An Audit of Acupuncture in a Single-Handed General Practice over One Year

Anthony Stellon

Summary
An audit was performed over one year on all patients undergoing acupuncture for a variety of conditions in a single-handed GP practice. The patients were observed for a further year to assess the effectiveness and duration of the treatment effect. Using the ‘measure yourself medical outcome profile’ (MYMOP) questionnaire, the effectiveness of acupuncture treatment was measured, and patients were categorised into no effect, improved or much improved. A total of 140 patients were audited over the one-year period. No effect was seen in 31% of patients, a further 31% were improved, and 38% were much improved. Those with a shorter duration of symptoms appeared to show the most benefit. During the one-year post-treatment observation period 50% of patients required further treatment.

In conclusion, acupuncture appears to have been an effective treatment in the author’s General Practice population. In this audit acupuncture seems to have had a short duration of effect. It is believed that this has lead to an increase in workload, not only as a result of patient demand, but also due to recurrence of symptoms following the initial success of treatment.

Keywords
Audit, acupuncture, primary care, general practice, MYMOP.

Introduction
Previous audits in primary care have indicated that acupuncture treatment may be effective for a variety of conditions, and appears cost-effective, not only through reducing referrals to secondary care. Primary Care Groups (PCGs) are becoming more interested in funding acupuncture, not only because of its possible cost-effectiveness, but also to satisfy patient requests for this type of treatment. More information will be required to satisfy a PCG of acupuncture’s effectiveness; specifically, information on cost-benefit, manpower to provide the service and public demand. This study examines the effectiveness of acupuncture treatment, together with its duration of effect, in a variety of conditions that presented to a General Practitioner.
a one-point decrease in the mean symptom score indicates that the subject has improved. A two-or-more-point decrease in the mean symptom score indicates that the subject is much improved.

The latest version of the MYMOP questionnaire (MYMOP 2) is included as an appendix to this paper (see appendix 1).

Patients attended for treatment at weekly or fortnightly intervals. The acupuncture treatment given consisted mainly of deep intramuscular stimulation, although both laser and traditional Chinese acupuncture were given on some occasions. In most cases the needling duration was judged as that necessary to relieve the muscle tightness. This usually ranged from several seconds up to one or two minutes. If no benefit was obtained, and/or symptoms worsened after three to six treatments, acupuncture was abandoned and the patients referred, if appropriate, for other modalities of treatment. At the end of a course of treatment, approximately two to three weeks after the final acupuncture session, all patients completed the same MYMOP questionnaire. Patients for whom the acupuncture was beneficial were asked to re-attend for further assessment and/or treatment in the event that their symptoms return or worsen. All patients were monitored for a minimum period of 12 months (range 12 to 25 months) following their last acupuncture treatment, and any further treatment documented. The mean scores for each individual symptom, activity and well-being, were taken before and after the course of acupuncture treatment.

### Results

A total of 140 patients underwent acupuncture treatment during the study period. The anatomical sites of presenting symptoms are shown in table 1. Sixty-four patients recorded two symptoms on the MYMOP questionnaire. Symptoms were present for a median period of 12 weeks (range 2 to 52 weeks). The median number of acupuncture treatments given was four (range 1 to 10), and the duration of acupuncture treatment ranged from one to 20 weeks. A one-point decrease (or improved) in the mean score of all symptoms corresponded to a 40% reduction of symptoms, and a two or more point decrease in the mean score (or much improved) corresponded to a 69% reduction of symptoms (see table 2 & figure 1).

### Table 1 Anatomical site of presenting symptoms in patients undergoing acupuncture

<table>
<thead>
<tr>
<th>Symptom 1 (n =140)</th>
<th>Symptom 2 (n =64)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neck</td>
<td>36 (26)</td>
</tr>
<tr>
<td>Back</td>
<td>43 (31)</td>
</tr>
<tr>
<td>Upper limb</td>
<td>17 (12)</td>
</tr>
<tr>
<td>Lower limb</td>
<td>22 (17)</td>
</tr>
<tr>
<td>Ear/ nose/ throat</td>
<td>3 (2)</td>
</tr>
<tr>
<td>Urinary tract</td>
<td>2 (1)</td>
</tr>
<tr>
<td>Headache</td>
<td>16 (11)</td>
</tr>
</tbody>
</table>

