

Acupuncture for Menopausal Hot Flashes: A Qualitative Study About Patient Experiences

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Abstract

Objective: The aim of this study was to describe any changes in health experienced by postmenopausal women after having acupuncture treatment for hot flashes.

Materials and methods: Our sample was drawn from women participating in a randomized controlled trial (ACUFLASH) investigating the effect of acupuncture on menopausal hot flashes. One hundred and twenty-seven (127) women from the intervention group who had received a course of 10 acupuncture treatments were asked to make a written statement about any kind of change they had perceived that they considered could be related to the acupuncture treatment. Qualitative data were analyzed using systematic text condensation.

Results: Many women reported a substantial impact from the treatment with respect to a reduction in frequency and intensity of hot flashes both by night and by day. Changes related to improved sleep pattern were also reported, and a variety of different bodily and mental changes were described (i.e., feeling in a good mood, not so run down, and calmer). Several women were uncertain whether any changes had occurred. A few reported feeling worse.

Conclusions: Our results describe a variety of health changes that may not be revealed by limited outcome measures in acupuncture studies. Further analysis of the relationship between such bodily experiences could lead to the development of hypotheses or models for how the acupuncture effect is mediated in complex bodily systems, and also contribute to development of outcome measures relevant for acupuncture studies.

Introduction

Menopause leads to bodily changes that may have an impact on well-being. Vasomotor symptoms of hot flashes—sudden sensations of intense heat with sweating and flushing—are reported by many perimenopausal women. Their prevalence is associated with climate, diet, lifestyle, and gender roles.¹ The sociocultural context influences the interpretation and consequences of the bodily changes. In a Danish study of perimenopausal women, almost everyone reported hot flushes (87.2%), but few felt very bothered (13.8%).² The burden of symptoms can be relieved by different strategies. Hormonal therapy was previously the treatment of choice, but adverse events have contributed to greater reluctance to use these drugs.^{3–5} Safe, efficacious,

cost-effective, and well-tolerated evidence-based treatment is called for by symptomatic menopausal women.⁶ Complementary and alternative therapies (CAM), including acupuncture, have become increasingly popular for menopausal hot flashes.^{7,8} Several trials have suggested that CAM therapies might benefit women with menopausal problems, but data are insufficient.⁹

Randomized control trials (RCTs) on acupuncture for hot flashes are published.^{10–14} Their results are inconclusive but sufficient to justify further studies. However, knowledge about the physical experiences of women treated with acupuncture for menopausal hot flushes is lacking. As a clinical acupuncturist for more than 25 years, the first author (T.A.) had observed the diversity in response from patients after treatment. Being an experienced general practitioner,

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the second author (K.M.) had a lifelong dedication to the impact of patient experiences as an evidence base. We therefore set up a study to describe the experiences of changes in health reported by postmenopausal women who had undergone acupuncture treatment for hot flashes in an RCT. Patients received Traditional Chinese Medicine (TCM) acupuncture treatment that was provided by 10 experienced acupuncturists in three different cities in Norway. In this RCT, outcome measurements included changes in number and intensity of hot flashes, health-related quality of life, and urine calcitonin gene-related peptide excretion.¹⁵

Design, Materials, and Methods

A qualitative design was considered most adequate to explore bodily experiences. Data were drawn from participants’ written answers to an open-ended question. Our sample was drawn from participants in an RCT, where 134 women had been randomized to acupuncture treatment. After completion of the treatment sessions, the women were invited to join a study about patient experiences. Participants were asked to make a written statement, using their own words, about any kind of change they had perceived as related to the acupuncture treatment. We asked them to include everything, even issues that might be considered as less important. The study was approved by the regional committee for medical research ethics and The Norwegian Data Inspectorate.

Seven (7) women had not completed acupuncture treatment at the start of the qualitative study and were not invited. Of the remaining 127, who had received treatment according to protocols,¹⁶ 112 participants (88%) responded. The mean age in the sample was 53.5 years, and mean menopausal age was 49.3 years. The authors (T.A. and K.M.) were not personally involved in the acupuncture treatment, and participants in the qualitative study provided their answers anonymously by mail.

