



irrespective of the definition used. Given that the mean readings were based on the mean of two recordings at one time, the higher diastolic cut off point may be considered more realistic. Again, irrespective of the definition used, a high percentage of subjects with raised blood pressures were untreated, and, similarly, in a high proportion of those treated hypertension remained uncontrolled.

Two recent surveys have suggested that the rule of halves might still apply in the United Kingdom.¹¹ The Scottish heart health study has provided the data required to make up the rule: on awareness, blood pressure, treatment, and control. It is quite striking how closely the rule of halves applies to men in this study. The rule means that only 13% of the male hypertensive population in Scotland is treated and its hypertension controlled. It may overestimate the hypertensive proportion in that some subjects with increased blood pressure on one occasion may have pressures lower than the cut off values at a subsequent measurement. The WHO criteria for defining hypertension predated the randomised control trials of the treatment of mild hypertension, and, though the rule of halves is a useful measure for international comparisons, it is no longer appropriate as an assessment of the detection and management of hypertension in the United Kingdom. It shows that control of blood pressure in Scotland is comparable to that in the United States in the 1970s before major campaigns were launched there to improve it.

We analysed our results according to the British Hypertension Society's recommendations with a higher cut off point of 105 mm Hg diastolic pressure as our data were based on two readings at one time. Systolic pressures were ignored, and the treatment target of 90 mm Hg diastolic pressure was used. The results in figure 2 show substantial differences between men and women in the detection and management of hypertension and a large effect of age, particularly in men. The percentages of hypertensive men and women not receiving satisfactory treatment by those current criteria are 75% and 58%.

The possible explanations for this sex difference include a higher frequency of contact with general practitioners by women and their better compliance with treatment. The effect of age in women was much

less pronounced than in men but probably reflects the frequency of general practitioner consultation in each age group and results from detection based on opportunistic screening.

The management of hypertension at a community level in Scotland, based on our finding, is not satisfactory. The standard of general practice in Scotland is generally regarded as being high, with practice sizes below the British average. The success rate in case detection, treatment, and control could all be improved. The situation is better in women than in men, with poorest control of hypertension in men in the younger age groups. Some studies have shown that detection, treatment, and control of hypertension in the United Kingdom can be improved.¹² Our findings have implications not only for managing hypertension but also for other conditions such as altered blood cholesterol concentration, whose measurement is being done either opportunistically or selectively, based on knowledge of other risk factors.¹³

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Audit of terminal care in a general practice

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Abstract

Objective—To determine satisfaction of relatives and general practitioners with care of patients during terminal illness and make recommendations on improving terminal care in general practice.

Design—Interviews with available relatives of patients who had had terminal illnesses and died in 1987, supplemented by questionnaires; questionnaire survey of general practitioners after review of case notes of all their patients who had died of terminal illnesses in 1987.

Setting—One urban general practice.

Subjects—34 Relatives of patients with terminal illnesses who died in 1987; five general practitioners from one practice.

Results—In six cases relatives were dissatisfied, mainly because of lack of communication; in eight cases doctors were dissatisfied because of com-

munication, poor symptom control, and inadequate care.

Implications—There is a need for improved communication between relatives and the health professionals involved in terminal care as well as better advice on services and benefits available to both patients and relatives. Bereavement counselling should be better organised.

Introduction

Terminal illness is generally recognised to be the final phase of a disease process, when the advent of death is certain and treatment becomes palliative rather than curative. Most general practitioners now regard terminal care as important, and many work to improve their knowledge and skills with further reading and by attending courses. In a questionnaire

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survey of general practitioners undertaken to elicit information about problems they had had in looking after terminally ill patients at home 40% of respondents indicated that training in communicating with dying patients would be a great help in improving care.¹ Likewise, in an extensive study of aspects of people's lives and care in the 12 months before they died Cartwright *et al* highlighted the ways in which they felt care and services could be improved and suggested that there should be more emphasis in medical education on caring and relieving rather than in curing.²

Although only 30% of patients in city districts and 40% in country districts die at home, on average 90% of a patient's terminal year is spent at home under the care of the general practitioner.¹ More than half of patients with a terminal illness have expressed the wish to remain at home as long as possible and, if feasible, to die there.¹ It is at home, therefore, that many of the challenges of dying are met, whether physical, psychological, or social. General practitioners and the primary health care team must therefore anticipate the problems of patients and their families and manage them so as to relieve suffering. This work will continue after the patient has died, in the care of the bereaved. In a study carried out by Wilkes into terminal care both in hospital and at home 24% of relatives were grateful to their general practitioner but 37% were critical.³

The audit described here had two aims: to seek the views of the relatives and general practitioners of patients from one practice with regard to their satisfaction with terminal care given, and to make recommendations on improving terminal care in general practice.