*Number of patients are given with percentages in brackets*

### Table 2 Mean MYMOP scores in patients benefiting and not benefiting from acupuncture treatment

<table>
<thead>
<tr>
<th>Symptom 1</th>
<th>Symptom 2</th>
<th>Activity</th>
<th>Well-being</th>
<th>Average score</th>
<th>Symptom 1</th>
<th>Symptom 2</th>
<th>Activity</th>
<th>Well-being</th>
<th>Average score</th>
</tr>
</thead>
<tbody>
<tr>
<td>All patients (n = 140)</td>
<td>4.36</td>
<td>3.74</td>
<td>4.17</td>
<td>3.21</td>
<td><strong>3.87</strong></td>
<td>2.61</td>
<td>2.00</td>
<td>2.44</td>
<td>2.13</td>
</tr>
<tr>
<td>No response (n = 43)</td>
<td>3.95</td>
<td>3.38</td>
<td>3.88</td>
<td>2.83</td>
<td><strong>3.51</strong></td>
<td>3.88</td>
<td>3.00</td>
<td>4.02</td>
<td>2.97</td>
</tr>
<tr>
<td>Improved (n = 43)</td>
<td>4.25</td>
<td>3.44</td>
<td>4.31</td>
<td>3.11</td>
<td><strong>3.78</strong></td>
<td>2.29</td>
<td>1.81</td>
<td>2.68</td>
<td>2.30</td>
</tr>
<tr>
<td>Much improved (n = 54)</td>
<td>4.77</td>
<td>4.31</td>
<td>4.52</td>
<td>3.57</td>
<td><strong>4.29</strong></td>
<td>1.46</td>
<td>1.49</td>
<td>1.09</td>
<td>1.31</td>
</tr>
</tbody>
</table>

*Percentage changes from the baseline are shown in brackets*
The mean MYMOP scores before and after acupuncture treatment are detailed in table 2. Fifty-four patients (39%) were much improved, 43 (31%) were improved, and 43 (31%) showed no benefit (see figure 2). More patients whose symptoms had been present for 12 weeks or less appeared to benefit from acupuncture treatment (table 3); however, 26 patients (18%) whose symptoms had been present for more than 13 weeks still obtained benefit (table 3). Of the 97 patients who were improved or much improved after treatment, 49 (50%) had a recurrence of symptoms within 18 months, the majority having a recurrence within six months of their last acupuncture treatment (see figure 3).

Of the 43 patients who did not respond to acupuncture treatment, 16 were referred to other departments, namely orthopaedic (12), pain (1), rheumatology (1) and physiotherapy (2). A further two were injected with corticosteroid for their plantar fasciitis, and their symptoms abated. The others were treated by alteration of their analgesic drugs, or treated with mood altering drugs.

The mean MYMOP scores for symptoms, activity and well-being, all appeared to decrease in those patients who benefited from treatment. The decrease in scores was more apparent for individual symptoms and activity, and less so for well-being. There was no change in any of these scores in patients who did not gain benefit from treatment (see table 2).

**Discussion**

This audit confirms the findings of other practitioners, that patients appear to benefit from treatment with acupuncture. In this study the majority of patients were suffering from musculoskeletal symptoms that commonly present in primary care. The audit suggests that patients with symptoms of shorter duration are more likely...
Audits

Figure 2  Percentage of patients in each group

<table>
<thead>
<tr>
<th>Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>All patients</td>
<td>100%</td>
</tr>
<tr>
<td>No response</td>
<td>31%</td>
</tr>
<tr>
<td>Improved</td>
<td>31%</td>
</tr>
<tr>
<td>Much improved</td>
<td>39%</td>
</tr>
<tr>
<td>Improved &amp; Much Improved</td>
<td>69%</td>
</tr>
</tbody>
</table>

to benefit from acupuncture treatment than those with more chronic symptoms, i.e. greater than 12 weeks duration. This raises a number of points. One is whether or not the patients with symptoms of shorter duration are likely to become asymptomatic, even without treatment. Another is whether or not these patients, if left symptomatic for greater than 12 weeks, are likely to develop more intractable symptoms, which are less likely to respond to acupuncture treatment. Another possibility is that those patients with longstanding symptoms may have idiopathic or neurogenic type of pain that is less likely to respond to treatment than those with nociceptive pain. This study did not discriminate the types of pain treated.

Another finding in this study was that those patients who benefited from treatment also showed a high relapse rate, with 50% of patients returning for consultation, usually within 6 months of their last treatment. This high relapse rate at 6 months was also found in a study of patients with chronic pain who were treated with acupuncture. This may be partly explained by the fact that the majority of patients presenting with musculoskeletal problems are likely to have a chronic underlying condition, such as osteoarthritis. The recurrence of symptoms could be a result of an exacerbation of the underlying condition. Alternatively, it may be a result of a wearing-off of the effect of acupuncture treatment. Shorter duration of effect of acupuncture has also been seen in neurogenic or idiopathic pain, and may account for these findings. The implication of this finding to primary care physicians is enormous, since if patients benefiting from previous acupuncture are reluctant to take drugs for their condition, they are more likely to re-consult and ask for further acupuncture treatment. This appears to have been the case in this practice, where the increased workload for acupuncture treatment has resulted in a change of working practice, namely reducing the patient list size, and obtaining funding from the PCG for provision of acupuncture to their patients. The money obtained has compensated, to some degree, for the loss of income resulting from the reduced list size. Primary care physicians should be aware of this scenario, and cater accordingly, before bidding for acupuncture contracts in future.

