Pharmacist's input into a palliative care clinic

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AIM • To describe the value of a medication assessment and review service provided by pharmacists at a weekly outpatient palliative care clinic.

DESIGN • Data were collected over a 9-week period documenting activities carried out by the pharmacist and types of medication-related problems identified and discussed with the patient/palliative care team. The 5 members of the palliative care team also completed qualitative questionnaires.

SUBJECTS AND SETTING • All patients attending a weekly outpatient palliative care clinic at Chesterfield and North Derbyshire Royal Hospital NHS Trust. The consultant, specialist registrar and three specialist nurses comprising the palliative care team.

OUTCOME MEASURES • Medication-related problems identified by the pharmacist, patient counselling provided, full drug histories taken, time spent with patient/carers. Subjective views of the palliative care team assessing appropriateness of the pharmacist's objectives and if objectives were being met.

RESULTS • Data were collected on 52 patient appointments. A total of 117 medication-related problems were identified by the pharmacist. The palliative care team members all agreed that the pharmacist's objectives were appropriate and being met. Drug histories, documentation of medication-related problems, prompt supply of medicines, patients' and carers' understanding of their medicines and overall running of the clinic were thought to be much improved with pharmacist input.

CONCLUSION • Palliative care patients may be prescribed complex drug regimens, requiring regular review in order to achieve optimum symptom control. The model of outpatient service employed at Chesterfield was found to improve key aspects of medicines management for patients and carers. This success indicates that the pharmacist has a valuable place as a key member of the multidisciplinary palliative care team.

Palliative care is defined as "comprehensive, interdisciplinary care of patients and families facing a terminal illness, focusing primarily on comfort and support".[1] It is the care of any patient with advanced, incurable disease.[2] Key aspects of palliative care include meticulous symptom control; psychosocial and spiritual care; a personalised management plan that maximises patient-determined quality of life and family oriented care that extends through the time of bereavement. It encompasses delivery of co-ordinated services, especially in the home, but also in hospital, extended care facilities, day-care centres and specialised units.[3] Palliative care takes a holistic approach, recognising that patients require a combination of physical, social and spiritual care.[2]

Symptom control makes up a large part of the physical care component. Palliative care patients may be prescribed complex drug regimens, which require regular review. Each symptom needs to be addressed and controlled, requiring a knowledge of the drugs, products and resources available. Multidisciplinary teamwork is an essential part of palliative care and there is evidence to suggest that specialist teams in palliative care improve satisfaction as well as identifying and dealing with more patient and family needs.[4,5]

A study investigating how terminally ill patients take their medicines at home found that 60 per cent were non-compliant and 33 per cent took less medication than prescribed, usually due to experiencing or having anxieties about adverse events.[6]

Another study assessed the impact made by a clinical pharmacist visiting palliative care inpatients. Interventions made in 13 per cent of patients could improve patient care, save money or both. Advice to rationalise inappropriate drug regimens was the commonest intervention (53 per cent), followed by warnings about drug interactions (24 per cent) and advice about therapeutic drug monitoring (8 per cent).[7] These examples help illustrate how pharmacists can become important members of the team, providing pharmaceutical care and a systematic approach to medication review.

The weekly palliative care clinic at Chesterfield and North Derbyshire Royal Hospital is a multi-professional environment, in which patients requiring palliative care are seen by specialist medical and nursing staff, and a pharmacist. A significant number of patients attending the clinic require active symptom management of their disease and this treatment is particularly dependent on the use of drugs.

Before a clinical pharmacist was present in the palliative care clinic, all drug histories were taken by a palliative care specialist nurse during the patient's appointment slot with the doctor. The nurses reported that time for taking drug histories was often limited, and they believed that their role as a provider and organiser of psychological and social support was adversely affected due to lack of time. They found difficulties in keeping an accurate and up-to-date drug history. The palliative care staff wanted to have a specialist member of staff present in the clinic whose role was specifically aimed at managing patients' drug therapy records. This paper outlines the pharmacist's input into the clinic and the improvements this has made.

