PRACTICE OBSERVED

Practice Research

Night workload in one health district

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Abstract

The night work (11 pm-7 am) in primary care in one health district (population 195 212 with 93 general practitioners) was studied over a three month period, starting 1 January 1983. The workload proved to be small (15% of all "out of hours" work for general practitioners). An average of three night visits was done a night in the whole health district, and 28 general practitioners were available for these. On average, over seven doctors were available each night for each patient who required a visit in primary care in the health district. It is concluded that there is only sufficient work for (at maximum) two doctors, and a system is proposed to make more efficient use of the general practitioners' time.

Introduction

The profession has recently been criticised for the way in which its "out of hours" work is organised. It is important that we aim at a uniformly efficient and caring system which does not detrimentally affect most of the work that is performed in the surgery. Before such a system can be planned the workload needs to be known.

The results of other studies have shown night workloads of individuals and within practices, but none has examined a complete health district. Lockstone (Whitby, 1976) calculated a rate of 10·7 night visits per 1000 patients a year, Ridsdill-Smith (Larkfield, Kent, 1983) 7·7, and Crowe (Leicester, 1976) 7·8.[1 2] Morton (Berwick, 1979), however, showed a rate of 15·9, Riddell (Glasgow, 1980) 16·8, Cubitt (London, 1983) 18, Cunningham (Hovingham, Yorkshire, 1980) 23·9, and Barley 20·8 (Sheffield, 1979).[4] [5] This variation was reviewed by Buxton, who showed a nationwide variation in rates between 3·8 and 17 in 1973-4.[6] He attempted to give reasons for this variation.

For this study "out of hours" work refers to the total work done between 6 pm and 8 30 pm, but "night work" more specifically refers to work done between 11 pm and 7 am. In the Maidstone Health District all out of hours work is undertaken by general practitioner principals and deputising services are not available. Most encounters with doctors that are initiated by patients between 11 pm and 7 am are carried out by general practitioners, as there are few casualty attendances during these hours.

I suggest that a more accurate estimation of overall workload may be obtained by studying a whole health district because it goes some way to eliminate variation among practices. The aim of this study was to describe the night workload for general practitioner care in a single health district, and, in the light of the information collected, to suggest a more efficient system of providing such care.

Methods and results

The number of claims for payment for night visits between 1 January 1983 and 31 March 1983 was provided by the Kent Family Practitioner Committee. By personally contacting at least one partner from each practice information was obtained on each group's arrangements to be on call and the number of patients on lists. Most claimed to be efficient in submitting night visit forms.

Maidstone Health District's 93 general practitioners (13%, of Kent's general practitioners) serve a population of 195 212 patients (12·6%, of the population of Kent). This allows an average of 2099 patients per general practitioner. (Kent's average is 2182 and a recently calculated national average is 2107.) The 93 general practitioners are organised into 32 practices (table). On call rotas mean that 26 general practitioners cover for 195 212 patients each week night (and 22 cover for this number at weekends). Thus each week night one general practitioner covers for an average of 7630 patients (at weekends for an average of 9132 patients). The average rota size is just over three doctors, and the largest group has seven general practitioners.

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Size of partnerships in the Maidstone Health District

No of doctors in partnership	No of groups	No of doctors	Percentage of all general practitioners
1 (single handed)	8	8	8·6
2	5	10	10·8
3	9	27	29
4	4	16	17·2
5	4	20	21·5
6	2	12	12·9
Total	32	93	100

During this three month period general practitioners did 299 night visits (7%, of the total made in Kent). The figures of the Kent Family Practitioner Committee show no seasonal variation (supported by Ridsdill-Smith),[2] and this, by extrapolation, gives a rate of 6·21 night visits per 1000 patients a year. In Kent 4252 claims were received from 711·5 general practitioners, covering 1 552 484 patients. The night visit rate from these figures is 10·95 night visits per 1000 patients a year. My personal rate was 5·9 per 1000 patients a year.

The maximum total number of forms for night visits relating to patients in the Maidstone Health District and received by the Kent Family Practitioner Committee for one night during the study period was nine. Twenty six general practitioners were available for these visits—that is, approximately three doctors for each patient. The average number of night visits in total each night was 3·3 (in the whole health district) shared among 26 general practitioners—that is, on average over seven (actually 7·8) general practitioners available for each visit required. Thus one general practitioner will do one night visit roughly every eight nights on duty.

Discussion

The night visiting rate of 6·2 night visits per 1000 patients a year is lower than in other studies. For a true picture of the night workload, however, those night visits not claimed for must be acknowledged, and, obviously, telephone consultations. Without the unknown number of visits for which no fee was claimed the figures presented are the minimum generated. I believe, however, that those visits were few and if included would not be sufficiently important to alter my conclusions.

