**UK Maternity acupuncture: A survey of acupuncturists belonging to the Acupuncture (For Conception to) Childbirth Team (ACT).**

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Background: In the United Kingdom a professional acupuncture network, Acupuncture (For Conception to) Childbirth Team (ACT), provides education and support for practitioners using maternity acupuncture. However, the nature of the treatments they provide is unknown.

Objective: To survey members about their practice with a focus on pregnancy related care.

Design: An anonymous self-completion questionnaire was completed by practitioners from ten ACT branches using the Internet provider Survey Monkey. Questions covered demographic information, practitioners’ frequency of treating patients in the previous year, and referral networks. Descriptive statistics were used to report the data.

Results. Ninety-nine replies were received from 114 invitations, a response rate of 86.8%. The majority (87 [87.8%]) had treated at least one pregnant women in the past year. Most frequent treatments were for : birth preparation (84 [96.5%]), nausea & vomiting (82 [94.2%]) and inducing labour (79 [90.8%]). Over 50% were also treating lower back and pelvic pain (77 [88.5%]), breech (74 [85.0%]), threatened miscarriage (55 [63.2]) and headaches/migraines (46 [52.8%]). Only a minority (8 [9.1%]) attended births. A greater number of referrals were received from medical health professionals for pregnancy (54 [65.8%]), than for fertility (16 [19.5%]) or menstrual conditions (8 [ 9.7%]).

Conclusions: ACT practitioners were providing treatmenting for a wide range of pregnancy related conditions, possibly because referrals from medical health professionals were more common than for fertility issues or menstrual health. It may be that acupuncturists in other countries would benefit from modelling this approach to support maternity acupuncture and build referral networks with medical health professionals.

**Key Words**

Acupuncture, Pregnancy, Maternity acupuncture, Pregnancy, fertility , menstruation, reproductive health

**Introduction**

Previous UK surveys have reported that acupuncturists are increasingly treating women’s health conditions (Hopton et al, 2012; Robinson et al., 2012). An EU/China survey indicated that 41% of EU respondents commonly treated obstetrics /gynaecological issues (just under half of respondents being UK acupuncturists). A survey amongst acupuncturists in Australia and New Zealand reported over 90 % of participants had treated women presenting for gynaecology, fertility and pregnancy related conditions in the past year (Smith et al, 2014). The most common gynaecology treatments were for premenstrual syndrome, menopause and primary dysmenorrhea, while the most common fertility treatments were for general fertility and to decrease infertility related stress. For pregnancy the most common conditions were those of nausea and vomiting, lower back or pelvic girdle pain (LBPGP), labour preparation and induction.

Acupuncture during pregnancy and labour has been evaluated as safe when used by a suitably qualified practitioner (Park et al, 2013), and growing willingness has been reported from western health practitioners to refer for pregnancy related acupuncture (Stewart et al, 2014). However, acupuncturists in Australia and New Zealand have expressed concerns about locating quality treatment information and the safety of treating women in early pregnancy (Betts et al, 2014). Safety concerns were also raised in in the round table discussion for this edition of Medical Acupuncture, with the consideration that this may be limiting women’s access to care.

While the practitioners participating in this round table discussion are examples of acupuncturists offering maternity acupuncture within a hospital setting, the majority of acupuncturists in countries such as the United States, the UK, Australia and New Zealand offer treatment through private clinics. In contrast, the majority of maternity acupuncture care in European countries such as Denmark, Finland, Germany, Norway, Sweden and Switzerland is administered by hospital midwives undertaking short training courses (Mårtensson et al, 2009; Romer, 2005). In New Zealand acupuncture is also provided by midwives including those acting as Lead Maternity Caregivers (LMC’s). These LMC’s assume total responsibility for maternity care and use acupuncture for selected conditions such as nausea, LBPGP, anaemia, and pre -eclampsia in addition to labour preparation, induction and pain relief for labour (Betts and Lennox 2006, Betts 2006, Calvert & Pairman 2011). A comparable training programme for midwives has also recently commenced in Australia, with women reporting a positive attitude towards receiving acupuncture during pregnancy and with midwives being able to provide this treatment (Williams, et a 2019).

There an interest in bringing acupuncture into the American health system as an evidence-based nonpharmacologic option (Tick et al 2018). Midwives, midwifery students and obstetricians also report they view acupuncture as a safe and credible therapy (Münstedt 2014; Williams, et a 2019). However, concerns raised by acupuncturists in locating quality education and safety of treating this specialised area of practice, may limit access, even with health professionals willing to refer.

