Clinical Topics

Shortening waiting lists in orthopaedic surgery outpatient clinics

R R WEST, B McKIBBIN

Abstract

There is a long waiting list for orthopaedic outpatient appointments in South Glamorgan Area Health Authority as elsewhere. A detailed study of that waiting list was undertaken to identify factors that might lead to its better management and reduction. One-third of patients on the list failed to attend when appointments were offered. A postal-questionnaire to all those listed as waiting confirmed that many no longer sought specialist orthopaedic consultation. Another third of the patients reported that they had been treated previously for the same orthopaedic problem. It is concluded that improved management of long outpatient waiting lists could be achieved by correspondence with referring general practitioners to weed out those patients who no longer wish to attend, to reduce the burden of reviews and re-referrals of patients with "chronic" conditions, and to request priorities fairly so that earlier appointments may be offered to truly "new" patients with treatable or with potentially serious conditions.

Introduction

Long waiting lists in orthopaedic surgery are chronic problems, causing concern year after year to patients, orthopaedic surgeons, and health service administrators. A DHSS committee under the chairmanship of Professor R B Duthie examined the evidence and reported recently¹: most of the waiting list data presented concerned inpatient lists. Inpatient lists are fed by outpatient clinics, however, and often the waiting lists for appointments at outpatient clinics are even longer with delays of up to years for some non-urgent patients. While long waits between outpatient attendance and inpatient treatment are undesirable, long waits for outpatient appointments might be even less desirable for a certain proportion of patients whose conditions may be deemed urgent when they are examined by specialists. In an ideal world all outpatient waiting should be abolished. Many orthopaedic surgeons think that the present state of affairs, although undoubtedly serious, is not really quite so alarming as the waiting list statistics alone would suggest. These views are nurtured by experience of such factors as high non-attendance rates at clinics and the many patients who, when ultimately seen, do not require orthopaedic treatment or cannot actually be helped by it.

We describe an attempt to study these factors objectively and independently in South Glamorgan Area Health Authority, where the outpatient waiting list has been a matter of considerable concern for several years. The report is based on a point-prevalence study of patients listed as waiting for orthopaedic outpatient appointments in hospitals in this area on 31 March 1978.² We outline briefly the size of the problem (for comparison with the inpatient waiting list¹) and the proportion of people on the outpatient waiting list who have chronic orthopaedic problems (perhaps barely amenable to treatment) and the proportion who have no problem (spontaneously or otherwise cured since being added to the list).

Methods

The point-prevalence study of the orthopaedic outpatient waiting lists was of all patients listed as waiting for outpatient clinic appointments on 31 March 1978 at all (three) hospitals in South Glamorgan AHA that hold orthopaedic outpatient clinics. A postal questionnaire was prepared to elicit from these people who they were and what was wrong with them. The questionnaire asked for a description of the orthopaedic problem (in the patient's own words), severity and duration of symptoms, past specialist (orthopaedic) treatment, and current (general practitioner) treatment for the problem, and asked a range of questions about disability in daily living activities, with leisure activities and at work (or at school). These latter questions were derived from past prevalence studies of disability in the community³⁻⁵ but were shortened to encourage high response rates from a postal questionnaire. Three mailings were sent, and brief information about non-responders was sought from their referring general practitioners—whether they still suffered from orthopaedic problems and whether they still sought appointments at the orthopaedic outpatients clinic. Eighteen months later, on 30 September 1979 a second questionnaire was sent to all who had answered the first, whether they had been seen in the outpatient clinic or not. The same set of questions about disabilities in daily living activities, with leisure activities and at work (or at school) were asked as in the first questionnaire to investigate what proportion of patients had chronic disabling conditions that varied little with time and what proportion became "cured." In the second questionnaire patients were also asked directly whether the orthopaedic problem they were asked about in spring 1978 had changed appreciably—either for better or for worse.

Results

On 31 March 1978 2256 patients were named as waiting for orthopaedic outpatient clinic appointments in South Glamorgan AHA (population 392 000, 4.2 (whole-time equivalent) consultants and 11.8 medical assistants, senior registrars, and registrars, and 323 orthopaedic beds). After three mailings 1702 completed questionnaires were received. The distribution by age and sex of the 1702 patients who completed the questionnaires was unremarkable. The response rates taking 2099 as a representative denominator (2256-88-69, see below) ranged from 71% to 91%.

