

The Evolving State of General Practice and GP Education in Germany

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Abstract

The general practitioner (GP) is of great importance in Germany: about 90% of the population has their own GP and approximately 70% of the population attend their general practice at least once per year; indeed, nearly a quarter of the population has continuous care from their GP. As the disease burden shifts further towards chronic disease, mainly as a result of demographic ageing, the demand for GP care will continue to increase in the coming years. The aim of this article is to summarise how general practice has developed in Germany and to illustrate that there is still a long way to go, both in terms of progress that should be made and the gap between Germany and other countries. It is hoped this will be a spur to further improvements as well as a resource for health sectors in countries other than Germany. The sources of information are the German Society for General Practice (Deutsche Gesellschaft fuer Allgemein Medizin - DEGAM), a general review of the literature, the experiences and perspectives of a GP in England, and the experience of another of the authors, who has both contributed to and witnessed the changes of the last three decades in German General Practice. There are many terms used in the literature for GPs, including GP specialists, family doctors and primary care physicians, each of which is in vogue in different countries. This article uses the term GP to cover all of these.

Keywords: General practice; Hausarzt; Germany; Primary care; Education; Professional development

Historical Development of General Practice

The professionalization of medicine is considered to have begun in Germany in 1852 when it was decreed that medical doctors may only be thus titled if they have completed their medical studies. It was much later; however that General Practice was recognized as a medical subspecialty [1]. Change was slow and general practice not recognised at first; following are some important milestones in GP professionalization in Germany: 1925: First appearance of the General Medical Journal "The Landarzt" (i.e., The Rural Doctor), later renamed the "Zeitschrift für Allgemeinmedizin" (Journal of General Medicine (=General Practice)). 1966: First Lecturer in general practice (Prof. Häussler, Freiburg) 1966: Founding of the DEGAM (Deutsche Gemeinschaft fuer Allgemein Medizin: German society for general practice) as a scientific society. 1972: Decision of the national council of physicians to develop institutes of general practice.

1976: Establishment of the first official professor of General Practice (Prof. Hahn, Hannover) 1977: First post-doctoral degrees ("Habilitation" ie professorial thesis) in general practice (Haussler, Pillau, Kochen, Klimm) 1978: General practice is compulsory and examined in medical school 1999: The Science Council came to the conclusion that the proportion and quality of teaching of general practice in medical education is inadequate. 1999: Governmental Guidelines made to promote research in general practice in medical colleges 1999: Seven departments or institutes of General Practice present at the medical universities. 1999: Nine Professors of general practice in post. 1999-2001: DEGAM: first professional development course for academically interested GPs [2,3]. 2003: New Governmental Licensing Regulations oblige 2 week internships in general practice for all medical students in the clinical years of undergraduate education; general practice is ranked among the five essential clinical subjects; the option of a 16 week elective period in the 6th year of under-graduate education is created.

State of General Practice today

Currently, there are 60,374 GPs active in Germany (Kassenärztliche Bundesvereinigung-KBV 2010a) [4]. But although the importance of GP activity is growing, the overall percentage of general practitioners

has been decreasing continuously for several decades: while in 1979, 65.4% of all doctors were general practitioners, it was 2009 only 47.6% [5]. Also, the number of new GPs is declining [5] in 2007 there were 1938 new doctors in general practice, whereas in 2009 there were only 1168. The number of practices also declined from 1189 in 2007 to 930 in 2009. Forecasts are that this trend will continue. The increasing feminization of the medical profession in general is especially visible among doctors. The proportion of women currently stands at 41.3%. The proportion of practicing women decreases in the course of the professional years; significantly more women than men were recognized GPs in 2009 (57.6%), although those women actively practicing were 'only' 51.3% [5], due in part, presumably, to incompatibility issues between family and work activities. GPs possess the second-highest average age among all specialist groups: In 2009 this was 53.2 years, where the general practitioners in the old East are slightly older than in the old Western Federal States (ibid.). Nearly two-thirds of GPs are already over 50 years old and a fifth is over 60.

