

Relationship between the provision of counselling and the prescribing of antidepressants, hypnotics and anxiolytics in general practice

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SUMMARY

Background. The provision of counselling in general practice is increasing, despite uncertainty concerning its effectiveness. Furthermore, the relationship between counselling and prescribing of antidepressants, hypnotics and anxiolytics in general practice is not known.

Aim. This study set out to assess the relationship between provision of counselling and prescribing of antidepressants, hypnotics and anxiolytics in general practice.

Method. An observational, cross-sectional study of general practices in Oxfordshire Family Health Services Authority was undertaken. Practices were surveyed on the availability of counselling services. The quantity and cost of prescribing of psychotropic drugs over one year (April 1992 to March 1993) were compared for practices with different levels of counselling provision.

Results. Of the 82 (96%) respondents, 74 (90%) referred patients for counselling; of these 74 practices, the highest levels of prescribing, in terms of number of items and net ingredient cost, were seen in those practices that employed a counsellor working on the premises. The lowest levels of prescribing were seen in those practices that referred their patients to a counsellor not working on the practice premises.

Conclusion. The relationship between the provision of counselling and the level of prescribing of antidepressants, hypnotics and anxiolytics is complex. In this study lower levels of prescribing of these drugs in practices with higher provision of counselling were not observed.

Keywords: affective disorders; management of disease; counselling; drug therapy.

Introduction

THE use of counselling in general practice has increased throughout England and Wales in recent years.¹ The term counselling is a broad term that encompasses treatment of a wide range of psychological problems addressed by many different health care professionals, including clinical psychologists, community psychiatric nurses, practice nurses and general practitioners.¹ The efficacy of counselling remains uncertain. Results from clinical trials have been inconclusive with regard to the value of such treatment.² This is partly caused by the difficulties in per-

forming clinical trials of counselling. Studies have highlighted different definitions of counselling, different levels of training of counsellors, problems with the blinding of treatment allocation and problems with outcome measurement.³ Thus, the increase in counselling services has occurred against a background of scepticism in terms of its clinical value^{4,5} and cost-effectiveness.⁶

Another issue further clouds the debate: that of the relationship between the provision of counselling in general practice and the prescribing of psychotropic drugs, particularly antidepressants, hypnotics and anxiolytics, by general practitioners. In terms of absolute costs, antidepressants are a more costly drug class than hypnotics and anxiolytics; antidepressants accounted for £960 000 of the annual drug expenditure for the Oxfordshire Family Health Services Authority in 1993 whereas hypnotics and anxiolytics accounted for £185 000.⁷ General practitioners are coming under increasing scrutiny with regard to the prescribing costs generated in primary care.⁸ Assumptions have been made that provision of counselling is an alternative to the prescription of psychotropic drugs, and counselling has been cited as a potential means to reduce the drugs budget;⁸ it is assumed that the provision of counselling in general practice will reduce the quantity of and cost incurred by prescribing of antidepressants, hypnotics and anxiolytics. Similar assumptions have been made for other illnesses, for example that the provision of physiotherapy will reduce prescribing of non-steroidal anti-inflammatory drugs in general practice for the treatment of osteoarthritis.⁸

An observational, cross-sectional study was undertaken to assess whether or not there was a relationship between the provision of counselling services in general practice and the prescribing of psychotropic drugs. In particular, the relationships between the level of provision of counselling services in general practice and the volume and cost of prescribing of antidepressants, hypnotics and anxiolytics were examined.

Method

General practices that were accountable to Oxfordshire Family Health Services Authority in 1992 were contacted by letter and were surveyed about their provision of counselling services in the year from April 1992 to March 1993. Non-respondents were telephoned and questioned in order to complete the data. The definition of counselling was adapted for the purposes of this study from an earlier survey.¹ A counsellor was defined as someone who offers sessions to patients in which patients are helped to define their problems and enabled to reach their own solutions: this service should be provided as a distinct or separate activity in the practice.¹

The level of provision of counselling within each practice was categorized as follows: a counsellor is attached to and employed directly by the practice; a counsellor visits the practice to hold regular sessions but is not formally employed by the practice; or the practice refers patients elsewhere for counselling, for example for private counselling or psychotherapy, and this takes place at a location separate from the practice.