Replies to the question, "Do you still wish to attend the orthopaedic

Welsh National School of Medicine, Cardiff CF4 4XN

R R WEST, PHD, FSS, senior lecturer, department of epidemiology and community medicine

B McKIBBIN, MD, FRCS, professor, department of traumatic and orthopaedic surgery

outpatient department?" showed that 285 of those who completed questionnaires no longer sought outpatient appointments. The most common reason given was that the symptom had been relieved. The answers are summarised by age and sex in tables I and II. In addition to those who returned completed questionnaires, 88 people reported by letter, on incomplete forms, or by telephone that they did not seek appointments and asked that their names be taken off the list (symptom relieved, treated elsewhere, moved, or died; although some answered as though they thought that they had been listed in error). After questioning the referring general practitioners of questionnaire "non-responders" 62 further patients were described as no longer seeking orthopaedic appointments (for the same reasons). Therefore, 435 of the 2256 listed (nearly 20%), reported that they no longer sought specialist orthopaedic consultation. This proportion is likely to be a very conservative estimate since "non-responders" would be expected to represent a higher than average proportion of those who had lost interest.

Another estimate of the "inflation" of a long outpatient waiting list by names of those who no longer seek specialist consultation or treatment is the proportion who do not attend at the outpatient clinic when (two) appointments have been offered. Of the 2256 listed as waiting on 31 March 1978, only 1381 attended the outpatient clinic during the subsequent two years: the crude non-attendance rate of nearly 40% was high, yet typical of many long waiting lists.

Of those who responded to the questionnaire 37% answered the question about previous specialist treatment for their current orthopaedic problem in the affirmative (table III). Forty-five men and 54 women reported previous treatment within the past year, 86 men and 74 women more than one year but under three years previously, and 74 men and 70 women over 10 years previously. These patients were not truly "new outpatients" with new orthopaedic problems: they included patients with chronic conditions returning for periodic refitting of support or appliance or for further injections, patients whose conditions might have worsened, and possibly "dissatisfied patients" who were trying the system a second (or subsequent) time.

In autumn 1979, 18 months later, the follow-up questionnaires were completed by 1434 patients (84% of those who completed the first). Patients were asked whether they still suffered from the same orthopaedic problem and whether the problem had changed appreciably for better or for worse during the interval: 1049 answered that they still had the same problem (tables IV and V). Since both first and second questionnaire "non-responders" almost certainly included more of those whose orthopaedic problems were resolved, the proportion whose conditions appeared not to be resolved after referral and before autumn 1979 (1049/2256=46% of the original list) was probably a fairly close estimate of the proportion with "chronic" orthopaedic conditions. Other measures of frequency and severity of pain and of difficulty in daily living activities, leisure activities, and at work

TABLE I—Number (percentage) by age group of 845 men not wishing to attend outpatient clinic and reason given

	Age group:	Not known	0-14	15-24	25-34	35-44	45-54	55-64	≥65	All ages
No (%)	..	..	10 (71)	4 (8)	21 (19)	29 (17)	30 (19)	30 (21)	13 (11)	152 (18)
Reasons given:										
Treatment elsewhere	..	..	2	1	7	12	12	13	7	61 (7)
Symptom relieved	..	..	6	3	16	19	23	18	10	107 (13)
Other										
Live with it, tired of waiting, moved away, no time to come	..	..	4	1	3	8	5	6	1	31 (4)

TABLE II—Number (percentage) by age group of 857 women not wishing to attend outpatient clinic and reasons given

								Age group:	Not known	0-14	15-24	25-34	35-44	45-54	55-64	≥ 65	All ages
No (%)	..	..	..	..	..	..	5 (50)	5 (12)	19 (15)	28 (23)	16 (15)	20 (13)	14 (10)	26 (17)	133 (16)		
Reasons given:																	
Treatment elsewhere	..	..	..	..	..	..	1	3	4	9	9	4	4	10	44 (5)		
Symptom relieved	..	..	..	..	..	..	3	3	10	21	8	15	12	22	94 (11)		
Other																	
Live with it, tired of waiting, moved away, no time to come	..	..	..	..	..	..	2	0	7	5	3	3	1	4	25 (3)		