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METHOD

The clinic set-up After discussions with the Macmillan consultant in palliative medicine at the hospital, it was agreed that there were theoretical benefits for a clinical pharmacist to attend the weekly palliative care clinic

with a view to optimising the outcomes of drug treatment. A clinical pharmacist started working at the weekly clinic after the following objectives were agreed:

- To take a thorough drug history for all patients including prescribed, over-the-counter and herbal medicines, supplements and allergies
- To maintain a continuing record of each patient's medicines and changes to them (medication summary sheet)
- To identify medication related problems as perceived by the patient or carer
- To provide clinical support to the palliative care team
- To resolve issues such as the prescribing of non-formulary items
- To counsel patients on their medication regimen
- To provide patients with written information on their medication regimen
- To answer patients' questions and discuss their concerns about their medicines
- To improve patient information by producing patient information leaflets

The patients, along with their relatives or carers, were seen by the pharmacist on arrival at the clinic. Patients gave verbal consent for details of their medication regimen to be documented by the pharmacist. The pharmacist reviewed their current medication, updated their medication record and discussed any medication-related problems. Any interventions or suggested treatment changes were documented in the patient's medical notes, along with a brief transcription of the discussion between the pharmacist and patient about their symptom control. Patients were then seen by the palliative care doctor and specialist nurse. If any changes were made to the medication regimen or the patient required a medication summary sheet, they were invited to see the pharmacist again for additional counselling. At this point, patient information leaflets were provided if necessary and patients were given a copy of their medication summary sheet to take away.

Data collection Over a nine-week period, data were collected on 52 patient appointments. Of these, 13 were new patients and 39 were follow-up appointments. Medication-related problems identified by the pharmacist at each appointment were recorded on a standard form. The time spent with each patient before and after their consultant appointment was recorded and drug history taking and patient counselling activities were also documented. This provided descriptive data on the activities carried out by the pharmacist.

Questionnaires were completed by the consultant, specialist registrar and three nurse specialists to evaluate the pharmacist's input. Team members were individually asked to judge the appropriateness of the pharmacist's objectives and the extent to which they were being met. They were also asked to judge how the pharmacist's input affected the overall running of the clinic.

RESULTS

A full drug history was taken at 50 appointments (96 per cent) and the average time spent with patients before their appointment with the consultant was 12 minutes (range 2–25 minutes). The average number of medicines being taken by each patient was 7.8 (range 1–14) and the average number of medication changes per appointment was 1.5 (range 0–7).

TABLE 1: NUMBER OF MEDICATION-RELATED PROBLEMS IDENTIFIED BY THE PHARMACIST

Problem	Number identified (%)
Ineffective medicine	32 (27)
Regimen changed by patient	26 (22)
Side effects	19 (16)
Untreated symptoms	17 (14)
Incorrect dose	7 (6)
Supply problem	6 (5)
Formulation difficulties	6 (5)
Unclear on reason for medication (patient/carer)	2 (2)
Unclear on how to take medication (patient/carer)	2 (2)
Allergies	1 (1)
Interaction between medicines	0 (0)
Contraindication	0 (0)
Unnecessary medication (no indication)	0 (0)
Total	117 (100)

Medication-related problems A number of medication-related problems were identified by the pharmacist over the nine-week period, as illustrated in Table 1. For the most common problem, ineffective medicines, medicines were classified as "ineffective" if they did not work at all, or only worked partially. Where the regimen had been changed by the patient, this was sometimes under the instructions of the palliative care team, as a certain amount of self-management is advocated by the clinic staff.

TABLE 2: COUNSELLING RECEIVED BY PATIENTS AFTER THEIR APPOINTMENT WITH THE CONSULTANT

Counselling received	Number of patients	Percentage of appointments
Verbal counselling	37	71
Counselling on new regimen	30	58
Medication summary sheet provided	26	50
Patient information leaflet provided	6	12

Counselling Table 2 illustrates the number of patients who received additional counselling from the pharmacist in the clinic after their appointment with the consultant. The average time spent with these patients was 10 minutes (range 5–30 minutes).