An estimation of "disturbances" between 11 pm and 7 am—that is, telephone calls for advice plus those leading to a visit—has been made. Crowe's "disturbance" figure is 13·3 per 1000 patients a year, leading to the quoted night visit rate of 7·8 per 1000 patients a year.[2] The results of Lockstone's study produce 13·1 (my calculation),[1] and Ridsdill-Smith showed a disturbance rate of 15·9.[2] My personal disturbance rate was 14·7 per 1000 patients a year.

From the results of these studies 84%, of phone calls to the general practitioner on call (out of hours) were before 11 pm and 84%, of the "out of hours" visits were done before 11 pm. These figures suggest that the general practitioner will be out of bed every fourth night on duty and telephoned after 11 pm every other night if covering for 12 000 patients.[1]

The results of my study show that in the Maidstone Health District a general practitioner will do one night visit roughly every eight nights on call. This lower rate is partly explained by the "average" general practitioner covering for fewer patients—7630 patients on week nights and 9132 at weekends. Thus a small proportion of all "out of hours" work is done between 11 pm and 7 am. About 16%, of telephone calls are received and 15%, of "out of hours" visits are done during these hours.

I suggest that these figures show inefficient use of expensive and highly trained manpower during unsocial hours for a trivial proportion of the general practitioner's work and propose an efficient system both in terms of manpower and patient care. Night calls (11 pm-7 am) in the Maidstone Health District could be coordinated and operate from a central base. General practitioners would cover for their own patients until 11 pm (thus still doing 85%, of "out of hours" work themselves or an immediate deputy—that is, a partner). The figures show that in the health district from 11 pm to 7 am there is sufficient work for only two doctors. All patients would be on telephone contact with the base (probably an area in the casualty department). One general practitioner would remain "on the road" in radio telephone contact with the other doctor who would stay at the base and deal with cases that could easily be attended to at the base and give telephone advice.

With this system each general practitioner would be "on call" one night in 43 if all general practitioners participated—that is, eight nights a year (allowing for eight "sleeping" partners). Distance to be travelled should not be a problem. From the base (which is central) to the furthest point is 14 miles. Some general practitioners cover this distance now. At night, even travelling from one side of the health district to the other takes a maximum of three quarters of an hour. Furthermore, the doctor is already up and alert. Existing on call rotas mean that seeing one's own patient at night is rare, particularly where relevant facts are known which appreciably alter management in a genuine emergency. By not covering from 11 pm to 7 am, a single handed practitioner who is usually "on call" every night of the year with an average list size will deprive only about 13 of his patients a year of a personal visit. He will still deal with 85%, himself. Most of his patients would not even know that he was not on duty during those hours.

The important difference which should eliminate criticism often made of deputising services is that this scheme is operated by a group of general practitioner principals who know each other and can work together. Peer criticism is an extremely powerful force which would help maintain high standards. Schemes based on this formula have been suggested before but not with the benefit of the workload figures of a health district.[14] As has been shown, there is only sufficient work for two doctors generated by the health district population of 195 212 patients between 11 pm and 7 am. A ratio of one doctor for every 100 000 patients is much healthier than most deputising services provide, and this cooperative would be non-profit making. Some have gone a step further and suggested separate "out of hours" contracts.[11]

"On call" work in short shifts can be enjoyable. It is unfair on patients when long shifts and disturbed nights create bad tempered doctors, which can effect detrimentally most of the work done during a normal day. It is extremely inefficient to have on average at least seven general practitioners available for each visit required every night between 11 pm and 7 am. This change is inevitable and it is better to mould the future than to be moulded by it or by influence outside the profession.

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Life Changes

Death of a spouse

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Personal account

It is nearly 14 years since my husband died. He was 30 and I was 28. We had been happily married for five years, and had two small sons. Strange to think that all that time has gone by and that my life has changed so much, when at the time I felt I didn't want to survive myself. My general practitioner had said "Time heals—little by little it will get easier" and I hadn't believed him, but those words have stayed with me and I can see now what he meant. Even after 14 years small things remind me of him—his handwriting in a book, a similar face on television or in a crowd, places where we had been together. They all stir memories, but the pain has gone, the intensity of grief has faded with the years.

Looking back I can remember so clearly first being told of his illness. He had had to have an operation to remove one of his testicles "because it wasn't functioning properly and might affect the other one." Picking him up from hospital I was called into the doctor's office and told that he had cancer. After the initial shock I asked if he knew. He didn't, and I was advised not to tell him at that time. Going home with him, brightly chatting in the car, and then facing my parents who had come to stay for the Easter weekend was like a nightmare, keeping up my normal behaviour and manner while I kept repeating to myself over and over again that conversation in the doctor's office.