Data comprised statements about the participants’ experiences during and after TCM acupuncture treatment intended to relieve menopausal hot flashes. The individual accounts were very diverse in style and length, ranging from 6 to 397 words. Examples are presented in Box 1. Analysis was accomplished by systematic text condensation^{17,18}: (1) reading all the material to obtain an overall impression and

bracketing previous preconceptions; (2) identifying units of meaning, representing different aspects of participants’ experiences associated with acupuncture treatment, and coding for these; (3) condensing and summarizing the contents of each of the coded groups; and (4) generalizing descriptions and concepts concerning experiences associated with acupuncture treatment. Analysis was done by the authors together, negotiating interpretations and categories along the process. At each stage of the analysis process, we met and discussed our views after reading the relevant material several times. By this approach our data were decontextualized, conceptualized, and categorized, informed by the perspectives of our different professional backgrounds. Especially in the final step of analysis, this triangulation of frameworks was used to establish common ground on the meaning of descriptions. The answers from participants were written in Norwegian and the excerpts were translated by a native speaker of English.

Results

Eighty-three (83) of the 112 participants described different positive changes they had experienced in relation to hot flashes during or after acupuncture treatment. The impact of time between treatment and effect, as well as the interval between hot flashes were often mentioned. Sixteen (16) participants reported improved sleep after treatment. Together, these changes made a major difference on the social life of the participants. In addition, 37 of the women described positive bodily changes beyond the hot flashes and related problems: improvement of energy, balance, or relaxation, as well as resolution of various health problems (migraine, digestive problems, hypertension, emotional instability, and pain syndromes). Twelve (12) participants were not sure if they could ascribe their change, if any, to the acupuncture treatment, 15 reported no change at all, and 2 described feeling worse.

Subjective impact of acupuncture on hot flashes and related problems

Many women reported a substantial impact of the treatment with regard to a reduction in frequency and intensity of hot flashes both night and day. They stated that acupuncture would be their treatment of choice if hot flashes should

Box 1: Examples of individual accounts
Have few hot flashes, but some every now and then.
I sleep through the night. Fewer hot flashes, they are reduced to half as many as before and they are not so intense. I feel that I have more energy and are not always tired, which I used to be.
The acupuncturist paid attention to me as a whole human being to get the best result out of the treatment. I have been much better with regard to my food intolerance and as a result my stomach is working very well. Everyday life is much better now due to relief of the hot flashes. They are nearly gone. I have maybe had four to five hot flashes since I finished the treatment; those were not as strong as they used to be. I am very pleased with what acupuncture did for me. My life is good now and if I get hot flashes again I would start with acupuncture again.

occur again. A woman with a high level of activity during work and spare time wrote:

The hot flashes disappeared and as a bonus my blood pressure went down and in general I felt less stressed. (23)

Concurrent with a reduction in the nocturnal hot flashes, a lot of women described improved sleep after acupuncture treatments, providing a feeling of more energy during the day and not feeling as tired as before. Some noticed a slight sensation of heat during the night, but by just "turning over" they managed to fall a sleep again. A woman aged 56, at present out of work, who spent most of her time in front of the television, described her changes like this:

Before I had to get up at night to wash myself and change my nightclothes. I don't have to do that anymore. (54)

A large group of women reported fewer hot flashes, with those remaining being much milder than before, and even some days without any hot flashes. Some reported them as "blushing," particularly on days with a lot of stress. The reduction in hot flashes improved social life. Participants felt much more confident since "the red sweaty" face was history. One woman described a feeling of "feeling whole" again, reminiscent of her premenopausal years. Another woman wrote that now she could turn off the fan at work, which had been on for months, blowing cold, fresh air onto her face. A housewife of 52, who spent a lot of her time walking and bicycling, noticed:

Now I can wear the same shirt all day. Before I had to change my blouse four or five times a day. (60)

Some women had experienced an increased level of hot flashes during acute illnesses before the acupuncture treatment. They described this as an imbalance in their body due to being ill. After acupuncture treatment they felt more balanced in their bodies, as if something had fallen into place, and experienced their bodies as less vulnerable than before.