The focus of the pharmacist's counselling was to explain changes to treatment and to clarify instructions for administration. The specialist nurses had identified this as a task that was difficult to concentrate on during their consultations with the doctor and patient. Likely side effects, how long they may be expected to persist and how to manage them were also key elements of the pharmacist's counselling.

Copies of medication summary sheets were given to patients as an aid to compliance and patients were encouraged to update the record themselves between clinic visits if any medication changes were made.

Feedback from the palliative care team The results of the questionnaire demonstrated that the palliative care team believed that the objectives for the pharmacist input were both relevant and appropriate.They agreed that the objectives were being fully met, and the following aspects of the clinic were thought to be much improved with a pharmacist's input:

- Drug history taking and keeping an accurate, up-to-date record of patients' medicines
- Documentation of medication-related problems
- Ensuring the supply of medicines to patients was prompt and efficient
- Improving the patients' and carers' understanding of the patients' medicines

Additionally, the overall running of the clinic was thought to be improved by the pharmacist's attendance.

DISCUSSION

Multidisciplinary teamwork is an essential part of palliative care. The success of the pharmacist's involvement in the palliative care clinic at Chesterfield and North Derbyshire Royal Hospital illustrates that the pharmacist has a valuable place as a member of the palliative care team. Anecdotally, we have received positive feedback from the patients and carers on the pharmacist's role in the clinic. However, their views were not formally assessed by this study and it is this area that we plan to audit next.

The most common medication-related problems identified by the study were not unexpected. Much of palliative medicine is trying to establish a happy medium based around controlling symptoms with powerful medicines that can cause side effects. With disease progression, the goalposts are constantly changing and hence, so must the medications. This is possibly why the team have found that the pharmacist's input has helped the overall running of the clinic; it provides a specialist focus that can define the success or failure of the current medication regimen in the eyes of the patient and that can inform patients and assist them in managing their medicines to best effect.

The high number of medicines found to be taken by patients and the frequency of changes highlight the need for robust medicines information to be provided at the time of clinic appointments. The pharmacist's structured questioning enabled accurate documentation of exactly what drugs and doses had been taken by patients following verbal instructions at previous appointments.

The number of information leaflets given to patients at the time of the study was low, but several leaflets have subsequently been developed specifically for the clinic to reinforce verbal advice given to patients and their carers. Use of these leaflets is particularly important in this group of patients as many drugs are used "off-licence", and therefore manufacturers' package inserts are often inappropriate.

From the pharmacists' viewpoint, we have found our consultations at the palliative care clinic rewarding. We have now had the opportunity to see many of the patients and their carers on several occasions and have therefore been able to build strong relationships that would not normally be possible with outpatients. The consultations have become interactive, and most patients and carers actively seek advice about their medicines.

The model described here may also provide a template for hospital pharmacists wishing to provide an outpatient service to palliative care or indeed other therapeutic areas. The timing of our consultation was vital to structuring a new appointment system for the clinic, to enable the clinic to run smoothly and ensure patients were not kept waiting beyond their allocated appointment time. By close liaison with clinicians and nurses, and the use of clearly agreed objectives, pharmacists can deliver highly valued services at outpatient as well as inpatient level.

There are examples of specialist palliative care pharmacists in the community, leading projects to improve the quality of prescribing in community palliative care and to promote pharmaceutical services to the primary care team, patients and carers. These projects have suggested that when community pharmacists are included as an integrated member of the palliative care team, they can improve pharmaceutical care for the palliative care patient.[8–10]

Future developments of the pharmacist's role in the palliative care clinic are to implement increased liaison between the palliative care pharmacist and the patient's named community pharmacist to ensure continuity of care and an increased awareness of the patient's pharmaceutical care needs in the community setting.

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