At the same time, the need for GPs is soaring as people age. The lack of doctors is particularly high in rural regions, many of which have relatively poor conditions, as well as a high proportion of older, multi-morbid patients, a low share of privately insured patients, infrastructural weaknesses (lack of educational and cultural activities, leisure facilities, etc.), frequent medical emergencies and long distances between home visits. Compared with other specialist areas the speciality of general practice has worse conditions during training (see later), specific risks, work and working time requirements (which is of great relevance to budding doctors) and lower earning potential compared to

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specialists. Also, the strong bio-medically dominated German medical schools prepare students too little for the diverse requirements of the bio-psycho-socially oriented GP profession. As a result, an interest that is found to be small at the beginning of their studies decreases during medical training (KBV 2010b) [6].

Medical School GP Departments

Despite these developments we still cannot speak at present of a coherent system of general practice education in the German medical school system. Not all schools even have their own institutes or departments of general practice. The existing financial and personnel equipment varies greatly. The current status of the University establishment of General Practice at the 36 medical faculties in Germany is as follows [7]:

- 14 Departments/institutes with peer-reviewed third-party funding, including 13 with single grants of more than €100,000 (highest of €6.5 million)
- Four sites are without their own offices
- Seven sites have less than half a secretarial job
- Many with only a few scientific assistants, some of whom also teach.
- Nationwide there are 491 paid lecturers
- Ratio of unpaid to paid teaching is 2 to 1
- Nationwide, there are 4,565 teaching practices (between 42 and 350 per faculty).

The consistent and comprehensive development of academic GP is necessary not only in principle, but also to aid research, in particular, into chronic diseases [8]. Despite the stronger establishment of general medicine in medical schools in the last few decades the specialist disciplines still pre-dominate: general practice has a correspondingly marginal role in education. Part of the problem is that less than two-thirds of the medical faculties have their own GP Professor [9]. Only the University of Witten-Herdecke weaves GP through the entire medical studies, both in theory and practice. That this concept succeeds is reflected, among other things, in the greater proportion of those who settle as local GPs, compared to graduates of other universities [10].

Changes in the Role of GPs

The increasing specialization in medicine (in 2004 there were 52 specialties and 18 subspecialties) creates competition between the various specialties themselves, and increases the risk of encroachment into typical GP work (e.g. palliative care, psychotherapeutics, pain therapy). The specialization, academization and professionalization of non-medical health professionals also represent a field of conflict. Against the backdrop of the looming GP shortage, especially in rural areas, there has been a controversial transfer of some treatment activities to other staff. The delegation of medical activities to nursing and other health professions is supported by medical leaders, the leading associations of statutory health insurers and the unions of the other health professions [11,12]. The expansion of competencies of these vocational areas also necessitates improved cooperation between the various health professions. It is important to question those medical services adopted so far for their appropriateness, and further developments. For example, doctor-relieving interventions, such as AGnES and VERAH, which serve to ensure medical care in rural areas and support GPs in their work, have the side effect of a potential loss of