Data were collected through prescribing analyses and cost (PACT) produced by the Prescription Pricing Authority. For each practice, the number of items prescribed and the net ingre-

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dient cost were collected for prescriptions of antidepressants and of hypnotics and anxiolytics (using *British National Formulary* classifications for these drugs⁹) during the year April 1992 to March 1993. Practice list size and age structure were used to calculate the number of prescribing units. The prescribing unit was calculated as the number of people aged up to 64 years on the practice list plus three times the number of people aged 65 years and over. Prescribing rates for each practice were calculated as the number of practice items per prescribing unit and as the practice net ingredient cost per prescribing unit. Data were analysed using the statistical package *EPI INFO*.¹⁰ Regression coefficients were calculated on log transformed data.

Results

All 85 Oxfordshire general practices were contacted and replies were received from 82 (96%). Of these practices, 74 (90%) referred patients for counselling and eight (10%) did not. Of the 74 practices that referred patients for counselling, 32 (43%) employed a counsellor on the premises, 26 (35%) used a counsellor who visited the practice and 16 (22%) referred their patients elsewhere for counselling.

Prescribing rates from April 1992 to March 1993 for antidepressants and for hypnotics and anxiolytics in the 74 practices that had some form of provision of counselling are summarized in Table 1. As the level of counselling increased, the costs of psychotropic drugs and numbers of items prescribed also increased. However, this relationship was not strong, with only the number of items of antidepressants having a significant relationship with the level of counselling.

For the eight practices that did not refer patients for counselling, the mean number of items per prescribing unit was 0.152 (standard deviation (SD) 0.050) for antidepressants and 0.214 (SD 0.070) for hypnotics and anxiolytics. In the same practices the mean net ingredient cost per prescribing unit was £1.060 (SD £0.324) for antidepressants and £0.448 (SD £0.617) for hypnotics and anxiolytics.

Discussion

The results of this study suggest that the provision of counselling services in general practice is not associated with a lower quant-

ity of or cost incurred by prescribing of psychotropic drugs. Prescribing was only weakly associated with the level of counselling provision, that is to say, there are many other factors besides counselling that will influence the prescribing of psychotropic drugs. A dose-response relationship was observed for antidepressants when the level of counselling was examined: the highest quantity and costs incurred were in those practices where a counsellor was employed directly by the practice. Prescribing of hypnotics and anxiolytics showed a similar but less clear-cut relationship; there was no dose-response relationship for net ingredient cost, although the practices that directly employed a counsellor were the most expensive prescribers.

This was a small observational study using fairly blunt measures of prescribing, from readily available prescribing data, and of counselling. This had the advantage of making the study easier to conduct and of observing clinical practice without influencing it. The main disadvantages of the study design were imprecision in estimating with confidence the size of any associations and the tendency of observational studies to exaggerate such associations. However, neither of these shortcomings would be expected to reverse the observed trend of any association that might exist.¹¹

The trend observed in these data was unexpected and at first sight counter-intuitive. There are several factors that might explain the results of this study; these revolve around the instruments used in the study and the relationships between doctors, their patients and attitudes towards mental illness.

There are limitations to the use of routine prescribing data. In particular, the number of items has been criticized as an inaccurate measure of prescribing.¹² However, the associations observed in this study apply to items and cost which suggests that the relationship is unlikely to be an artefact. Counselling intensity was measured in terms of the availability of a counsellor to the practice and may not necessarily reflect the actual uptake of counselling in each individual practice. Although it is thus a proxy measure, it does address the health service question of whether increased provision reduces prescribing costs.

