

Patient Perspectives on Outcomes After Treatment with Acupuncture

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ABSTRACT

Objectives: To determine patients' experience of outcomes after acupuncture treatment.

Design: A patient questionnaire followed by semistructured interviews.

Setting: Acupuncture practices in York, England.

Subjects: Questionnaires were distributed by 4 acupuncturists to all 132 of their patients over a 2-week period, 72 (55%) of whom responded. Of these, 11 patients were interviewed.

Interventions: Patients received normal care from their acupuncturists, all of whom were members of the British Acupuncture Council.

Outcome measures: Patients reported on physical symptoms, emotional/mental symptoms, lifestyle changes, major life changes and inner life changes affecting outlook and attitudes to health. Patients also reported on the extent they attributed change to acupuncture and what they valued about attending for treatment.

Results: Primary reasons for attending were categorized by patients as physical symptoms (90%), mental and emotional problems (9%) and general health and well-being (1%). For physical symptoms, 75% of patients reported definite change; for emotional and mental symptoms, 67%; lifestyle changes, 40%, major life changes, 27%; and for inner life changes, 54%. Over time, many of the patients (42%) changed their primary reason for attending from their initial physical concerns, half of whom describing their new focus as related to general health and well-being. Some emotional changes were experienced by 83% of patients, irrespective of the initial reason for attending. For all these changes, 58% of patients reported that they "substantially" attributed the changes to acupuncture, and 25% "totally." The interviews provided additional data on the depth of the changes particularly for the longer term patients and on what they valued about treatment.

Conclusions: Treatment with acupuncture results in a broad range of outcomes from physical and emotional change through to wider benefits involving the patients' lifestyle, outlook, and attitude toward their health. Existing outcome measures are not adequate to assess these wider benefits. The results suggest that patients experienced holistic benefits from acupuncture, an outcome that could be described as holism-in-action.

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INTRODUCTION

Practitioners of Traditional Chinese Medicine are concerned with treating the whole person, which includes their body, mind, and spirit, however researchers have yet to explore the deeper and subtler effects of treatment more fully. We only have limited research data on patients' perspectives in these areas and we know even less about what patients' value about their treatment. In this context of these gaps, some key questions were formulated for this study:

- How do patients describe the range of changes that they experience after treatment with acupuncture? In particular, what do they have to say about lifestyle changes, changes in attitude and behavior, and the more subtle inner changes that affect patient's perceptions of themselves and their health?
- What do patients most value about acupuncture treatment? What are the central components that they see as important in the therapeutic relationship?

To answer these questions this study's primary goal was to document the nature of changes experienced by patients of acupuncture. A secondary goal was to consider whether the changes experienced by patients can be adequately recorded using existing outcome measures or whether new measures may be needed.

A beacon of good research in this area is Cassidy's study, which recorded the range of changes experienced by acupuncture patients in the United States (Cassidy 1998a, 1998b). Key research questions posed by Cassidy were "Who uses acupuncture and why: what do they think the care does for them, and why do they value or 'like' it" (Cassidy 1998a, 1998b). The top three reasons for seeking Chinese medicine given in this study were pain relief, emotional care, and wellness care. Patients reported relief of symptoms, claiming 91.5% of their presenting symptoms improved or disappeared. They also reported improved physiological coping, including increased energy, faster healing and better relaxation. Psychosocial coping also improved with increased self-awareness, well-be-

ing, empowerment, balance, and centeredness. A number of minor themes emerged in this study including the value of a close patient-practitioner relationship and the focus of Traditional Chinese Medicine in treating the whole body/mind/spirit/social person. The question of whether these insightful findings would be found to hold true in the United Kingdom was a motivation for this study.

A related issue in acupuncture research relates to the role and relevance of the outcome measures. Fitter (1996) has suggested that there is a hierarchy of outcome measures with objective, such as degrees of movement in a joint, changes in blood pressure or hormone levels, etc., being afforded the highest value in the evidence profile by most medical doctors and scientific researchers. Subjective outcome measures of patient's self-perceived change at physical and mental-emotional or social functioning levels are also now well established, see for example the well-validated SF-36 (Brazier et al., 1992) and have been used in a variety of acupuncture studies (e.g. Sallstrom et al., 1996; MacPherson and Fitter, 1998) and are likely to be of more relevance to patients. In the last few years researchers have turned to developing patient-generated measures (Ruta et al., 1994; Paterson, 1996). Of these, the Measure Your own Medical Outcomes Profile (MYMOP) is the easier to administer and allows the patient to choose and define the symptoms they wish to monitor along with an activity they feel is limited by their ill health (Paterson, 1996).