Many women wrote about periods of time with no hot flashes immediately after treatment, but subsequently their hot flashes recurred, although with less intensity and frequency. These women restarted acupuncture treatment again and reported an improvement fairly soon. A woman aged 51 described her changes after having had a break in her treatment:

Now again after a few treatments I get only some waves of warmth a day, "wonderful" instead of having an attack every hour. I wonder what will happen when I stop having acupuncture. (168)

Other subjective bodily changes after acupuncture

Several participants wrote how the hot flashes had previously made them feel fatigued. After treatment, they had felt that their energy and surplus strength had returned. They gave different descriptions on how their general condition had improved, feeling in a much better mood, and not so run down. The women felt better balanced than before. Some said that their initiative had increased. A woman with a physically demanding job reported:

I felt more balanced in my head because I had had difficulty in concentrating and I had been irritable. (65)

A number of participants felt that the treatment had made them calmer, in contrast to their previous feeling of undue excitement. They described a kind of relaxation, in their bodies as well as in general. One of the women, who had previously spent a lot of time on the Internet as a symptom of agitation, said that this was not so attractive any more. Others wrote that they no longer felt so irritable towards their surroundings. One woman said that now she had forgotten annoying matters that previously bothered her a lot.

For some women, mood variations seemed to be affected by acupuncture treatment. One of them said that her anxiety problems were improved. A couple of participants remarked that their spirits were more stable, one of them emphasizing that her usual winter depression seemed to have disappeared. These positive changes lead to better social functioning. A woman aged 52, a full-time student, reported:

The needles drew out my stress and fatigue. My mood got better and this meant I could manage everyday life better. I have more stamina and less mood swings. (151)

Specific bodily changes perceived as acupuncture effects were also mentioned. Some participants gave detailed descriptions about how migraine and other headaches had decreased during treatment. One woman, who previously needed daily medication to relieve her pain, said that it was not necessary anymore. Another, who had had frequent sick leave due to migraine, would now usually attend work every day. She said that this change felt nearly like a miracle for her. Another described a powerful beneficial side-effect of acupuncture treatment:

I have severe migraine attacks at least once a week, in other words only 3–4 days without any attacks. After the treatments I have had no attacks in 13 days, a record. (357)

Other participants reported perceived changes in their digestive system. Some reported improvement of problems in bowel function or food intolerance, attributing this to acupuncture. Three (3) women mentioned that their appetite had become better during treatment.

Muscular tension and pain could also be positively affected by acupuncture treatment. A woman with Sjogren's disease noticed that her rheumatic symptoms were distinctly decreased. Another woman wrote that her restless legs were less troublesome. Other bodily effects reported included effects on blood pressure, swelling, and better bladder control:

Before I was up and peeing the whole night. Now I fall asleep and sleep all night until I wake up. (303)

Not sure, certainly sure, and feeling worse

Some of the women reported transient relief during treatment, but when the program was finished, the frequency and intensity of hot flashes became worse again. A couple of

women wrote that they had registered no lasting effects, neither positive nor negative, and some of these had resumed estrogen medication. One woman whose hot flashes had been disturbing her sleep very much was disappointed:

After a couple of acupuncture treatments, I noticed the hot flashes were less intense. This led to a better quality of sleep and feeling much better in myself. Later I felt that most of hot flashes had gone/the peaks of the flashes were taken away. But how long was I in paradise? Not so long. After finishing acupuncture, life returned to normal. The hot flash has come back like before, my sleep is not very good, and life in general is not so great. (135)

Other participants recognized changes, but were not sure whether they were due to treatment, or just an effect of time passing by. Two (2) of them considered the possibility that improvement could be due to increased light in springtime. A woman with a heavy burden of symptoms gave this account:

I have still hot flashes, but they are fewer and with less intensity. It varies day to day and week to week. Some weeks I have a lot of hot flashes and other weeks they can be less. Whether this is to do with the treatment, I don't know. (322)

A few negative effects attributed to acupuncture treatment were also reported. One (1) woman got worse during treatment, with stronger hot flashes. The acupuncturist had then suggested that acupuncture should be discontinued, and she agreed.

Discussion

Our results present a variety of health changes experienced as positive by the participants, mostly associated with an improvement in their social life due to reduction of hot flashes and improved sleep patterns. Furthermore, several positive emotional and bodily health changes were reported. In the following sections, we discuss the impact of these findings, related to study design, existing theoretical and empirical knowledge, and impact for clinical practice and research.

Strengths and limitations of the study design

We found the participants' written, unstructured statements sufficiently consistent and stable to conclude that our question had been adequately understood. Saturation was indicated by repeated statements about the same phenomena, although some detailed variation would still occur. The answers presenting negative treatment effects indicate that participants did not feel obliged to report only beneficial experiences. Some of them presented their experiences very openly, giving us the impression of honest and authentic stories that were not just made up to meet our expectations. Semistructured interviews or focus group data might have provided more depth, although at the expense of the level of breadth that we pursued here.

