General Practice Observed

Attachment of a physician's assistant to an English general practice

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Summary and conclusions

A final-year student from the physician's associate programme at Duke University in North Carolina, USA, worked in an English health centre for eight weeks between May and July. He managed 221 cases under supervision, and they were typical in terms of sex ratio, diagnosis, and the preponderance of children. Current social and economic trends in Britain suggest that selective under-doctoring, especially in inner urban areas, may become acute, and a type of physician's assistant specially selected and trained for the work in areas with serious and unusual problems should be considered as among the possible, even desirable, solutions.

Introduction

In an attempt to reverse the decline of general practice in America, Duke University started in 1965 to train assistants for primary care physicians in the rural areas of North Carolina. Other medical schools followed, and by 1974 the American Medical Association had accredited 48 training programmes from which some 1200 "physician's assistants" were practising in 36 States.¹ After graduation these assistants are employed and supervised by a physician. In each State they must be licensed or certified to practise and their autonomy is legally circumscribed.

In Britain there is no comparable problem in the distribution of general practitioners and no explicit call for a doctor's assistant. Indeed, the idea of a physician's assistant on American lines is resisted by the BMA². Nevertheless, there is a debate about medical manpower, including the development of "extended roles" and the contribution of other health professionals to the medical problems of inner city areas.^{3 4} It seemed opportune when a final-year student at Duke University asked to spend his family practice elective in an English general practice, and an attachment was arranged with the partners in the health centre at Sonning Common, one of whom (TIS) acted as his precepting physician.

At Duke University students receive two years' training in basic and clinical science, including history-taking, physical examination and practical procedures. A problem-solving approach using the subjective, objective assessment and plan (SOAP) system enables them on graduation to "... assume many of the diagnostic, therapeutic, and administrative responsibilities traditionally performed only by the physician ... to integrate and interpret findings on the basis of general medical knowledge, and to exercise a degree of independent judgment."⁵

All prospective physician's assistants must have had one year's health-related experience before training, and this student had worked as a hospital emergency technician for two years with six months in a public health department. As a former mountaineering instructor he had also had experience in triage and medical care and had worked in two family practices in America. This experience and training was relevant to his work in an English health centre practice.

Method

We found no record of any working visit by a physician's assistant to Britain, and we sought advice about the legal and ethical issues. The General Medical Council was concerned about "covering" and stipulated that the patients must understand that the physician's assistant was not a registered medical practitioner. The Medical Protection Society warned that no procedure should be delegated until the doctors were satisfied that he was competent to perform it. The hospital liability insurance of Duke University covered him against litigation while in Britain.

The health centre staff were briefed beforehand, and a notice was displayed for the patients but those who saw him also received a written explanation. While working he wore his own uniform and pocket badge to fulfil the requirements of the General Medical Council about his identification. After a week in the practice his capability was assessed by the staff for his preceptor to gauge his competence for the work envisaged. He subsequently recorded data about the patients he saw by himself, and one of us (BLR) interviewed him and the staff about their reactions.

Results

The physician's assistant spent eight weeks in the practice between May and July and saw patients on 35 weekdays. During the first nine working days he made himself familiar with the staff and procedures of the health centre. He also visited the offices of the area health authority, the family practitioner committee, and the social services department and accompanied the district nurse and health visitor. After assessment he was treated as a trainee general practitioner, with the use of a consulting room and all facilities including the appointment system.

During the next 26 days, he held 267 consultations (10.3 a day on average) with 221 patients. Of these, 188 (85%) attended only once, but the remaining 33 provided a total of 79 consultations. Thus there

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were 46 repeat consultations, forming 17% of his overall total. This proportion did not differ significantly from week to week. Twenty-seven (10%) of all his consultations were with 16 patients in their own homes (or in one case in the community hospital), although some of them also attended at the health centre. Thus his ratio of surgery attendances to visits was 8.9:1.0 compared with the significantly higher rate of 17.7:1.0 for the practice as a whole during the same period ($p < 0.01$). In addition he worked in the health centre's diabetic, infant welfare, and obstetric clinics and shared the work of the treatment room nurse.

The assistant saw more female than male patients (57%) and 59% of his patients were aged between 15 and 64 years. The proportion of children under 15 (32%) was, as expected, significantly higher than their proportion (22%) in the population of England in 1978.⁶ There was a secular trend whereby the proportion of children that he saw increased and the proportion of patients aged 65 or over diminished during his attachment.