medical expertise. AGnES is short for *Arztentlastende, Gemeindenahe E-Healthgestützte Systemische Intervention* i.e. community-based e-health-assisted systemic support; VERAH=*Versorgungsassistentin in der Hausarztpraxis*, i.e., Care assistant in General Practice [7]. A Cochrane review "Substitution of doctors by nurses in primary care" gives the summary: "doctors' workloads may remain unchanged either because nurses are deployed to meet previously unmet need or because nurses generate demand for care where previously there was none" [13]. Empirical data in Germany is lacking as to whether there has been a reduction in workload through the intervention of AGnES; estimates by participating doctors and model projections show an AGnES capacity of 500 hours per year which does not show how much calculated 'home visit time' actually is made available to the doctor to 'treat additional patients' [14]. AGnES Zwei 2 is an evolution of this concept. German states act as autonomous regions, similarly to the USA, and this system was developed in Brandenburg by the KVBB (*Kassenärztlichen Vereinigung Brandenburg*). AGnES 2 nurses earn further qualifications and then may act more autonomously as case managers with respect to elderly, multimorbid patients, although always operating under GP delegation. In comparison to other advanced nations nurse practitioners (NP) do not exist in Germany. Compared to the GP-bound AGnES, the NP has significantly advanced competencies and works not on a delegation basis, but largely autonomously in the sense of a substitution of medical services [15]. One key difference is that NPs can prescribe medications. In comparison, practice nurses, of course, abound—their focus is more on simple examination e.g. the obs (pulse, BP, etc.), education, practical treatments, administering medications (e.g. intravenously) and rehabilitation. In 2011 a controversial directive was presented, after several years' discussion, by the Federal Joint Committee, (*Gemeinsamer Bundesausschuss-GBA*), which makes possible the delegation of medical services in pilot projects [16]. GPs may transfer care activities, such that they are technically, economically and in civil liability law no longer responsible for them. The doctor however is still responsible for diagnosis and referral. He devises a plan of therapy to which the caregiver must hold. There are restrictions: nurses cannot independently transfer a patient to a referring GP, they can only enact a referral. There are five conditions which specially trained nurses can take over tasks: diabetes mellitus type 1 and 2, dementia, chronic wounds and hypertension. To this may soon be added management of polypharmacy in the elderly, and the ordering of health aids. There are recent GP based gatekeeping models, which will be familiar to those working in the NHS in England where the GP explicitly performs the role of gatekeeper and coordinator. This is something that patients can specifically opt into in some regions such as with the AOK (an insurance company) in Thuringia. This both saves money and allows the GP to explicitly have an overview of their patients' care. This is known as *Hausarztzentrierte Versorgung*.

Further Education in General Practice

Training as a GP provides further education in the clinical areas of general medicine, surgery and pediatrics as well as in general practice. In contrast to other specialties, further education in general practice must be undertaken in an actual practice. The access possibilities and pre-requisites for settling as a general practitioner have changed many times in the course of the development of the profession: until the 1990s doctors could settle as "practitioners" without a specialist exam, although the possibility existed of training as a GP specialist; now this is compulsory. At the same time, the training bases for the GP have been changed several times over the last few decades, with the focus of the discussions and new regulations on the temporal

perspective (i.e. long term care), less on the content. In 1993, on the basis of European Guidelines to facilitate the free movement of doctors, reciprocal recognition of diplomas, certificates and other evidence of formal qualifications were instituted in Germany [17,18]. At this point, specific general practitioner training was first begun. Since then, this is obligatory anchor in order to settle as a general practitioner.

The following list summarizes some of the stages of professional development in general practice [16]:

1961: Three-year specialist training in East Germany.

1965/1967: Introduction of the specialist in GP in East Germany (five-year training).

1968: Installation of the four-year training as specialist in general practice in West Germany.

1972: New designation of specialist general practitioner in West Germany.

1993: Three-year compulsory education as a pre-requisite for settling as a GP.

1998: Legal anchoring of the five-year training as a specialist in GP.

2002: Establishment of the specialist in general and family medicine.

2006: Five-year training compulsory.

2010: Re-establishment of the specialist in General Practice.

Further qualifications are awarded to those with appropriate training through the provincial doctors' chambers, such as for experience in the field and corresponding activity. Training is nonacademic in nature. Thus far a uniformly regulated training, such as structured rotations, has not been realized due to various conflicts or the differing interests of stakeholders (DEGAM, GP association, Medical Association, Insurance associations, social and health ministries) [19,20]. Doctors who are interested in training as a GP must normally organize efforts themselves, and often change employer for sections of their training. The financial remuneration for training has also, for a long time, been neither uniformly regulated nor been comparable to other specialties. In addition to these structural flaws, there is no common curriculum and quality control is absent. There are, for example, no systematic train-the-trainer concepts [21].