Methods

The practice studied has a list size of 9000, including 1200 university students. Due to the large retirement population in the practice area, 20% of the list consists of patients aged over 65 (national average 15%).⁴ The practice has four full time male partners, one part time female partner, and one trainee. The doctors in the practice are responsible for the care of patients in the local cottage hospital and for the care of residents in the town's two nursing homes.

Other members of the primary health care team attached to the practice include three district nurses, who were often involved in the general nursing care of the terminally ill, and two health visitors, whose potential role in the care of dying patients did not seem to be appreciated by the general practitioners. The practice is also able to contact the Macmillan Home Care Service for help and advice on the management and care of cancer patients, and both a doctor and nurse from the service are available to make home visits if requested. Other nursing services are available but infrequently used and include private agencies, the Marie Curie overnight nurses, and stoma nurses. The practice can call on the social services, the most commonly used part of the service being the home help.

This study, carried out in 1988, looked at the terminal care of this largely urban practice during 1987. For the purposes of the study, "home" was defined as the patient's own private accommodation. Nursing homes, the cottage hospital, and general hospitals were all referred to as "hospital."

The medical records of all patients from this practice who died in 1987 were recalled from the health board. The records were studied and classified as sudden unexpected deaths (this group was not studied further); predicted deaths due to malignant disease; and predicted deaths due to non-malignant disease.

The case notes of each patient whose death had been

predicted were given to the general practitioner principal who had provided care, along with a semistructured questionnaire. The doctors' questionnaire asked them to specify whether they were generally satisfied with the patient's terminal care; whether death was unexpected; who in the health care team was involved (district nurse, Macmillan nurse, tucking in service, health visitor, or other); and whether they had carried out any bereavement counselling (within one month, three months, six months, or one year).

The closest available relative of each deceased patient was visited by the author, interviewed, and asked to complete a questionnaire. The interviews were open ended and semistructured. Relatives were encouraged to talk freely and relevant comments were recorded. The questionnaire asked whether they were generally satisfied with the care their relative was given; what area of health care they would have liked more help with (daytime nurse, night nurse, general practitioner support, or other); and whether they would have welcomed the opportunity to talk to the general practitioner about the death of their relative in the subsequent months.

The doctor's and relative's questionnaires were analysed separately and independently, after which interview transcripts were analysed.

Results

Eighty five deaths occurred in the practice during 1987, of which 35 were sudden unexpected deaths (including three due to malignant disease), 25 were predicted deaths due to malignant disease, and 25 were predicted deaths due to non-malignant disease (mainly bronchopneumonia secondary to senile dementia, cerebrovascular accident, or myocardial infarction). Terminal care could be assessed in the 50 predicted deaths. Thirty nine occurred in hospital and 11 at home.

Thirty four of 50 relatives of the deceased were visited. Fifteen of the remaining 16 had no relatives or close friends living locally, and in one case the relative refused to be interviewed. Of the 15 relatives of patients with malignant disease who were interviewed, 12 expressed satisfaction, two dissatisfaction, and one mixed feelings concerning professional care given. Of the 19 relatives of patients with non-malignant disease, 16 expressed satisfaction, two dissatisfaction, and one mixed feelings.

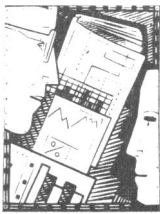
Completed returns were available from doctors for all 50 cases. Doctors expressed satisfaction with the management of 21 patients with malignant disease, dissatisfaction in three, and mixed feelings in one. For patients with non-malignant illness they expressed satisfaction in 21 cases and dissatisfaction in four.

Thus doctors were not completely satisfied in eight cases and the relatives in six. In three of these cases both the doctor and the relative were not completely satisfied. The table summarises these cases.

Of the 15 relatives of patients with malignant disease, only one would have liked more help from a day nurse. Of the 19 relatives of patients with non-malignant disease, six would have liked help from a day nurse, one from a night nurse, one from the general practitioner, and one from other sources (Crossroads).

The problems of patients with senile dementia were associated both with a gradual degenerative decline in intellectual abilities and physical decline. Those most commonly mentioned by relatives were: behaviour problems including apathy, aggression, and wandering; problems of daily living including dressing, bathing, and eating; incontinence; and forgetfulness, disorientation, and confusion.

The general practitioner's questionnaire showed



that all families in the sample had been visited initially for bereavement counselling. After three months only 18 of the 34 available relatives had received a further visit. Seven relatives stated on their questionnaires that they would not have welcomed the opportunity to speak to the general practitioner about the death of their relative in the following months whereas four relatives replied that they would. The remaining 23 did not answer directly but gave various reasons to explain why they did not feel that bereavement counselling was necessary.

