

ORIGINAL PAPER

Does homeopathy reduce the cost of conventional drug prescribing? *A study of comparative prescribing costs in General Practice*

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There is little research on cost-effectiveness of homeopathy in General Practice. This study aimed to compare the costs of homeopathic prescribing with conventional drugs prescribing. Data were collected for 4 years on all patients who were treated homeopathically. Costs of homeopathic remedies and costs of conventional drugs which otherwise would be prescribed for these patients was calculated for the total duration of treatment. Savings were calculated. One hundred patients were included in the study. Average cost savings per patient was £60.40. The majority of patients had improved and most did not report any side-effects. The limitations of this study are that it is based on one GP's work, with a small number of patients so definite and generalisable conclusions cannot be drawn. Moreover, calculated costs in this study are based on drugs only, it does not take into account doctor's time, special investigations and time off sick. Future work needs to be carried out to include all of these points for a comprehensive economic analysis. *Homeopathy* (2003) 92, 71–76.

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Background

There has been relatively little economic evaluation work to examine the cost-effectiveness of homeopathy. In order to evaluate whether homeopathy is cost-effective it is necessary to examine the impact on the prescribing of other conventional medication with reference to other services and the impact of attendance at GP surgeries.¹

Homeopathy is scientifically controversial because of the technique of preparation of medicines. A team in South Korea discovered that dissolved molecules cluster together as the solution is diluted. When the solution is diluted further, the clusters clump together to form even larger clusters. The *New Scientist* reported: 'The finding may provide a mechanism for how some homeopathic medicines work, something that has defied scientific explanation till now'.²

Information on homeopathy is lacking in part due to shortage of scientifically rigorous research in this field. A growing body of literature does exist and, although of mixed quality, many studies show promising results.³ Educational courses are needed that meet the standards and needs of physicians in evaluating and using homeopathy for their patients.⁴ Reilly⁵

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reports that in a survey carried out at Glasgow Homeopathic Hospital, 81% of patients rated their care as very good or excellent, with only 9% choosing to be treated by conventional medicine in future. Consumer surveys⁶ also show similar levels of satisfaction, with four out of five users claiming significant benefit or cure for their treatment.

Vincent and Furnham examined how patients chose complementary and alternative (CAM) therapies.⁷ Most CAM patients had been, at some time, patients of orthodox medical practitioners and had come to complementary medicine after receiving such treatment. Different complementary therapies attract different kinds of complaints. Over 90% of osteopathy patients had musculoskeletal problems and over a quarter of the homeopathy patients had allergies or skin disorders. Over a fifth of acupuncture patients were seeking treatment for psychological or stress-related problems, and over a quarter of the total sample had received some help for emotional problems in the past.⁷

Patients value homeopathy as it emphasises on treating the whole person. Homeopathy patients are most strongly influenced by the ineffectiveness of orthodox medicine for their complaints, a fact which is largely accounted for by the chronicity of their complaints.⁷ A recent study shows that homeopathy appeared to be at least as effective as conventional medical care in the treatment of patients with respiratory tract complaints including allergies and ear complaints.⁸ There is no reason to assume that GP's make use of alternative methods just to meet their patients' wishes. A majority of GP's believe that alternative therapies include ideas and methods from which the regular methods might benefit. The integration of alternative medicine within the medical system goes hand in hand with its acceptance by general practitioners.⁹

Economic evaluation of CAM is becoming increasingly important and should take place by using a multifaceted, staged approach. Before embarking on randomised trials, observational data on cost, effectiveness and utility should be collected. The cost-effectiveness of CAM appears to be most sensitive to the duration of the consultation.¹⁰ A study on *Improving the Evaluation of Homeopathy; Economic Considerations and Impact on Health* by Chaufferin¹¹ summarised the questions which need to be addressed including defining homeopathy's scope of intervention, its place in health care strategies, recourse to treatment, and especially economic data appraising homeopathy's impact on expenditures and outlay. The study used the General Evaluation Model to define the study. The main results were in terms of costs showed that for reimbursable medicines the public sales price of homeopathic products is a quarter of the average. The total reimbursement for a prescription of allopathic products is three times more than for a prescription of homeopathic products.¹¹ Homeopathic

physicians incur annual reimbursement outlays which are half those of the average General Practitioners. The differences observed cannot be explained by the patient profile or the disease treated. Another study carried out in France showed that 87% of patients whose physicians had prescribed homeopathic treatment did not see another physician for the same problem.¹¹

The report on an NHS practice-based homeopathy project concluded that there is a definite saving on drug costs.¹² The cost of drugs takes a large proportion of the NHS budget and is a notorious burden on NHS finances. Homeopathy medicines are relatively inexpensive and are often prescribed as occasional doses rather than continuous courses. A pilot study by Jeremy Swayne suggests that doctors practising homeopathic medicine issue fewer prescriptions and at a lower cost than their colleagues.¹³ Constant efforts are being made at national and local level to reduce the costs of prescribing. This study is aimed to compare the cost of conventional drugs only and has not taken into account doctor's time, special investigations and time off sick. Moreover, this study is based on only one GP's work and with a small number of patients to draw definite and generalisable conclusions. Future studies would be required for a comprehensive economic analysis.