The problem remains that research using existing well-validated measures of change may inadequately reflect the whole experience of the patient. Given the holistic orientation of traditional acupuncture and its key interest in a range of energetic manifestations in the patient, it is important to investigate the patient's experience in more depth. With the exception of Cassidy's studies (1998a, 1998b) and a small but growing literature on case studies in the West (MacPherson and Kaptchuk, 1997), this form of patient-centered research is sparse to date.

METHODOLOGY

As this research aims to investigate the perceptions of patients, two complementary ap-

proaches are utilized: quantitative and qualitative. The quantitative research took the form of a questionnaire-based survey designed to provide a number of baseline descriptors, including demographic data, and to establish the main types of change experienced by patients. The questions were based on the surveys undertaken by other researchers (Stewart et al., 1988; Brazier et al., 1992; Mills and Peacock, 1996; Cassidy, 1998a, 1999b) and on topics of particular interest, particularly the range of changes experienced and the importance of different changes to the patient.

The questionnaire contained 14 questions, the last 4 being open-ended. After basic questions on gender, age, treatment experience, and presenting conditions, the core of the questionnaire focused on the following categories of change:

- Physical change: pain levels, medication patterns;
- Mental/emotional change: moods, well-being;
- Lifestyle change: diet, exercise patterns, activities;
- Major life change: work, relationship, living arrangements; and
- Inner life change: outlook, attitude to health.

The wording of the questions was piloted using the phrasing: "Since attending for acupuncture have you noticed . . ." to elicit patients responses to the whole treatment process, not merely the act of needling. Categories of changes were chosen to reflect areas of specific interest for this exploratory study and remain congruent with other work on this subject (Cassidy, 1998b). Differentiation of these types of changes was clear to patients although there was some overlap and ambiguity in the categories of mental/emotional and inner life change. As an exploratory study, the information gathered would itself lead to a greater understanding of how such concepts are used by patients and hence to the possibility of greater clarity in phrasing future questionnaires. The use of open-ended questions was considered vital for similar reasons. Often, patients' answers simply emphasized responses to previous closed questions, but at times they also added additional information. The question-

naire also asked patients how much of their change they actually attributed to acupuncture, if they had further comments to add, and if they would be willing to be interviewed in greater depth. Overall the questionnaire itself was a research tool under development and the study outcomes of this work were in part intended to explore suitable methodologies for evaluating the wider outcomes from practice.

Four York-based acupuncturists agreed to recruit patients to the study, one of these practitioners worked from home and three worked at multidisciplinary clinics. Ethics approval was granted through the ethics committee of the Northern College of Acupuncture, York. The questionnaires were distributed by hand to all patients treated over a 2-week period, and returned directly to the researcher by mail. The goal was to recruit a minimum of 50 patients, enough to form the basis for statistical analysis. Completed questionnaires were then coded and data were analyzed utilizing the Statistics Package for the Social Sciences (SPSS) to determine frequency distributions, cross-tabulations, and χ^2 analyses.

The qualitative research took the form of interviews of a subgroup of the patients in order to explore the subtler and less physical responses to acupuncture. Selecting the patients to be interviewed required purposive sampling (Pope and Mays, 1995) to ensure they had experienced a range of changes and "substantially" or "totally" attributed these changes to acupuncture. The interviews were tape-recorded, lasted approximately 1 hour and almost all took place in the patient's own homes. Although the goal of the interviews was to allow patients the freedom to talk about the issues that were most important to them, discussion was focused on why they had come for acupuncture, the nature of the changes they had experienced and what they valued about attending for acupuncture.