National Efforts to Promote General Practice

Against this background several efforts to promote the development of the GP profession, have been begun. The Association of Supreme State Health Authority for the Maintenance of Primary Care in Germany (Arbeitsgemeinschaft der Obersten Landesgesundheitsbehörden-AOLG 2008) [22], declared in 2008 that by 2020 GP numbers must have increased by 20%, on the basis of demographic and social change. Actually, even this number of will not be anywhere near sufficient to ensure comprehensive medical care. Suggestions for improvements in the area of research as well as education and training have also been made as well as administrative changes [23] and a stronger anchoring of general practice in university medical studies. Students who profess a strong interest in primary care in the selection process may be given scholarships, reduced paybacks of governmental financial support or even targeted selection and promotion [21]. The National Association of Statutory Health Insurers (Die Kassenärztliche Bundesvereinigung), the German Hospital Federation (Die Deutsche Krankenhausgesellschaft) and the Federation of health insurance companies (Der Spitzenverband Bund der Krankenkassen) plan to monitor their "agreement to promote

training in general practice" that came into effect to January 1, 2010. Meanwhile, the earnings of GP trainees have been adjusted to the earning potential of other specialist groups in training and are about €3500 per month [24]. Continuing educational collaborations have become more established, and are functioning more at the country level. Examples of structured academic training programs include "Composite Training Plus" in Baden-Württemberg, as well as "The Future Concept of General Practice" in Hessen to name but two [25]. But not all states have made such good progress. Different states have different rules, for example with regard to the question of who will coordinate education (State Chambers of Physicians, universities, etc.). In addition to improving the educational situation of prospective GPs, the professional development of those who are established is also important. Within the statutory health insurance modernization Act, proof of regular professional training is mandatory for all established doctors since 2004 [23]. Training opportunities are very heterogeneous with regard to substantive, methodological and structural areas, so, for example the GP Department in the University of Heidelberg has developed a "General Practice Day" with high standards of multidisciplinary content, speakers, teaching, evidence-base, financing and industry independence [26]. There are other developments which demonstrate the growing influence of general practice in Germany. For example, GPs now sit on the council of experts of the Federal Government to set health and science priorities.

International Perspectives on General Practice

The role of the GP in many countries (for example in Scandinavia) is more central than in Germany. The primary care model, well established in various European countries, obliges GPs to take a stronger steering role than doctors do in Germany [27]. Also, there are many medical activities, which are carried out by specialists in Germany that are provided by GPs in other countries. It is instructive to note the great discordances that exist between Germany and the rest of the civilized world with regard to patient contacts [28]. The average consultation takes 7.8 min in Germany and GPs see an average of 243 patients per week. These extreme figures compare to the next worst of 11.1 min in the UK for 154 patients per week. The other 5 countries investigated average 121 patient contacts per week with an average consultation time of 15.7 min. Consistent with this almost overbearing stress, 96% of German GPs think their health service needs either fundamental changes or a complete overhaul. Despite the apparent strain under which German GPs operate, they, somewhat surprisingly regard the success of their practice in much more positive terms than their international counterparts: to give two examples, 93% of German GPs consider that they are well equipped to give good chronic disease care (cf 76% in the UK, the next best) and 70% are well-equipped to care for those with psychological disorders (cf 65% in Holland, the next best). Again surprisingly, German GP are as satisfied with their lot as their international colleagues with 80% very or somewhat satisfied with their overall experience practicing medicine (range 76-90% internationally).

Conclusion

Classically German GPs were single-handers, at best supported by one or two assistants but this situation is becoming less common. Indeed, there have been many measures taken to further the professional and faculty development of general practice in Germany, which include:

Stronger links between hospital practice, teaching and research.

- Development of medical teaching and academic training, and training as a continuous process in the sense of continuing professional development.

- Greater integration of primary care in medical teaching [10].
- Improvement of education/training structures with continuous and systematic evaluation.
- Systematizing and unifying the content of education and training opportunities.
- Opportunities for development of basic (modular) master's courses in parallel to academic qualifications or certificates.
- Development of concepts for the qualification of teachers in education and training, as convincing train-the-trainer models are absent [3].
- Development of GP research both in the field of teaching and professional research, as well as health care research, e.g. with regard to symptom evaluation studies and the assessment of relevant procedures and technologies in primary care [29,30].

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