Method

This study did not take into account doctor's time, special investigations and time off sick. All patients were given an appointment for 1h for the initial homeopathic consultation.

Patients were mostly treated with classical homeopathy using one medicine at a time; a few were treated with clinical homeopathy eg use of Arnica in patients complaining of chronic pain following injury, where an hour's initial appointment was not necessary. Data were recorded between October 1996 and January 2002.

The following data were collected on each patient:

- Age
- Diagnosis
- Homeopathic medicine/potency prescribed
- Total duration of treatment
- Number of visits
- Outcome scores were based on Glasgow Homeopathic Hospital outcome measure¹⁴
- Side-effects
- Comments on each patient's treatment were recorded individually.

Costs of homeopathic medicines used during the total duration of treatment were calculated. Costs of conventional drugs which would have been used by the same GP were based on average amounts per month, no formal criteria was considered. The total hypothetical costs of conventional drugs were

calculated by multiplying one months drug costs by the total duration of treatment in months. Total savings were calculated by deducting the total homeopathic medicine cost from total costs of conventional drugs which would have been used on the basis of the calculations above. Costs of any conventional drugs prescribed during the duration of treatment were deducted from the total savings. Patients who consulted on two or more occasions for the recurrence of the same problem were included as the same case and all attendance of their first episode were taken as total number of visits for the purpose of analysis. Three patients who consulted about more than one entirely unrelated problems at different times, were allocated separate case numbers.

Results

During the study period 109 patients were seen, of which nine were excluded from the study. Out of these nine patients, six failed to attend follow-up. Two patients did not take their homeopathic medicine; one patient improved with topical emollients, one patient had therapeutic effect of first long consultation and one decided to be treated by conventional medicine as her symptoms worsened. It is not clear if the medicine was taken. Patients presented with many medical problems. Some of them had multiple problems, summarised in Table 1.

Patients age ranged from 1 month to 67 years (average 33 years) (see Table 2).

Side-effects

At each consultation patients were specifically asked if they had had any side-effects since they started homeopathic treatment.

No side-effects during treatment were reported. One patient developed herpes zoster which could have been coincidental or remedy reaction.

Outcome

Figure 1 shows the outcome of patients whose treatment is complete, using the Glasgow Homeopathic Hospital outcome measure.¹⁴

Treatment is continuing for 10 patients of which five have improved significantly, two moderately, two are unchanged. For one patient it is not yet clear if the homeopathic medicine will be necessary. These patients are included in Figure 1.

Savings

Ninety patients have completed treatment, of these, for six, no conventional treatment was available, therefore savings on these patients cannot be calculated in terms of drug cost. For the remaining 84, savings ranged from minus £12.48 to plus £703.95 (average saving per patient £60.40). Figure 2 shows the range of savings that were made.

Table 1 Presenting conditions of patients

Conditions	Number of patients
Skin conditions (eczema, dermatitis, psoriasis, urticaria, wart, infection, acne etc.)	27
Asthma, hayfever and allergic rhinitis	17
Women's problems (menstrual/genital problems, PMT and menopausal problems)	12
Pain (acute and chronic pain following injury, back ache, joint pains and arthritis)	11
Digestive problems (IBS, constipation, dyspepsia, mouth ulcers, infant colic)	7
Psychological problems (anxiety, depression, phobic and panic disorder)	6
Cold, catarrh, sore throat and sinusitis	6
Headaches and migraines	5
Ophthalmic problems (stye, allergic and infective conjunctivitis)	3
Haemorrhoids	3
UTI	2
ENT problems (tinnitus, nasal polyps)	2
Hair loss	2
Post-viral fatigue syndrome	1
Hydradenitis Suppurativa	1
Shingles	1

Table 2 Age, sex and duration of treatment

	Men	Women
0-15 years	7	10
16-30 years	4	16
31-50 years	11	36
50 + years	3	13
Total number of men/women	25	75
Average age	28.5	34.5
Average number of visits	3	3
Average duration of treatment	4.5 months	4 months

For those 10 patients whose treatment is continuing, for two no conventional treatment is available. For the remaining eight savings until the end of January 2002 ranged from minus £3.21 to plus £349.82 (average per patient £68.40).