The sample was opportunistic, representing women with a considerable symptom burden who had volunteered to any of the randomization outcomes. They all completed treatment ac-

ording to the individual recommendations of the acupuncturists. Our findings are not transferable to any menopausal woman, since cultural dimensions, shaping bodily experiences and treatment expectations, could have led to different emphasis and articulations with a group of women from another part of the world. Yet, the phenomena presented by the women correspond well with theoretical presumptions about bodily mechanisms during acupuncture treatment. The design of our study does not allow for conclusions about prevalence or distributions of the reported phenomena in a general population of menopausal women. Such questions could be pursued in a future quantitative study.

We would not immediately infer the experiences reported from our sample to be causal effects from acupuncture treatment. Being a procedural therapy, some of the positive results may reflect the patient-therapeutic relationship rather than a specific acupuncture effect.¹⁹ Associations between empathy, enablement, and clinical outcomes have previously been studied for acupuncture²⁰ and other CAM therapies.²¹ However, in a naturalistic study, such contextual issues are part of the participants' experiences and should not be excluded from analysis. Recent research suggests that complex interventions, such as acupuncture, should not be split into characteristic and incidental elements.²²

Specific symptom relief—or even more?

Previous studies have concluded that acupuncture induces a variety of perceived changes in health that are not necessarily registered in existing outcome measures; hence, there is a need for developing new outcome measures relevant for acupuncture research.²³ Qualitative studies on patient experiences can provide important contributions in those pursuits.²⁴ The broad range of positively perceived bodily experiences beyond the strictly menopausal problems appeared as a positive side-effect of the acupuncture treatment in the present study. Similar descriptions were also reported from Norwegian women receiving acupuncture treatment for prevention of recurrent cystitis.²⁵ UK and U.S. patients with chronic problems reported similar results.^{26,27}

Qualitative studies on TCM acupuncture treatment indicate that there may be cross-cultural consistently similarities on patient experiences, across the different conditions being treated. The TCM approach to taking a medical history corresponds well to the experience of a "lived body," where the personalized descriptions of symptoms fits well into a TCM theoretical framework. This framework is not only suitable as a diagnostic strategy, but may also induce an understanding in the patient that the acupuncturists focus on "wholeness" rather than on one symptom only. Hence, patients are open to express health changes bodily and emotionally, along the treatment course and when asked in relevant studies. This information can help us in planning future acupuncture studies including patient-centered outcomes and thereby increase our knowledge of how acupuncture may affect the body and body-mind manifestations beyond necessary efficacy studies.

Traditional Chinese Medicine and Western medicine: An explanatory model

Acupuncture textbooks in the West²⁸ present the menopausal syndrome as well defined, mainly caused by a de-

cline of the *yin* or *yang* energies of the Kidney. Whether these views are in historical terms TCM or not have been discussed.²⁹ The decline in Kidney energies may correlate to the biomedical understanding that lower levels of estrogens give rise to hot flashes. Biomedical theory relates hot flashes to decreased production of sex steroids, leading to a change in the β -endorphins and noradrenergic activity, and a less steady thermoregulatory effect in the hypothalamus.^{30,31} Acupuncture is known to increase central β -endorphin activity, and acupuncture could affect hot flashes through these mediators.³²

The heat present in menopausal women may cause, beyond hot flashes, uneasiness, palpitations, sleep problems, and sweating. The women in our study experienced relief of such symptoms. In TCM terms, acupuncture treatment may have regulated the heat aspect in the participating postmenopausal women and relieved the “causes” behind that. The participating acupuncturist tried to depict a total physiologic and psychological picture of the woman in front of them and customized the acupuncture treatment accordingly. Details of the TCM theory and acupuncture treatment applied in the RCT will be reported elsewhere.

Conclusions

For a clinical acupuncturist surrounded by “happy patients,” our result will not necessarily create many new questions. To the scientific world, it adds to the questions on reliable outcomes in acupuncture studies and to causal effects (the needle, the needle stimulation, or the patient-therapeutic relationship, or is it the whole package of treatment components?) that are distinct but not divisible.

Furthermore, menopausal women’s reports of positive acupuncture effects, beyond the intended symptom relief, indicate complex bodily mechanisms underlying hot flashes that deserve further attention.

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The authors state that no competing financial interests exist.

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