RESULTS

The four practitioners distributed questionnaires to 132 patients, of whom 112 (85%) were female and 20 (15%) male. Completed questionnaires were returned by 72 patients, representing 55% of the total, in approximately equal

TABLE 1. TYPE AND FREQUENCY OF CHANGE EXPERIENCED BY PATIENTS

	<i>Sample size</i>	<i>Definite change: number (%)</i>	<i>A little change: number (%)</i>	<i>No change number (%)</i>
Physical change	72	54 (75%)	15 (21%)	3 (4%)
Emotional change	70	47 (67%)	11 (16%)	12 (17%)
Lifestyle change	72	29 (40%)	15 (21%)	28 (39%)
Major life change	70	19 (27%)	2 (3%)	49 (70%)
Inner life change	71	38 (54%)	18 (25%)	15 (21%)

numbers from each of the four acupuncturists. Of those responding, 53 (75%) were female and 18 (25%) were male with one questionnaire with no gender specified. The average age was 50 with the majority (92%) being between 26 and 75. In terms of the number of treatments, 21% had received 5 or less, 37% had had between 6 and 20, and 42% had had 21 or more sessions. The primary reasons given for attending were categorized into physical problems (90%), mental/emotional problems (9%), and general health and well-being (1%).

Many patients were longer term users of acupuncture and so patients were asked whether their primary reasons for attending had changed over time. Whereas 58% were still seeking help for the same type of problems, 42% had consciously changed their reasons for continuing with treatment. The main shift for patients was away from physical problems, dropping from 90% at the outset to 64% at the time of the survey, and toward concerns about general health and well-being, rising from 1% to an unexpected 22%. The number of patients attending primarily for emotional/mental symptoms rose from the original 9% to 13%.

For those with physical symptoms, 75% of patients reported a definite change and 21% a little change (see Table 1). With regard to mental/emotional changes, 67% experienced definite change and 16% a small change, giving a total of 83% who experienced some change. Remarkably, these mental/emotional changes were experienced irrespective of the patients' reasons for attending. The cross-tabulation between emotional change and number of treatments showed that these changes were significantly ($p < 0.1$) more common for patients attending for more than 21 treatments (Gould, 1999).

Patients were asked about changes to lifestyle, including diet, exercise patterns, and other activities. Of the sample, 40% had made definite changes and 21% a small change. This indicates a commitment by many patients to work with the treatment in aiding a return to, or maintenance of, good health. From the cross-tabulation, most of this change ($p < 0.2$) was made by long-term patients (Gould, 1999).

For major life changes, defined as those involving changes to working patterns, (giving up work or changing occupation) to relationships (marriage, separation, divorce, etc.) or to place of residence, 27% reported definite change and 3% a small change. In terms of inner life change, for example in outlook and the way patients viewed their health, 54% reported definite change while 25% reported a little change. Cross-tabulations showed that the length of treatment was highly significant ($p < 0.01$), with 88% of those recording such change having received more than 21 treatments (Gould, 1999).

Having covered a range of possible forms of change, patients were asked an open-ended question: "If you have experienced a variety of changes since you began seeing your acupuncturist, can you say which is the most important to you?" Only 48 patients responded to this question, of whom 31% valued the physical changes, 21% the mental/emotional changes, 21% the general health changes, and 27% other specific changes such as increased self awareness, greater ability to take responsibility for health, better decision-making skills, and recognition of a more holistic outlook.

In answering the question "To what extent do you attribute the important changes you have experienced to acupuncture and your practitioner?" there were 60 responses, of

which 58% attributed change "substantially" to acupuncture and 25% attributed the changes "totally" to acupuncture.

The semistructured interviews were designed to add more depth to our understanding of the patients' experience of acupuncture. A total of 11 patients were interviewed, the results of which have been more fully reported elsewhere (Gould, 1999). In this article, we will provide relevant quotes in the discussion below to illustrate the issues surrounding patients' experiences of deeper change. From the interviews, it was found that patients placed great value on the therapeutic relationship with three themes emerging. First, patients valued acupuncture's treatment effects on symptoms, especially the emotional, mental, and well-being changes. Second, they valued the holistic style of treatment offered, including a close practitioner-patient working relationship. Third, they valued the opportunities acupuncture presents for general maintenance health care, improving quality of life and disease prevention.

DISCUSSION

The patients in the survey represented 55% of the possible respondents and of these 75% were female with a mean age of 50, characteristics similar to those found in other studies of acupuncture populations. Kelner and Wellman (1997) recorded 70% female, mean age 45, and Wadlow and Peringer (1996) recorded 69% female, mean age 45. Cassidy (1998a) recorded 72% female.