TABLE III—Previous treatment for this orthopaedic problem: number (percentage) by age group for 845 men and 857 women

Age group: Not known						0-4	5-14	15-24	25-34	35-44	45-54	55-64	≥ 65	All ages
Men	..	..	..	..	7 (50)	1 (5)	7 (22)	27 (25)	61 (36)	70 (45)	65 (45)	51 (44)	33 (40)	322 (38)
Women	..	..	..	..	4 (40)	1 (7)	6 (22)	37 (29)	52 (42)	38 (36)	52 (34)	50 (35)	75 (48)	315 (37)

TABLE IV—Change in orthopaedic problem for better or for worse over 18 months for 708 men by age group. (Percentages in parentheses)

					Age group: Not known	0-14	15-24	25-34	35-44	45-54	55-64	65 +	All ages
No problem	..	..	..	..	7	25	31	40	32	25	20	23	203 (29)
Same problem:													
Change for better	..	..	..	..	1	6	18	24	21	29	19	13	131 (19)
No change	..	..	..	..	2	11	30	52	53	55	47	28	278 (39)
Change for worse	..	..	..	..	1	0	6	16	24	19	20	10	96 (14)
Additional different problem	..	..	..	..	0	1	6	3	12	7	6	2	37 (5)

TABLE V—Change in orthopaedic problem for better or for worse over 18 months for 725 women by age group. (Percentages in parentheses)

						Age group:	Not known	0-14	15-24	25-34	35-44	45-54	55-64	65 +	All ages
No problem	..	..	..	..	..	2	18	26	27	16	32	28	32	181 (25)	
Same problem:															
Change for better	..	..	..	..	..	0	6	14	17	29	27	25	19	137 (19)	
No change	..	..	..	..	..	3	11	46	37	37	57	45	50	286 (39)	
Change for worse	..	..	..	..	..	2	3	9	15	16	17	26	33	121 (17)	
Additional different problem	..	..	..	..	..	0	0	3	4	3	5	7	11	33 (5)	

supported this overall picture of chronic (although for many only limited) disability. Between about one-third and one-half of internal derangements of knee (ICD 717) among men, unspecified disorder of joints (ICD 719), other and unspecified disorders of back (ICD 724), synovium, tendon, bursa, muscle, ligament, fascia (ICD 727-9) injury, and late effects of injury (ICD 800-959) appeared to be resolved, but other orthopaedic conditions appeared to be reported as often as they had been 18 months previously, and intervertebral disc disorders including osteoarthritis of spine (ICD 722-3) were reported by more women at follow-up.

Discussion

The study confirms the widely held view that long outpatient waiting lists include both patients with conditions that have already cleared up ("trivia") and patients with long histories of chronic conditions ("incurables"). Of those named as waiting for outpatient appointments in South Glamorgan in spring of 1978, at least 20% could be regarded as not seeking appointments and possibly as many as 40% (the crude clinic non-attendance rate) could be so classified. Thirty-eight per cent of first questionnaire "responders" reported previous specialist treatment for their orthopaedic problem and as many as 46% of the original list had symptoms of the same problem 18 months after the mailing of the first questionnaire. It is highly unlikely that these are all "incurables" but many must have "chronic" orthopaedic problems such as degenerative spinal disorders where only palliative solutions are available.

For optimal use of resources in this overworked specialty, which has recently added important new operations to its armoury, some further management of the outpatient waiting list would seem advisable.¹ Many who are referred to orthopaedic outpatient clinics and placed on waiting lists subsequently recover and do not take up their appointments when offered. Such regular (though fluctuating) non-attendance is allowed for in many clinics by overbooking. A tidier solution would be for the outpatient booking clerk to review the waiting list periodically; possibly every six months, each time striking off the list those who no longer seek appointments. The proportion of non-attenders would then be smaller and more constant.

Patients called for routine review of refitting of appliances or supports should not be added to waiting lists as "new" outpatients but should be booked straight into clinics (even if at five-yearly intervals). This ensures that refitting is done at the recommended intervals and not delayed by variable waits on the

outpatient list. Such direct booking is particularly facilitated when computerised systems are used. Direct booking of patients for review, when the requirements for supportive diagnostic services—for example, x-ray—and treatment—for instance, plaster—can be reasonably accurately anticipated, could allow better use of time within the clinical session, when patients may be booked at times that could not be taken up by truly "new" patients with relatively "unknown" problems.