A few days later I went by myself to see our general practitioner who was very sympathetic and supportive. Throughout the year of my husband's illness I knew that I could approach him at any time, which was a great comfort. I asked him if I should tell my husband that he had cancer, but he said that if he wanted to know he would ask. For all those 10 months he never asked and I never told him. Everyone else knew, family and friends, but he didn't. It was like keeping a terrible secret from him. I used to lie in bed at night crying quietly by his side as he slept, wishing and wishing he would ask so that I could share with him that terror of what was happening, but at the same time being so frightened that if he knew he would fall apart. He was a very outgoing person, full of life and energy, and I was scared that I couldn't cope with him becoming depressed.

All through that year he was off work from his teaching job for long periods, was in and out of hospital having radiotherapy or chemotherapy, new lumps appearing in his lymph glands, his chest, his stomach, or having periods of recovery when everyone said "It's a miracle, he's cured." Once, coming out of the radiotherapy department, he said "Do you know, there are a lot of patients there with cancer," but he never outwardly made a connection between that information and himself. I suppose that that was his own form of denial, and I went along with it. It is one of my deepest regrets. I will never forgive myself for not having the courage to share with him facing his death, the end of his short life, and parting from everything and everyone he held dear. Death is such an important part of life that, however painful, I realise now that it can't be hidden or disguised. Only at the very end when the cancer had reached his brain and he was on the verge of death did he ask in a lucid moment what was the matter with him. I told him, and he expressed his thankfulness with me for all he had had in life, for everything he had been blessed with, but by then it was the end.

I appreciated the hospital allowing me so much privacy with him. He was in his own room and I was given a room nearby so that I could be with him as much as I wanted. After he had died I remember going back to my hospital room and not wanting to leave it, not wanting to go home and face the children, our two sons aged 2 and 3. My general practitioner had them to stay with his family for that night.

Looking back I realise now how long the grief lasted—not just months, but years. I don't think people understand this unless they've been in a similar situation. The death of someone so close can never be forgotten or "got over" completely. It was a long time before I could hear the word "cancer" without having to run from the room. The emptiness and loneliness was devastating. Particularly being with a crowd of people, perhaps at a party, I was aware of everyone else belonging to a couple. I no longer had that familiar reassuring figure nearby whom I felt loved and accepted by. The effect this had on my self confidence took a long time to mend. I desperately wanted to hang on to memories and to keep photographs to remember him clearly.

One night, not long after he had died, I found my 3 year old son crying in bed. "I can't remember Daddy's face, I've forgotten his face." It was in fact having to keep going for the children that helped me. But because they were so young I wonder now whether I was conscious enough of the effect it must have had on them.

One thing that I remember clearly was my awareness of the embarrassment of other people over what I had suffered—their avoiding the subject or distracting or encouraging conversation—and my attempt somehow to spare them my distress. Because of this I found myself covering up my grief in front of them, only allowing myself to cry on my own. This feeling of not being able to share, even with very supportive friends, contributed to the feeling of "aloneness" after his death. I remember the intense relief of meeting a woman in her 20s whose husband had also recently died of cancer, with whom I felt I could share aspects of my experience because she had also experienced them—things that may seem trivial but in fact would have embarrassed me to have discussed with older friends or family, such as the need for the warmth and intimacy of a sexual relationship. Having suddenly had that part of my life cut off, there were many difficulties in being approached by men again when the only man I really wanted was my husband.

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After his death I realised for the first time that I could never rely on anything being permanent, or safe, or secure again; I could never rely on happiness lasting, for tomorrow everything might change. I became reckless. I would drive and take risks in the car sometimes with my eyes shut, thinking "If I don't make it, I don't," gambling with my own life. I had affairs that were desperate and unrealistic. I couldn't cope with the financial and practical sides of life, which had all been organised by my husband, and so stuffed unopened bills into drawers with a sense of panic, leaving them there untouched for months.

The sense of responsibility, of being the sole parent and provider for my children eventually made me think about the future, about retraining, and I was fortunate in having friends and family to help me in this. And of course life does go on. Things change, and what seemed overwhelming gradually receded more and more into the past.

Something I regret is that if I visit my husband's grave I cannot really feel that he is there to speak to. If he had been buried rather than cremated I believe I might feel more in contact with him—I don't know. Death is so final, and I'm sure one always has regrets and guilt as well as the additional guilt of finding happiness in new relationships. We are left with those feelings which can perhaps be repaired but never completely healed. That is what we carry as the survivors, but hopefully as survivors we can be more in touch with what others suffer.