Table 3 shows examples of patients and how costs have been calculated.

Discussion

This study shows apparent savings on the cost of conventional drugs. It also shows few side-effects, only one patient reported a possible side-effect of the

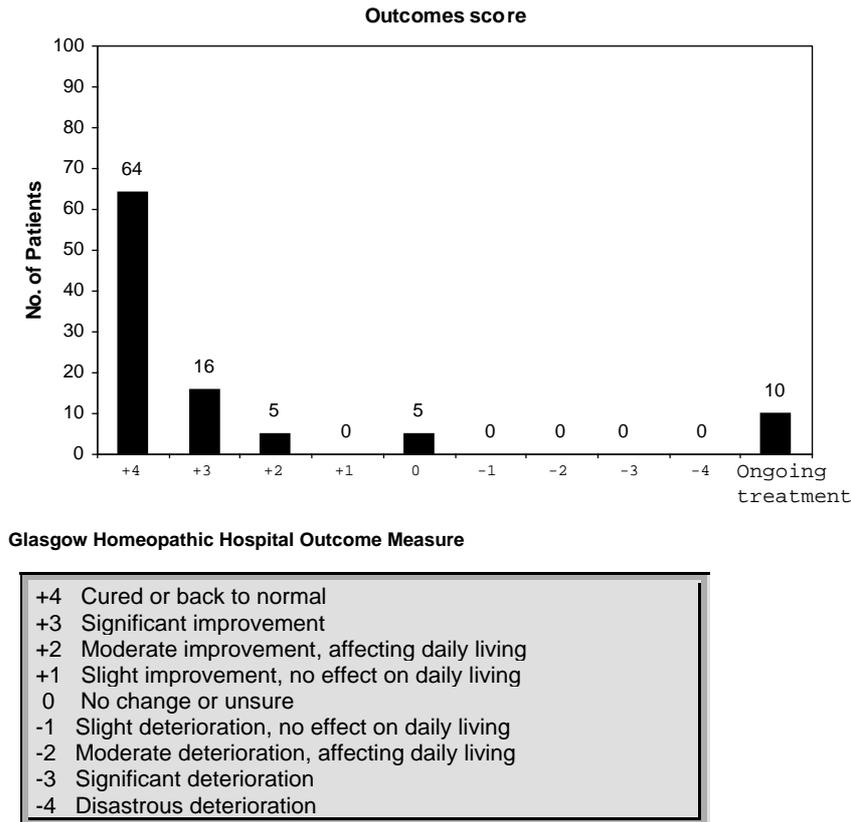


Figure 1 Outcomes score.

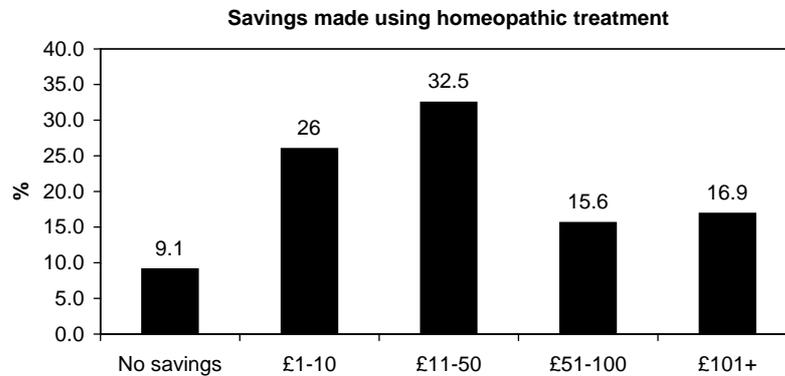


Figure 2 Savings.

homeopathic medicine. Ninety-two patients improved, seven were unchanged, none had deteriorated. This suggests that homeopathy is safe and effective. Findings of this study are in keeping with other outcome studies.¹⁵⁻¹⁷

However, there are limitations to this study. It was carried out by a single GP and the number of patients studied is small. It has not taken into account the doctor's time, special investigations and time off sick, which would be required for a comprehensive economic analysis. Moreover, it reflects conventional drugs prescribing of only one practitioner this might vary if the prescribing habits of other GP's were considered, although conventional drugs included in the study are based on the standard treatment usually prescribed by

GPs. No formal criteria for the hypothetical conventional prescriptions were considered, but the aim was to be as cost-effective as possible in prescribing strategies without compromising therapeutic efficacy.