In this study, the vast majority (90%) attended for help with physical complaints or symptoms. These findings reflect both the level of information available on the usefulness of acupuncture and the cultural tendency for patients to need a "real," i.e., physical reason, for seeking out treatment (Cassidy, 1998a). This proportion is comparable with other surveys of acupuncture and complementary medicine which cluster around the same figure (Wadlow and Peringer, 1996; Shaw, 1998; Mills and Peacock, 1995).

In this study, 9% of the patients attended with mental/emotional problems, a figure

comparable to the 9.1% founded by Wadlow and Peringer (1996) in their survey of United Kingdom acupuncture practitioners and the 7% by Kelner and Wellman (1997) in their study in Canada.

However, classification in these groupings can oversimplify a patient's concerns, especially where there is coexistence of emotional suffering alongside physical pain, or when the patient is aware of a more deeper inner process, as for example in the case of one interviewed patient who reported: "I don't just believe in killing pain, [I] knew there was something deeper."

In this study, 42% of patients changed the primary focus of their treatment over time. In particular half of these sought more help for their general health and well-being. An audit from a teaching clinic in Reading (Shaw 1998), which also explored changes to goals, found that approximately 30% of patients altered their goals in this way. Recognition of this tendency has been considered of enough importance to influence the design of the MYMOP outcome measure (Paterson, 1996). This shift away from physical concerns suggests that patients are experiencing the effect of the explicit interest of practitioners in their whole health.

Some changes to their physical state were experienced by almost all the patients surveyed (96%). This may be compared to findings from the U.S. study (Cassidy 1998b) that reported that 91.5% of patients recorded that their "presenting symptoms" had "improved" or "disappeared." Although the findings here do not measure the extent of change, this is an encouraging response especially because 75% were definite about the impact. It is also an encouraging result in the context of the chronicity of acupuncture patients' conditions (Wadlow and Peringer 1996; MacPherson and Fitter, 1998).

This survey found that 83% of patients also experienced some positive change to emotions and moods. Similar figures were also recorded from the United States (Cassidy, 1998a) and the United Kingdom (Shaw, 1998). Caution must be exercised in the interpretation of these results because of Western society's tendency toward a "psychologizing" of illness (Goudsmit and Gadd, 1991). Interviewed patients reported

"coming through gradually," of being "more positive and hopeful" and "more relaxed," and about "clearing my mind." Of interest is that these emotional changes were experienced irrespective of the patients' reasons for attending.

The survey also indicated the change patients initiated for themselves. A total of 61% of patients had made some lifestyle changes, reflecting the willingness to take more personal responsibility for their own health. One patient reported: "I take time off, take things easy if I'm in pain or down . . . [and] I don't feel guilty about it." And 27% of patients reported making major life changes. Many patients are embracing holistic explanations about the nature of their lives, recognising the intertwining of their physical, emotional and mental states and the causal effect of factors such as negative relationships or working conditions upon health. Such recognition may have been latent in their belief system prior to treatment or it may have been engendered during the course of treatment in response to a practitioner's input.

In terms of inner changes, the interviews demonstrated considerable depth in many cases. For example, a patient reported: "Over the last 18 months there's been a huge turnaround for me. [I'm] less extreme now . . . far calmer and confident. I don't put myself down so much. I deserve good things in life, as much as anyone else. I just wouldn't have been able to say that before I went." The practitioner's explanations of an illness, the sense of possibilities for change and the hope or empowerment this may bring could all contribute to such changes. Such impacts take time, a point reinforced by the finding that those attending for 21 or more treatments were more likely to experience such changes.

Further support for the idea that patients are expanding their concepts of health comes from the data on the change they most valued and their changing use of acupuncture. A remarkable 69% of patients placed most value on the "nonphysical" changes that have occurred in their lives as a result of attending for acupuncture. In addition a high proportion of those changing the focus of their treatment brought new mental/emotional or general health con-

cerns to their practitioner. For a population whose initial concern was overwhelmingly with physical problems, and most of whom also experienced change in such problems, this result is notable.