Discussion

The first aim of the study was to assess the satisfaction of both doctors and relatives. The results show that most relatives were satisfied with the care received: doctors were sometimes described as "marvellous," "terrific," "superb and very caring," and the overall impression seemed to be that care was "excellent." In 16% of cases, however, the doctors were dissatisfied with terminal care, and in 18% of cases the relatives were dissatisfied. The main reason for dissatisfaction on the relatives' part was poor communication whereas the doctors were dissatisfied not only with poor communication but also with symptom control and feelings of inadequacy in not providing as good care as they believed they should. There were therefore considerable differences between the perceptions of general practitioners and relatives, a finding also shown in a study by Reilly and Patten of terminal care in the home.⁶

Relatives were asked what aspects of health care they would have liked more help with. Though requests were few, other comments made suggested that there was a greater demand for more help. Several relatives commented that they would have liked more help or advice about bathing, and others thought that they could have coped better if they had been given bath aids. One relative did not know that incontinence pads were available. Some relatives remarked that they did not think to ask or that help came too late.

Problems arising from lack of involvement of the health care team or lack of nursing aids suggest that doctors may not always anticipate the problems that relatives face. Again this can be attributed to poor communication as relatives were often unaware of the services available and may also have been reluctant to mention some of their problems to the doctor, to have outsiders in their homes, or even to needing help. Two of the skills in good terminal care are intelligent anticipation of problems and well planned use of the many professional services available in the community: help and support should be offered and not have to be asked for.

The study highlighted the problems of senile

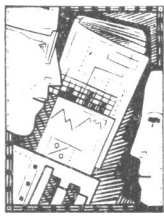
dementia. Often this condition is a long, unremitting illness that tires out even the strongest of families. The doctor is usually powerless to alter the course and pattern of the disease, but a great deal can be done to relieve the burden that falls on the family. This is somewhere that the involvement of the health care team should be maximised.

The survey showed that all families in the sample were visited initially for bereavement counselling, but it is disappointing to note that after three months only half of the available relatives had received a further visit. The relatives were asked if they would have welcomed the opportunity to talk to the general practitioner about the death of their relative in the year after bereavement. Only two families felt that they could not have approached their general practitioner after bereavement, even though they thought that counselling was a good idea. Both had, because of poor communication, been dissatisfied with the terminal care given to their relatives, and it is therefore perhaps more understandable that they thought their doctor was unapproachable. The other families all seemed satisfied with the support given and indicated that they could go and discuss any problems with their general practitioner. Many, however, stated that they felt there was no point to bereavement counselling as nothing could be achieved by it. Despite these statements the impression obtained during the interviews was that people were eager to talk about their loss, that they thought they would be "wasting" doctors' time by talking to them about something that could not be altered, and finally that many had questions concerning their relative's illness that were obviously troubling them. Several commented that they had not liked to ask the doctor questions. One relative admitted that although she saw her doctor regularly for high blood pressure, she did not like to take up his time talking about her husband's death; and one elderly widow was still wondering why her husband had not had chemotherapy or radiotherapy.

Most relatives were very welcoming and seemed genuinely pleased that someone was taking an interest in them. Many talked at great length about their lost relative. Most gave information about the relative's illness from diagnosis to death without prompting. Many also talked about the life they had shared with the deceased and their feelings of loss and guilt, and very few did not shed tears at some point in the interview. Despite the feeling of relatives that there was no point in talking to their general practitioners it seemed that they were using the interview as a chance for bereavement counselling, although they themselves were unaware of this. The doctor should therefore explain to relatives that regular counselling during this stressful time in their lives will help them to cope with their grief. The importance of this is shown in Parkes's

Cases in which relative or general practitioner, or both, were not completely satisfied with care given in terminal illness

Case No	Sex	Age (years)	Place of death	Diagnosis	Relative's comments	General practitioner's comments
1	F	67	Hospital	Bronchopneumonia; metastatic malignant disease	Poor communication	Poor communication; poor symptom control
2	F	81	Hospital	Carcinomatosis; carcinoma of the bowel	Poor communication; general practitioner could have improved communication	Poor communication
3	F	64	Hospital	Carcinomatosis; carcinoma of colon	Nursing help offered too late	Poor symptom control
4	M	53	Hospital	Carcinoma of prostate	Refused to be interviewed	Poor symptom control
5	M	75	Home	Ruptured aortic aneurysm	No relatives living locally to interview	Not satisfied; family distressed at patient dying alone
6	F	79	Hospital	Myocardial infarction	Satisfied	Not satisfied; unable to carry out terminal care at home
7	M	96	Hospital	Cerebrovascular accident	Satisfied	Poor symptom control
8	M	79	Hospital	Bronchopneumonia	Satisfied	Not satisfied; inadequate support for family
9	F	71	Hospital	Renal failure	Not satisfied; wanted more general practitioner support with dialysis problems	Satisfied
10	M	69	Hospital	Bronchopneumonia	Not satisfied; wanted more help with bathing and aids	Satisfied
11	F	92	Hospital	Cerebrovascular accident	Not satisfied; poor medical care	Satisfied



study of the effects of bereavement on physical and mental health.⁷

Although the study was based on a single practice several recommendations can be made. Poor communication may be due to a variety of reasons, but one main cause can be attributed to the large number of people who may be involved in the terminal care. Members of a multidisciplinary team must know each other's roles and must be able to develop strategies to allow them to work together.