Although only 18% of patients with long term symptoms of greater than 12 weeks benefited from treatment, it would still suggest that acupuncture has a role to play, albeit a small one, in treating these conditions. Of this 18%, 38% remained
asymptomatic 12 months after their last treatment.

In comparing those patients that benefited from acupuncture, with those that received no benefit, there appeared to be no change in well-being other than that associated with their reduced symptoms and activity score. Certainly in those patients not benefiting from treatment, no change in well-being scores was noted following acupuncture treatment. Does this lay to rest the anecdotal assumption that acupuncture may work by increasing well-being, as opposed to reducing symptomatology and/or increasing normal everyday activities? Perhaps this aspect needs further research.

In conclusion, the findings of this audit suggest that patients should be treated as early as possible, even though some could recover naturally. Offering acupuncture to patients with predominantly nociceptive pain is likely to lead to better and longer effects of acupuncture treatment. Offering acupuncture treatment routinely will result in increased consultation rates for this treatment and tie up physician time. The consequent increased workload and financial implications need to be addressed by acupuncturists, primary care groups and other health care workers, if acupuncture is to be fully integrated into routine practice.

Reference list
Appendix 1

MYMOP 2

Full name .................................................................................. Date of birth ............................................................................
Address and postcode .................................................................................................................................................................
Today’s date .............................................................................. Practitioner seen ......................................................................

Choose one or two symptoms (physical or mental) which bother you the most. Write them on the lines.
Now consider how bad each symptom is, **over the last week**, and score it by circling your chosen number.

SYMPTOM 1: .................. 0 1 2 3 4 5 6
........................................... As good as As bad as
........................................... it could be it could be
...........................................

SYMPTOM 2: .................. 0 1 2 3 4 5 6
........................................... As good as As bad as
........................................... it could be it could be
...........................................

Now chose one activity (physical, social or mental) that is important to you, and that your problem makes difficult or prevents you doing.
Score how bad it has been in the last week.

ACTIVITY: ....................... 0 1 2 3 4 5 6
........................................... As good as As bad as
........................................... it could be it could be
...........................................

Lastly, how would you rate your general feeling of well-being during the last week.

0 1 2 3 4 5 6
........................................... As good as As bad as
........................................... it could be it could be
...........................................

How long have you had your Symptom 1, either all the time or on and off?
Less than 2 weeks ☐ 2-4 weeks ☐ 4-12 weeks ☐
3 months to 1 year ☐ Over 1 year ☐

Tick the box which best describes how you feel:

- Cutting down or avoiding medication
  - is not important to me ☐
  - is a bit important to me ☐
  - is very important to me ☐

If you have answered that medication **IS** important to you, write down what medication you would like to cut down or avoid, and how much of it you are taking at the moment.
**MYMOP 2 Follow-up**

Please circle the number to show how severe your problem has been IN THE LAST WEEK.

This should be YOUR opinion, no-one else’s!

<table>
<thead>
<tr>
<th>SYMPTOM 1:</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>As good as it could be</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>As bad as it could be</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SYMPTOM 2:</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>As good as it could be</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>As bad as it could be</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACTIVITY:</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>As good as it could be</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>As bad as it could be</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WELL-BEING:</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>general feeling of well-being?</td>
<td>As good as it could be</td>
<td>As bad as it could be</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If an important new symptom has appeared please describe it and mark how bad it is below.

Otherwise do not use this line.

<table>
<thead>
<tr>
<th>SYMPTOM 3:</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>As good as it could be</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>As bad as it could be</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The treatment you are receiving may not be the only thing affecting your problem. If there is anything else that you think is important, such as changes you have made yourself, or other things happening in your life, please write it here (write overleaf if you need more space):

If cutting down or avoiding medication is important to you, tick the box to show how this has changed since your previous MYMOP form:

- Not much change
- Taking less medication
- Taking more medication

If there has been a change write down what medication has changed, and how much of it you are taking now:
An audit of acupuncture in a single-handed general practice over one year

Anthony Stellon

*Acupunct Med* 2001 19: 36-42
doi: 10.1136/aim.19.1.36

Updated information and services can be found at:
http://aim.bmj.com/content/19/1/36

**Email alerting service**

*These include:*

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to:
http://www.bmj.com/company/products-services/rights-and-licensing/

To order reprints go to:
http://journals.bmj.com/content/subscribers

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/