Finally, those unfortunate patients who have been through the system previously, whose symptoms are not particularly amenable to treatment, and who have been referred a second (third, fourth) time to try the system again should be given a low priority by their referring doctors. If specialist orthopaedic treatment was unsuccessful first time, it is unlikely to be much better second time round. It is hard on those "chronic" patients but it is also hard on those with conditions more amenable to treatment if the queue of "incurables" delays their treatment. Improved communication between referring general practitioners and orthopaedic surgeons is obviously desirable, and if the above considerations were borne in mind when assigning priorities the outpatient waiting list would not disappear but the duration of waiting by those in need of treatment might be reduced considerably.

We thank Miss R M Long, the staff of the orthopaedic outpatient clinics and the medical records departments, general practitioners, and the many patients who completed questionnaires. The study was supported by a grant from the Welsh scheme for the development of health and social research.

References

- 1 DHSS. *Orthopaedic services: waiting time for outpatient appointments and inpatient treatment*. Report of working party. London: HMSO, 1981.
- 2 West RR, Long RM, McKibbin B. *Study of orthopaedic outpatient waiting list 1978*. Report for South Glamorgan AHA. Cardiff: Welsh National School of Medicine, 1980.
- 3 Harris AI, Cox E, Smith RW. *Handicapped and impaired in Great Britain*. London: HMSO, 1971.
- 4 Jeffreys M, Millard JB, Hyman M, Warren MD. Set of tests for measuring motor impairment in prevalence studies. *J Chronic Dis* 1969;**22**:303-19.
- 5 Garrod J, Bennet AE. Validated interviews schedule for use in population surveys of chronic disease and disability. *Br J Prev Soc Med* 1971;**25**: 97-104.

(Accepted 11 December 1981)

MATERIA NON MEDICA

A late start in entomology

Don't give binoculars to someone about to retire; second-rate ornithologists abound. Give him a moth-trap: second-rate entomologists are scarce, though their reward is great. Some attributes are necessary: an obsessional temperament; a saintly wife to put up not only with a clutch of collecting boxes in her fridge but also a preoccupied husband with furrowed brow in the grip of differential diagnoses surpassing those which perplexed him in professional life; and, not least a guru, a real entomologist who usually solves problems with a nonchalant glance. I was lucky; my secretary lived 14 miles away, where my GP guru works, and on her way home would leave my undiagnosed moths in the cottage hospital fridge to be diagnosed and released the following day. Those without a guru had best cultivate a member of Watch, the junior section of the local Nature Trust, who will at least act as a spur, though more likely as a mentor.

The Robinson trap which I acquired is a circular black box with a superimposed ultraviolet light. The first night I visited it so frequently that I developed large bilateral scotomata which persisted until I fell asleep but had happily disappeared on waking. For reasons unknown

ultraviolet light attracts insects of many kinds, mainly moths (I have had more than 400 species) but also maybugs and other beetles, lacewings, mayflies, caddis flies, hornets, wasps, and so on. They fall through four slits below the light and usually rest peacefully on a ledge on or beneath the egg boxes provided. Those trying to escape are usually thwarted by the perspex which covers most of the roof of the trap.

A difficulty is that some large moths are nearly as big as the small birds which arrive at dawn, believing that the whole contraption is for their benefit. I have learnt to keep them at bay with a contrivance constructed of wire and pipe-cleaners, but a more ruthless enthusiast I know does not scruple to use a mouse trap. Not all moths are attracted to light, and some of the rarest prefer to bask blissfully in the ultraviolet rays on a nearby wall rather than enter a trap, but this bashfulness in no way deters the ardent entomologist, who on his midnight round eagerly boxes them and puts them in the fridge for diagnosis the next day. True lepidopterists rightly scorn those who only record adults: they know about eggs, larvae, and pupae, and have commonly bred moths since they were children. Late starters can only learn to appreciate the fascinations of insect life vicariously through books.—B E MILES, retired physician, Hereford.