activities because patient care is the primary source of income.

Perhaps the three models of patient care should be considered as a developmental process. The 'separate, main area: practice' model is an early reflection of general practitioners' academic activities and a signal that general practice is as important as any other clinical discipline. But this model becomes a vicious circle because such departments are unable to expand and lack the critical mass to achieve the required research output.<sup>3</sup> The low staffing levels in these departments exemplifies this problem. A similar situation is found in small departments of family medicine in the United States of America, in that they do not succeed in building strong research programmes for lack of size, diversity and, above all, resources.<sup>9</sup> Another problem is that medical students may lack role models in general practice if there are only a few doctors in this specialty working in an academic setting who have only a marginal role.<sup>10</sup>

On the other hand, the 'separate, main area: university' model stresses the academic aspects of general practice, especially research opportunities. This stage may be necessary for general practice to become accepted as an equal partner in a university faculty. Perhaps heads of department neglect practical work, but Curtis questions whether everyone in a university department should do equal clinical work, research and teaching (since this is the model that student and trainees should observe) or whether there is a need for specialization.<sup>11</sup> Continuity of care remains a crucial point in this model. However, it is not clear whether continuity of care depends on the continued presence of the same individual doctor or whether 'organizational' continuity would suffice.<sup>6</sup>

The 'integrated' model is mainly present in countries with a longer tradition of recognized general practice. The heads of department undertake patient care but are not forced to consider it as an important source of income. This could establish a basis for implementing teaching and research into innovative patient care. In this sense, the 'integrated' model is the equivalent to the academic establishment of other clinical disciplines — and requires a lot of administrative work. Although some general practitioners consider academic general practice as a fringe activity carried out in ivory towers, teachers of general practice should view themselves as academics and engage in scholarly activity.<sup>3,12</sup> A structural integration of general practice departments does not necessarily conflict with the community-based approach of family medicine, if, for example, a spatial (not organ-izational) separation of a surgery from the medical school provides the confidence of a well-structured and efficient group practice.

An American study about the professionalization of academic family medicine looked for associations between the head of department's age and research activities.<sup>13</sup> Younger heads of department had a greater appreciation of the importance of research compared with older heads of department but there were no differences between the two groups in the proportion of time spent on research. The data from the present study confirm this latter result. Also, older doctors were not more likely to work according to the 'separate, main area: practice' model, the more traditional concept. So, there seems to be no reason to believe that standardization and the implementation of progress-ive concepts in general practice is a matter of 'biological' development.

This study only ascertained quantitative data. Even if most heads of department have correctly estimated their allocation of time no conclusions may be drawn about the quality of respondents' performance. A second limitation is that the three models presented do not cover all varieties of patient care by heads of academic departments of general practice. Above all, differences between countries seem to explain part of the variance between the departments. However, the study has provided information

about different working models in Europe and demonstrated the interaction between patient care and academic structure. The results might be of relevance for each country in supporting the future development of general practice as a recognized academic discipline.

## References

1. Evans PR. The changing scene in general practice in Europe. *BMJ* 1994; **308**: 645-648.
2. Heyrman J, Spreeuwenbergh C (eds.) *Vocational training in general practice. Proceedings of a workshop 15-18 October 1987*. Leeuwenhorst, Belgium: Ramakers, 1988.
3. Allen J, Wilson A, Fraser R, Gray DP. The academic base for general practice: the case for change. *BMJ* 1993; **307**: 719-722.
4. Kochen MM, Fischer GC, Jork K, et al. General practice as an academic discipline. *Z Allg Med* 1990; **66**: 588-594.
5. McWhinney IR. *An introduction to family medicine*. New York, NY: Oxford University Press, 1981.
6. de Jong BM. General practice in Europe after 1992: enabling and limiting factors. In: Societas Internationalis Medicinae Generalis (ed). *1992 — general practice without borders (46th SIMG congress)*. Klagenfurt, Austria: SIMG, 1992.
7. Freeman GK, Richards SC. Personal continuity and the care of patients with epilepsy in general practice. *Br J Gen Pract* 1994; **44**: 395-399.
8. Handysides S. Building morale through personal development. *BMJ* 1994; **308**: 114-116.
9. Geyman JP. Family medicine as an academic discipline: progress, challenges, and opportunities. *J Fam Pract* 1990; **31**: 297-303.
10. Council on long range planning and development in cooperation with the American Academy of Family Physicians. The future of family practice — implications of the changing environment of medicine. *JAMA* 1988; **260**: 1272-1279.
11. Curtis P. Academic base for general practice [letter]. *BMJ* 1994; **308**: 64.
12. Taylor RB, Colwill JM, Puffer JC, et al. Success strategies for departments of family medicine. *J Am Board Fam Pract* 1991; **4**: 427-436.
13. Murata PJ, Lynch WD, Puffer JC, Green LA. Attitudes toward and experience in research among family medicine chairs. *J Fam Pract* 1992; **35**: 417-421.

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