The table shows that the primary diagnoses recorded by the physician's assistant were broadly similar to those recorded nationally.⁷ After every consultation (excepting 13 for minor procedures) his preceptor routinely reviewed the clinical record, discussed the findings and plan, and signed the prescriptions. The physician's assistant actively sought advice about diagnosis or management in only 26% of cases but more detailed case discussion followed each consulting session, and there was a weekly random case review.

Primary diagnoses of patients seen by the physician's assistant

Diseases	International classification	Episodes		Second national morbidity survey ⁷
		No	%	%
Respiratory system	460-519	27	29	22
Hay fever/allergic rhinitis . .	407	38		
Skin and subcutaneous tissues . .	680-709	23	10	8
Musculoskeletal and connective tissues	712-739	17	8	6
Genitourinary system	580-629	16	7	5
Ear	380-387	13	6	4
Infective and parasitic	008-136	12	5	4
Digestive system	520-578	10	5	4
Circulatory system	390-458	8	4	5
Accidents, poisoning, and violence	N802-994	7	3	6
Pregnancy, childbirth, and puerperium	{ Y60-62 631-678 }	6	3	9
Mental disorders, central nervous system, and eye	294-378	5	2	12
Neoplasms	151-239	4	2	1
Endocrine, nutritional, and metabolism	240-279	1	< 1	2
Physical symptoms and signs . .	780-	10	5	10
Miscellaneous conditions	Y00-99 (except Y60-62)	24	11	2
Totals		221	101	100

Further monitoring was provided by the preceptor's partners and by feedback from patients and staff. Overall, these controls added about 15 minutes to each of the preceptor's consulting sessions and about two hours at the end of each week.

Data from the recorded semi-structured interviews showed that his acceptability to the staff depended on the extent of their preparedness. A treatment room nurse who had missed the initial briefing said she began by feeling insecure and hostile to him, whereas a district nurse who had worked with medical assistants abroad accepted him without difficulty. The staff were impressed by his clinical ability after only two years' training, and his probationary period was reduced from four weeks to two because of this. He was judged to be more confident and competent than most attached medical students and some trainee general practitioners, particularly in practical procedures, and less stereotyped by hospital attitudes. He was popular with patients and particularly with children, some of whom believed that they were seeing a real cowboy!

Having themselves helped to develop the extended role for community nurses in Britain,⁸ the general practitioners agreed that their experience with the physician's assistant showed that casual training for treatment room and first-contact work was insufficient. Practice nurses should have a formal training that included the theory of scientific and technical aspects of the work, such as chemical pathology and electrocardiography, as well as practical medical skills. This work also requires a reliable system for delegation and supervision. But

despite their experience with this assistant, both general practitioners and nurses were doubtful whether the American type of physician's assistant was appropriate for general use in Britain. Although general practitioners were sometimes overworked, the creation of a new type of health worker did not seem justified, except in our urban ghettos where the local use of medical assistants other than nurses might enable a primary care service to survive.

The physician's assistant said that his prevocational work in emergency rooms had taught him to deal with minor conditions, and by watching the doctors he learnt how to approach patients and became familiar with physical examination routines. He extolled this experience and said: "... you know something about what medicine is. I think that makes a tremendous difference; and the age too—the students that you have here are five years younger than I am so far as dealing with patients is concerned ... we all started at a low level and had a view of what we were getting into. Certainly it is true of [American] medical students that I know that they don't know what they are getting into."

He thought the clinical experience in this elective was similar to that of family practice in America but envied our district nursing service and facilities for monitoring and recall in immunisation and cervical screening. He observed that our treatment room nurses appeared to do much more than the "office nurse" in America—indeed, more than most American nurses outside special treatment units. Commenting on the collaboration between the health centre staff he said that interest in this was growing among American physicians, despite their tradition of isolation in this respect. Asked what he had gained from his attachment, he replied: "Certainly it is right in line with what I had hoped for—that is, common problems with enough things thrown in that are serious or unusual and require more thorough investigation. I want to be very comfortable in dealing with the common problems, and I want to learn about handling problems that are very acute. I have gotten that feeling here—the majority have been common things which I feel I can pretty well handle myself."

Discussion

We believe that this is the first time that an American physician's assistant has worked at any stage of his career in an English general practice. Given appropriate safeguards, there were no legal or professional barriers to the attachment, but its success depended particularly on the initial briefing for the staff, his preliminary assessment by the whole practice, and the information given to prepare the patients.

His cases were typical in terms of sex ratio, diagnosis, and the preponderance of children. A daily average of 10.3 consultations, with attendance at clinics, must represent an acceptable amount of educational experience, and the proportion of patients he saw at home was similar to that recorded both by Howie⁹ and by Marsh *et al.*¹⁰ He dealt with common acute problems rather than the routine examinations that figure largely in American practice,¹⁰ and in the circumstances this was the most relevant experience. His preceptor and the other staff were satisfied that the information he collected and his assessments of patients were accurate, relevant, stood up to scrutiny, and enabled management plans to be discussed and implemented. Despite his relative inexperience, he identified and handled at least one patient's major emotional and social problem with skill and tact.