In the United Kingdom, a professional acupuncture network Acupuncture (For Conception to) Childbirth Team (ACT) provides specific education, advertising, networking opportunities and support for acupuncturists interested in treating fertility and pregnancy related conditions. All ACT members must have a qualification or training in acupuncture and be a registered member of a UK professional body (British Acupuncture Council, Association of Traditional Chinese Medicine or British Medical Acupuncture Society). Membership is maintained through continuing professional development within regional groups. The extent and treatments being provided by these acupuncturists for pregnancy related conditions is not known. This study aimed to build on the existing limited knowledge of acupuncture treatment in maternity care by surveying these ACT practitioners about their practice with a focus on pregnancy related care.

**Methods**

An anonymous self-completion questionnaire was completed by members of the UK Acupuncture (for Conception to) Childbirth team (ACT) on their use of acupuncture in the treatment of women’s health conditions. ACT networks are structured across the UK according to region (county/area) and are run by volunteer members. Each regional network maintains their register of members. Regional coordinators were asked to email an invitation letter with a link to the questionnaire to their members. The questionnaire was then accessed through the Internet provider Survey Monkey (http://www.surveymonkey.com).

The survey was adapted from a survey the author (DB) participated in administering for acupuncturists in Australia and New Zealand (Smith et al., 2014). The areas of women’s health examined included gynaecology, fertility and pregnancy and post-partum. Within each section questions were on practitioners’ frequency of treating of various conditions in the previous year, treatment modalities commonly used for each condition, and referral networks used. Demographic questions were included to examine the diversity of participants, including their years of experience, location of training and current practice, and theoretical basis of practice. Survey responses were collected between March and August 2016 and required less than 20 mins to complete. Following the initial email invitation, three reminders were sent before the survey closed. This study was approved by London South Bank University Research and Ethics Committee (UREC 1580).

**Data analysis**

Survey Monkey data was exported in Microsoft Excel format (Microsoft Corporation, 2010) for analysis. All usable questionnaires were included, and missing data reported. Descriptive statistics were reported.

**Findings**

Of the networks available, m and agreed to participate.

A total of 99 replies were received from the 114 individual survey invitations sent, a response rate of 86.8%. Of these, 82 (82.8%) participants provided demographic information. The majority were female (80 [97.5%]) and had trained in the UK (69 [84.1%]). There were similar numbers of respondents selecting TCM (30 [35.5%]) and Integrated (28 [34.1%]) as their main style of practice (Table 1). Approximately half had been in practice 10 years or longer (44 [53.6%]). The largest number of respondent were form the London or Hertfordshire networks (38[46.2%]).

Table 1. Demographic Characteristics of Participants responding to Survey (N=82)\*

|  |  |  |
| --- | --- | --- |
| Sex | N | % |
| Female | 80 | 97.5 |
| Male | 2 | 2.4 |
| Age |  |  |
| < 45 y | 22 | 26.8 |
| ≥ 45 y | 60 | 73.1 |
| Years in practice |  |  |
| < 10 y | 38 | 46.3 |
| ≥ 10 y | 44 | 53.6 |
| Style of practice |  |  |
| TCM | 30 | 35.5 |
| Integrated | 28 | 34.1 |
| Five Elements | 9 | 10.9 |
| Japanese | 5 | 6.0 |
| Other | 10 | 12.1 |
| Training location |  |  |
| UK | 69 | 84.1 |
| China | 8 | 9.7 |
| Other | 8 | 9.7 |
| ACT branch |  |  |
| London | 20 | 24.3 |
| Herts | 18 | 21.9 |
| Yorkshire | 11 | 13.4 |
| Brighton & Sussex | 9 | 10.9 |
| East Anglia | 7 | 8.5 |
| Northwest | 4 | 4.8 |
| Bristol | 3 | 3.6 |
| Oxford | 3 | 3.6 |
| Berkshire | 2 | 2.4 |
| Buckinghamshire | 1 | 1.8 |
| Did not complete | 4 | 4.8 |

\*Note data only relates to fully completed questionnaires ( or is it completing this section of the questionnaire)

**Women’s reproductive health** All participants (99 [100%]), had treated menstrual health , fertility related or pregnancy related conditions in the past year. Ninety-three (93.9%) had treated menstrual health issues, 87 (87.8%) fertility issues and 87 (87.8%) pregnant women.