A second recommendation is to advise relatives about the services available and to encourage them to use them.⁶ Practices could produce leaflets on the services and aids available locally. These leaflets could also list the other members of the primary health care team, explaining their roles and outlining how they could help patients and their relatives. Many charities already produce leaflets to help patients and relatives find help and enable them to cope with their illnesses and the common problems encountered.

Thirdly, there is a need for improvement in the organisation of bereavement counselling, particularly home visits initiated by the general practitioner. We recommend that general practitioners undertake bereavement counselling and that there is a well organised system for following up bereaved relatives.

Perhaps practices could keep diaries and systematically plan post-bereavement visiting in the following year. It is also important to record deaths in a relative's case notes. Many relatives present at the surgery around the anniversary of a loved one's death, and unless the doctor is aware of this the real reason for the consultation—for example, a depressive illness—can be missed.

Finally, as bereavement commonly causes an increase in both psychiatric and non-psychiatric symptoms⁷ it is important that general practitioners not only are aware of this fact but also that they know how to deal with it.

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Effect of reactive pharmacy intervention on quality of hospital prescribing

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Abstract

Objective—To evaluate the medical impact of reactive pharmacy intervention.

Design—Analysis of all interventions during 28 days by all 35 pharmacists in hospitals in Nottingham.

Setting—All (six) hospitals in the Nottingham health authority (a teaching district), representing 2530 mainly acute beds, 781 mental illness beds, and 633 mainly health care of the elderly beds.

Patients—Hospital inpatients and outpatients.

Interventions—Recording of every important intervention made by pharmacists to prescriptions for both inpatients and outpatients when they perceived inadequacies of drug prescription or administration, including characterisation of the problem, coding of outcome, recording of time taken to initiate and resolve intervention, and grade of prescribing doctor. The problems were independently assessed for their potential to cause medical harm.

Results—769 Interventions (about 2.9% of prescriptions) were made, of which 60 concerned prescriptions rated as having a major potential for medical harm. The commonest problems concerned dosage, which was wrong in 280 prescriptions (102 for antibiotics) and not stated in 50 (one for antibiotics), especially those associated with a major potential for medical harm (32 prescriptions). These concerned sedatives; analgesics; cardiovascular drugs or diuretics; and iron, vitamin, or mineral preparations. Also common were overprolonged prescription of antibiotics (48 prescriptions), confusion of drug names (nine), and inadvertent coprescription of excessive quantities of aspirin or paracetamol in plain and compound preparations (seven). The pharmacist's recommendation

was accepted in 639 instances (86%), and the prescription was altered in 575, leading to an appreciable (246 cases) or minor (231 cases) improvement. Interventions had little effect on costs; 427/646 had no effect and 130 produced savings <50p. Pharmacy intervention (730/769 interventions) occupied on average 41 minutes per pharmacist per week.

Conclusions—Most reactive pharmacy interventions concerned prescribing errors with a limited potential for medical harm, but a small number of detected errors with a major potential for medical harm; cost savings were not appreciable.

Introduction

The quality of hospital prescribing in the United Kingdom could be improved. The inappropriate use of drugs represents a potential hazard to patients and an unnecessary expense. It has been suggested that greater involvement of pharmacists in the treatment of patients might lessen hazards and reduce costs,¹ and recently pharmacists have been increasingly concerned in ward rounds,^{1,3} case conferences,⁴ information services,^{5,7} and dosage advice services based on therapeutic drug monitoring.^{8,9}

Intervention by pharmacists in prescribing by doctors has taken several forms. Active campaigns by pharmacists have sought to alter prescribing in specific areas. The use of guidelines, particularly when backed up by personal visits, reduces the inappropriate use of antibiotics (notably cephalosporins),¹⁰⁻¹⁴ parenteral nutrition,¹⁵ albumin,¹⁶ dextropropoxyphene,^{14,17} cerebral and peripheral vasodilators,¹⁴ and diazepam,¹⁸ although the effects of such targeted interventions may be transient.¹⁹ Pharmacists have also contributed to establishing drug information services, and there is

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