This study did not compare costs in terms of General Practitioners' time required for consultation and the number of visits for both conventional and homeopathic treatments. The average duration of the homeopathic consultation vs the average duration of the conventional consultation is an important area which should be explored and further studies should be carried out in order to assess actual savings made using homeopathic treatment.

The first homeopathic consultation is time consuming. It may take an hour compared to conventional

Table 3 Examples of patients to show how costs have been calculated

Case no.	PT's age (yrs)	Diagnosis	Remedy potency	No. of visits	Duration	Outcome	Remedy cost £	Conventional drugs	Drug cost on P/Mth £	Total drug cost £	Total saving	Comments on savings
1	33	Anxiety/depression/ menstrual problems	Sepia 200C/30C	5	14 months	Cured (4)	2.28 2.55 4.83	Paroxetine 20mg od (30)	17.76 17.76	248.64 248.64	243.81	Libido improved/happy & pregnant again.
2	52	Menopausal/mild hyperension/ hyperlipidaemia	Lachesis 30C	5	6 months	Improved (3)	2.55 2.55	Kliefem tab (3 x 28) Bendrofluzide 2.5 mg od Simvastatin 20 mg (28)	25.95 0.74 29.69 56.38	155.70 4.44 178.14 338.28	335.73	Remedy improved all her symptoms. Reduced cholesterol levels confirmed by rpt. tests. Not on any other treatment.
3	8 months	Eczema	Sulphur LM1/LM2/LM3 Calendula Cream	8	10 months	Cured (4)	4.25 4.25 4.25 3.40 16.15	Fucidin-H cream 30g Diprobath oint. 200g Diprobath 500ml	5.30 6.16 7.50 18.96	53.00 61.60 75.00 189.60	173.45	Recurrent scripts would cost considerably more. Did not use any steroid cream since hom. remedy started.
4	32	Hayfever	Nat-M 30C	3	10 months	Cured (4)	2.55 2.55	Loratadine 10mg tab od (30) Opticrom eyedrops 13.5 ml	7.57 7.96 15.53	22.71 23.88 46.59	44.04	Symptoms completely cleared with no recurrence.
5	36	Shingles	Rhus-Tox 30C	2	2 weeks	Cured (4)	2.55 2.55	Zovirax Tab. 800mg (35) (shingles treat. pack) Paracetamol (100)	75.11 75.11	75.11	73.30	Episode subsided fairly quickly & was less intense & no post-herpetic neuralgia
6	45	Acne	Silica 30C Sepia 30C	5	14 months	Cured (4)	2.55 2.55 5.10	Minocin MR 100mg od (28)	17.62 17.62	246.68 246.68	241.58	Long-term antibiotics are Reqd. for this condition which would cost more.
7	33	Low back ache	Rhus-Tox 30C/12C	4	6 months	Improved (3)	2.55 2.55 5.10	DiclofenacSR 75 mg bd (56) Paracetamol (100)	12.38 0.74 13.12	74.28 4.44 78.72	73.62	Rpt. scripts would cost more.
8	23	Depression/ psoriasis/scalp psoriasis	Staphysagria 30C/200C/1M	3	3 months	Improved (3)	2.55 2.28 2.28 7.11	Paroxetine 20 mg od (30) Diprosalic scalp lot. 100 ml Betnovate cream 100g Nizoral shampoo 120 ml	17.76 10.50 3.95 5.84 38.05	53.28 31.50 11.85 17.52 114.15	107.04	Avoided use of steroid cream scalp lotions & shampoos. Pt. stopped antidepressants.

consultation which is usually 10 min. However, follow-up homeopathic appointments are usually 15 min which is not much different from the usual conventional consultation time.

In the long term homeopathy may be time-effective as, once improved, patients do not keep visiting the GP and some patients show a therapeutic effect of the long first consultation. Moreover, they did not require more visits than they generally would have for conventional treatment. Another limitation is that the hypothetical use of conventional drugs is assumed to be constant throughout the entire observational period, which may not be necessary, actual use is difficult to predict. The savings in this study include the cost of antibiotics only for one course of treatment, obviously repeat courses would cost more. Some of these patients might have needed hospital referral if they had not improved with homeopathy and that would also have increased the costs to the NHS.

An additional benefit of homeopathy is in terms of improved quality of life. This is particularly true for those patients for whom there is no conventional treatment available. If more General Practitioners were trained to provide homeopathy, it might be possible to make savings on prescribing budgets.

In conclusion, this study provides some preliminary data that suggests that homeopathy may be an effective and relatively inexpensive addition/alternative to conventional medicine. Further, more rigorous studies are required to substantiate the findings of this study.

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