Other factors may influence referral for counselling and prescribing of psychotropic drugs. First, in practices that had high counselling levels and prescribing costs, the underlying morbidity from psychological illness among their patients might have been greater. Secondly, practices that provided on-site counselling have been more aware of their patients' psychological illnesses and might have provided medication as an adjunct to rather than as an alternative to counselling. Thirdly, provision of counselling services might have uncovered psychological need among patients and consequently might have led to increased psychotropic drug prescribing. Fourthly, practices might have already identified a need for counselling in the treatment of psychological illness and have introduced a counselling service but it was too early to see any benefit in terms of reduced prescribing. Finally, the drugs that general practitioners prescribe and the referrals they make will be influenced by both their own and their patients' beliefs about the causes of mental illnesses and the general practitioner's role in dealing with them. Because of the design of this study it is not possible to test such hypotheses. What does seem to be apparent is that the relationship between provision of counselling and psychotropic drug prescribing is far more complex than has been assumed.⁸

There are randomized controlled trials that have examined the impact of counselling on the volume and costs of prescribing. In a controlled trial of the impact of providing a clinical psychologist in a primary care setting, Robson and colleagues reported that the intervention group experienced a statistically significant reduction in the number and cost of psychotropic drugs prescribed after one year, compared with the no counselling (usual

Table 1. Prescribing rates for antidepressants and for hypnotics and anxiolytics, by provision of counselling in practices that referred patients for counselling.

Provision of counselling	Antidepressants		Hypnotics/ anxiolytics	
	Mean items per PU (SD)	Mean NIC per PU (SD)	Mean items per PU (SD)	Mean NIC per PU (SD)
Counsellor employed by and works in practice (n = 32)	0.156 (0.111)	£1.194 (£0.748)	0.216 (0.263)	£0.278 (£0.402)
Counsellor visits practice (n = 26)	0.142 (0.050)	£1.169 (£0.514)	0.204 (0.125)	£0.258 (£0.158)
Refer elsewhere for counselling (n = 16)	0.112 (0.050)	£1.069 (£0.697)	0.163 (0.050)	£0.262 (£0.141)
Regression coefficient (standard error)	-0.070 (0.026)*	-0.030 (0.030)	0 (0.033)	0.050 (0.041)

n = number of practices with level of counselling provision. PU = prescribing unit. SD = standard deviation. NIC = net ingredient cost. *P<0.05.

care) control group.¹³ Similarly, in a controlled trial of the impact of a clinical psychologist versus usual psychiatric care, Earl and Kinvey reported that the treatment group received significantly less medication than the control group up to the end of their treatment with the psychologist.¹⁴ However, this difference in prescribing was not sustained at longer follow up, seven months after counselling had ceased. In a trial with a different objective, to compare the psychological outcome of a group randomized to drug treatment (anxiolytic medication) versus a non-drug group (brief counselling without anxiolytics), similar improvements were experienced in both groups in terms of psychiatric and social assessments up to seven months later.¹⁵ Lastly, a retrospective audit in one general practice examined the impact on prescribing psychotropic medication before and after the introduction of a counsellor to the practice.¹⁶ No changes in the prescribing volume or cost of psychotropic drugs were demonstrated; an increase in prescribing was demonstrated when those who received counselling were compared with matched controls.

Despite the widespread introduction of counselling services in England and Wales the issue of treatment efficacy is still not established.^{2,3} What is even less clear is the relationship that exists between counselling and prescribing of psychotropic drugs. Our interpretation of the results of the randomized trials is that there is a qualitative difference in the practice of clinicians who know that they are being closely observed in a trial to that of clinicians working in everyday practice. The results of this present observational, cross-sectional study concur with the audit performed by Martin and Martin.¹⁶ Although under trial conditions certain psychological interventions may reduce the need for drug treatment this effect is not, at the moment, observed in mainstream clinical practice. This present study does not support the assumption that the volume of and cost incurred by prescribing of psychotropic drugs will diminish with increased counselling provision; counselling may actually increase the volume and cost of such prescribing, particularly of antidepressants. The underlying reasons behind this relationship need further study, particularly to determine whether psychotropic drug prescribing is used as an adjunct to rather than as an alternative to counselling.