The concordance of findings between this and the U.S. study of Cassidy (1998b) is important because it indicates that the population of acupuncture users have common experiences on different continents. This suggests that this sample may be reasonably representative of acupuncture patients in the West. However the findings of this study contrast with those of Mills and Peacock (1996) whose survey of patients attending complementary medical practices showed little change in their attitudes to their health. Chinese medicine thus appears to offer a particular form of holistic health care that can be differentiated from the other modalities of complementary medicine.

Patients clearly indicated the importance of a quality relationship with their practitioner. "Listening," "respect," "acknowledgment," "trust," and "working together," were all phrases used by patients to define this relationship. None of the patients interviewed used Chinese medical terminology such as *yin*, *yang*, excess, or deficiency, or *qi*. However terms connected to a sense of holism, such as balance, well-being and self-awareness were common. There are similarities here to Cassidy's (1998b) findings in the United States. Patients are not aware of, or concerned with, understanding the intricate details of Chinese medical theory. But patients are experiencing and appreciating the holistic approach, which includes the sense it makes of their lives and health, the meaning it provides and the possibilities for self-empowerment that it offers.

Caution must be exercised in drawing conclusions from this study. There were only 72 patients responding to the survey questionnaire, and all of these patients were based at York consulting just 4 practitioners in three locations. There was a selection bias in both the recruitment of practitioners and in the self-selection of patients. Reasons for nonparticipation by patients were not explored. While the questionnaire sought to elicit the range of changes from acupuncture, the results do not

give a measure of the scale of such change, nor the extent of the change that might have taken place without visiting an acupuncturist.

One of the clearest implications of this study is that if a holistic, patient-centered, educative approach to acupuncture is practised, changes will occur at many levels and patients will place a high value on these wider benefits. If acupuncture is practised in a more mechanistic way, for example as a technique used within a Westernized model of medicine, it is unclear whether such wider benefits would be achieved.

There are three areas where it is felt that research could be expanded to increase understanding in the topics covered in this study.

- Patient-centered projects: In-depth work is needed to explore patients' experiences of change, particularly changes to attitudes and behaviors that affect their health, and the wider consequences of consulting an acupuncturist.
- Practitioner-centered projects: Future research is needed to establish levels of congruence between the patient and practitioner perspectives, explore what practitioners think they do and what they actually do in the treatment room, and the ways they consciously seek to influence their patients' lifestyle and their search for meaning and purpose.
- Outcome measures: New outcome measures may need to be developed. General health status questionnaires, such as the SF-36, are inadequate as instruments for evaluating the wider types of change described in this study. In addition it has been shown that many of the changes identified are not amenable to measuring on a "fixed scale" because they reflect expanded perceptions and life changes that are nonlinear, a concept developed by Golembiewski et al. (1976) who discusses the assessment of second and third order changes.

CONCLUSIONS

This study has demonstrated that patients experienced a range of different changes, in-

cluding relief of physical symptoms and other mental/emotional and nonphysical effects, much of which they attributed to acupuncture. The majority put more value on the nonphysical changes they had experienced even though almost all patients originally sought help with physical problems. Many also introduced a number of lifestyle and self-help measures into their lives. Nonphysical changes were significantly more likely to occur for those attending for more than 21 treatments.

The evidence suggests that over time, there was a shift in focus by patients away from physical symptoms and toward mental/emotional issues and concerns about general health and well-being. In addition, the emotional changes that were occurring in most patients were often unrelated to the reason the patient was attending for treatment. Overall the results suggest that the acupuncturists appear to deliver wide-ranging outcomes, something that could be described as holism-in-action. This topic is one that could be fruitfully addressed in further research.

The findings are an important incentive for practitioners to practice in a holistic manner, engaging with the emotional/mental dimensions to treatment and the related inner changes to outlook, attitude, and relationship to self. In addition by retaining a focus on patient education, patients can choose to make significant and positive changes to their lifestyle that will support their recovery.

We hope this exploratory study has provided some insight into what patients themselves consider to be of value about acupuncture and its wider benefits. The study did not attempt to establish a quantitative outcome measure of these benefits. At present it is unlikely that these wider benefits could be adequately assessed using existing outcome measures. Specific new outcome measures may thus need to be developed, such that they better match the patients' experiences of change.

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