Doctor's comment

There can be few more painful transitions to make than that following the death of a spouse. In general practice we are frequently, and often unknowingly, helping people to navigate such major changes. We spend a lot of our time in contact with the effects of loss and death. Grief may result from much that is less obvious in life; from the loss of homes, health, ideas, or prestige. But often the loss is more obvious.

He first deceased, she for a little tried
To live without him, liked it not and died.
Sir Henry Wotton, 1892.[1]

The surviving spouse is left as a numbed and bleeding half of what was a couple. This involves a considerable loss of "self" or "self in other." If the death is in early life the future and its hopes and expectations are lost. If in later life it is more a shared past and all the experiences of a lifetime that lose their other half.

Not surprisingly, this transition has a clear morbidity and mortality. Widows seek consultations with general practitioners for psychiatric symptoms three times more often than expected in the first six months after bereavement;[2] and close relatives die within one year of bereavement seven times more frequently than shown in a control group. The risk of death among close relatives in that first year after bereavement is doubled when the person has died in hospital, as opposed to home.[3] Perhaps "death at a distance" is an increasing modern phenomenon and one that should concern us.

The doctor's first knowledge of the change in a patient's life may be from an urgent call to Mrs A who "needs tranquillisers," or from a delayed and scantily worded discharge note about a patient whom he hardly knew who has died in hospital. But the great strength of the general practitioner's position is that often his contact with the surviving spouse has begun long before the death of the husband or wife. Particularly if the death has occurred at home, a lot will have been shared between the two and a working relationship will have been begun during the terminal care of the spouse. The doctor may have got to know both partners well and helped them to face some of their grief together before the death. To help someone die with dignity at home and enable the spouse and other family members to share in this, as closely as they want to, without deception and with open feelings, is probably the single greatest contribution the general practitioner may make towards the health and eventual recovery of the bereaved partner. This is true preventive medicine. For if the surviving spouse can feel that she has done as much as possible, and been adequately supported in this, so there is no residue of resentment at having been left to cope with too much; and if the two, even at the very end of life, can draw close enough to share some of their feelings about parting, then the whole experience is registered as deeply as possible, and recovery is less delayed by regrets. This kind of terminal care is not possible if the basic relationship of the couple has been too poor.

THE PRACTICE

Nowadays about a third or less of deaths will occur at home. One hundred years ago only 5%, of the population died in hospital. What of the surviving spouses whom the doctor knows less well?

Are all deaths discussed at the practice meeting? Is there a practice meeting? Or, like the dead themselves, are "deaths" quickly forgotten and not discussed much? Do the receptionists know what has happened so that they are alert to the importance of a request for a visit or an urgent appointment? Does anyone from the practice call on a recently bereaved family? If so, when and who? Or is this none of the doctor's business? If such a visit is undertaken what are its purposes? It may be an opportunity for the surviving spouse to have information, find things out, and express some feelings about what has happened; perhaps it is also a not too intrusive example of concern and may pave the way for future help if and when it is needed.

There may be many mixed feelings for the surviving spouse associated with the medical management of the last illness. The hospital, and often by implication the general practitioner himself, may be blamed for not caring enough or for unnecessary delays and poor treatment. Usually such complaints contain aspects of legitimate criticism but are also coloured with the spouse's present despair and anger and wish to find an authority to blame. The doctor has to allow sufficiently the expression of such feelings without being too defensive and self justifying, or allying himself too much with the criticism. On the other hand, there may be an uncritical attitude towards the doctor as "never having put a foot wrong," and again the doctor must be wary of accepting such a valuation and try instead to achieve a useful working relationship for the bereaved patient.

After the initial stage what of the next two to three years? It is during this time that recovery slowly begins to occur or not occur, and many aspects of the general practitioner's function may be called into play. He must have a good knowledge of helpful organisations in the local community, recognising the severity of social isolation that may follow bereavement; he may need to be in touch with other people concerned with the family, such as the school health service or the local social services department; he will need to recognise the differences between appropriate grief, which is within an expected pattern for a particular individual, and a more complicated or prolonged depressive reaction that may need treatment with antidepressant drugs. He may need to collaborate with the local psychiatric day hospital or other nearby psychiatric resources. And, particularly with elderly people, he will need to know something of whatever network of supportive relationships they have to rely on.

The general practitioner is also in a strong position for the early diagnosis of any ensuing physical illness in the surviving partner.

It is tempting to "organise" an approach to the management of the "surviving spouse," and in so doing give a deceptively oversimplified "strategy" that may be appealing in its ordered approach, its marshalling of the resources at the doctor's disposal, but ignores the complexity of the situation. We must be careful not to regard everything as a treatable