The responses of the nurses and health visitor towards him emphasised the essential difference between two worldwide stereotypes—the physician's assistant and the nurse practitioner.¹ Regardless of his gender, all the nurses saw him as a type of physician, not a type of nurse. The treatment room nurse, however, recognised that her work and role most resembled his, thus reinforcing a suggestion that these nurses differ in type from other nurses and might be said to be the "feldshers" of British general practice.¹¹

We were convinced that his confidence and maturity and his ability to relate to the members of the health centre team as well as patients owed much to his prevocational experience. Perhaps the formation of community health care teams in Britain could be enhanced by a similar initiative among embryo doctors and nurses, and a controlled experiment should be carried out in nursing and medical schools. Moreover, clearly nurses who

undertake medical activities in British general practice must have the generic skills for collecting medical data from patients and be trained in a level of differential diagnosis that at least enables them to make an informed "triage" decision.¹²

The attachment also convinced us that it would be possible in Britain to train an auxiliary physician to handle a considerable proportion of the more straightforward cases in primary care. At present it seems unlikely that auxiliaries of this kind would be needed as the result of a shortage of doctors, but it is barely a decade since the Americans were compelled to adopt this as one solution to the problem of selective under-doctoring affecting their inner urban areas, among others. Current social and economic trends in Britain suggest that the same problem may become acute here as well, and a type of physician's assistant specially selected and trained for work in areas with serious and unusual problems should be considered as among the possible, even desirable, solutions.

We thank Dr Michael Hamilton, director of the physician's associate program at Duke University Medical Center for his collaboration and the Royal College of General Practitioners and the Wellcome Foundation in North Carolina for their supporting grants. We are also grateful to Dr P M R Hemphill, Dr J C Hasler, and Dr Helen McEwen, together with the nurses, health visitors, and administrative staff of the Sonning Common health centre for their support and interest in the attachment.

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(Accepted 14 July 1980)

Letter from . . . Chicago

Exotic diseases: sheriffiosis

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In a moment of inspired upmanship this young moonlighting casualty officer had quietly dropped the word that he was a famous specialist in exotic diseases. For, although he enjoyed the work and the extra income of his weekly pilgrimages to the green suburb of Mount Forest, he badly wanted to cut down to size those arrogant paramedics, forever strutting around the emergency room in their purple and white overalls as if they were about to take the field against the Chicago Bears.

Two years later, when he had quite forgotten about this, his phone rang one evening and it was one of the paramedics—who, having remembered that his young friend from the medical school knew more about exotic diseases than anyone else in the world, wanted some information about Sheriffi's disease. The doctor ransacked his medical books and scoured the *Index Medicus*—but all to no avail. At last admitting his ignorance, he asked about the symptoms of the mysterious disease. "It was mainly fever and diarrhoea," replied the paramedic, "and heaven knows what would have happened had Dr Shigella not prescribed a powerful antibiotic."

We might feel sorry for Dr Sheriffi, conqueror of the non-

lactose fermenting enemy, so close to becoming immortalised as the eponymous discoverer of a dread disease, yet pre-empted by Dr Shiga and now forever condemned to deliver primary care in the sleepy township of Mount Forest. Yet things might have turned out differently, he might have become a celebrated exotic specialist, perhaps founded the Exotic Society, edited the *Journal of Exotic Diseases*, lobbied to have exotic medicine recognised as a bona fide specialty, and even organised the first clinical examination for the exotic boards. He might have written many excellent monographs on sheriffiosis, its nature and its nosology, painstakingly proving that this was not a mere syndrome or a transient departure from health, but a true disease, appropriately named and officially coded in the international classification. For was it not true that *his* was a generalised disease, not one bounded by the *musculus muscularis mucosae*? Had he not shown that involvement of the urinary tract could cause the debilitating condition of epidemic koskinuria,¹ and that retrograde spread to the oral cavity resulted in the grinding agony of malignant nocturnal bruxism?² Was not enteric pediculosis in absent-minded Cambridge men³ merely another expression of the protean manifestation of his disease? And did not its occurrence as a chronic form of petrositis in the brush-tail rat⁴ confirm his famous dictum that if you knew sheriffiosis you knew medicine?

More remarkable still was his discovery that some atypical forms of his disease were caused not by *Sheriffella sheriffi* but

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