These findings indicate that providing more counselling in general practice is unlikely to be funded from savings in prescribing of psychotropic drugs. It remains to be seen whether general practitioner fundholding incentives for the creative use of savings on drugs will result in a further expansion of counselling in general practice. If the provision of counselling services were a means of reducing the overall expenditure on care for those with depression and anxiety then it might be a reasonable policy to press for more counselling. However, it seems possible that such a policy would cost more money; more counsellors would be required and, as shown in this study, prescribing costs may increase. What is needed is a refocusing on general practitioners' attitudes towards mental illness, on their perceptions of how pharmacological and psychological interventions operate and on the clinical effectiveness of these interventions.

References

1. Sibbald B, Addington-Hall J, Brenneman D, Freeling P. Counsellors in English and Welsh general practices: their nature and distribution. *BMJ* 1993; **306**: 29-33.
2. Corney RH. Counselling in general practice — does it work? *J R Soc Med* 1990; **83**: 253-257.
3. King M, Broster G, Lloyd M, Horder J. Controlled trials in the evaluation of counselling in general practice. *Br J Gen Pract* 1994; **44**: 229-232.
4. Martin E. Counsellors in general practice. *BMJ* 1988; **297**: 637-638.
5. Pringle M, Laverty H. A counsellor in every practice? [editorial]. *BMJ* 1993; **306**: 2-3.

6. Fahey T, Wessely S. Should purchasers pay for psychotherapy? [editorial]. *BMJ* 1993; **307**: 576-577.
7. Oxfordshire Family Health Services Authority. *Prescribing analyses and cost 1992/3*. Oxford: Oxfordshire FHSA, 1993.
8. Audit Commission. *Report on prescribing*. London: HMSO, 1994: 21-22.
9. British Medical Association, Royal Pharmaceutical Society of Great Britain. *British national formulary. Number 29*. London: BMA and the Pharmaceutical Press, 1995.
10. Dean AG, Dean JA, Burton AH, Dicker RC. *Epi Info, version 5: a word processing, database and statistics programme for epidemiology on microcomputers*. Stone Mountain, GA: USD Inc, 1990.
11. Hennekens CH, Buring SL. *Epidemiology in medicine*. Boston, MA: Little, Brown and Company, 1987: 123-126.
12. Bogle SM, Harris CM. Measuring prescribing: the shortcomings of the item. *BMJ* 1994; **308**: 637-640.
13. Robson M, France R, Bland M. Clinical psychologist in primary care: controlled clinical and economic evaluation. *BMJ* 1984; **288**: 1805-1808.
14. Earl L, Kinvey L. Clinical psychologist in general practice: a controlled trial evaluation. *J R Coll Gen Pract* 1982; **32**: 32-37.
15. Catalan J, Gath D, Edmonds G, Ennis J. The effects of non-prescribing of anxiolytics in general practice 1. Controlled evaluation of psychiatric and social outcome. *Br J Psychiatry* 1984; **144**: 593-602.
16. Martin E, Martin P. Changes in psychological diagnosis and prescription in a practice employing a counsellor. *Fam Pract* 1985; **2**: 241-243.

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Doctors as patients

GPs' views on osteopathy

As chairman of the Royal College of General Practitioners' examination board, it is one of my pleasant duties to attend the annual examiners' workshop. Two days before this year's workshop, I developed sudden and very severe low back pain on getting out of my car. This resulted in my having to abandon my heroic attempts to do morning surgery and retire to bed where I stayed for four uncomfortable days. As a result, I sadly missed the examiners' conference, but spent much of the time negotiating over the telephone on the topic of summative assessment with many very senior general practitioners, including four regional advisers, senior RCGP officers, a couple of professors, and other leaders of our profession. Of the 12 doctors that I spoke to, 10 advised me to see an osteopath. When you think how doctors have thought about and talked about complementary therapists in only the relatively recent past, this advice is quite astonishing and shows a dramatic change in mainstream medical thinking.

If senior members of our profession now feel this way, surely it is time for such important therapies to be available to our patients as part of the National Health Service. Is it ethically acceptable to deny effective treatments to our patients simply because they cannot afford to pay? Incidentally, I did see an osteopath, and he worked wonders.

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