These acupuncturists had treated a wide range of conditions within each area of practice; Irregular periods, menopause and premenstrual syndrome were the most frequent menstrual health conditions. Women seeking treatment due to a medical diagnosis, general fertility health and for stress and relaxation were the most frequently treated fertility issues, while birth preparation, nausea & vomiting, induction, LBPGP and breech were the most frequent pregnancy related conditions (Table 2).

Table 2. Most common conditions treated in the past year

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Menstrual health (n=93)  n % | | | Fertility issues (n=87)  n % | | | Maternity health (n=87)  n % | | |
| Irregular periods | 85 | 91.3 | Fertility WM diagnosis | 81 | 93.1 | Birth preparation | 84 | 96.5 |
| Menopause | 84 | 90.3 | General fertility | 80 | 91.9 | Nausea | 82 | 94.2 |
| Premenstrual | 81 | 87.0 | Stress and relaxation | 79 | 90.8 | Induction | 79 | 90.8 |
| Primary dysmenorrhea | 77 | 82.7 | Pre and post ER only | 76 | 87.3 | LBPGP | 77 | 88.5 |
| PCOS | 76 | 81.7 | ART failure - no further WM treatment recommended | 76 | 87.3 | Breech | 74 | 85.0 |
| Endometriosis | 75 | 80.6 | Threatened Miscarriage | 55 | 63.2 |
| Menorrhagia | 74 | 79.5 |  | | | Headaches/migraines | 46 | 52.8 |
| Menstrual headache | 63 | 67.7 | Anaemia | 40 | 45.9 |

Maternity related conditions that were treated less frequently were depression in pregnancy (38 [43.6%]), itching (37 [42.5%]) postnatal depression (36 [41.3%]), varicosities (33 [37.9%]), blood pressure issues (31 [35.6%]), breast feeding issues (26 [29.8%]) caesarean section scar healing (21 [24.1%]) and attending a labour (8 [9.1%]).

When asked about the frequency of treatments, only a minority of practitioners estimated they had treated more than 11 women in a year for specific conditions. Approximately 40% of practitioners were in this category for fertility related stress and relaxation (43 [49.4%]), fertility treatment with a western medical diagnosis (41 [47.1%]) and general fertility health (35 [40.2%]). However, this was only approximately 30 % for labour preparation (34 [39%]), Induction (30 [34.4%]), irregular periods and premenstrual conditions (28 [30.1%]) (Table 3).

Table 3. Estimated frequency of most common treatments

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | ≥11 | | 1-10 | | Not treated | | Did not answer | |
| Menstrual related conditions (n=93) N % N % N % | | | | | | | N % | |
| Irregular periods | 28 | 30.1 | 57 | 61.2 | 4 | 4.3 | 4 | 4.3 |
| Menopause | 16 | 17.2 | 65 | 69.8 | 4 | 4.3 | 8 | 8.6 |
| Premenstrual | 28 | 30.1 | 51 | 54.8 | 6 | 6.4 | 8 | 8.6 |
| Primary dysmenorrhea | 14 | 15.0 | 62 | 66.6 | 4 | 4.3 | 13 | 13.9 |
| PCOS | 23 | 24.7 | 52 | 55.9 | 11 | 11.8 | 7 | 7.5 |
| Menorrhagia | 11 | 11.8 | 59 | 63.4 | 11 | 11.8 | 12 | 12.9 |
| Menstrual headache | 11 | 11.8 | 50 | 53.7 | 18 | 19.3 | 14 | 15.0 |
| Endometriosis | 16 | 17.2 | 57 | 61.2 | 12 | 12.9 | 8 | 8.6 |
| Fertility related conditions (n=87) | | | | | | |  | |
| Fertility WM diagnosis | 41 | 47.1 | 32 | 36.7 | 8 | 9.1 | 6 | 6.8 |
| General fertility | 35 | 40.2 | 45 | 51.7 | 0 | 0.0 | 7 | 8.0 |
| Stress and relaxation | 43 | 49.4 | 32 | 36.7 | 4 | 4.5 | 8 | 9.1 |
| Pre and post ER only | 27 | 31.0 | 35 | 40.2 | 14 | 16.0 | 11 | 12.6 |
| ART failure - no further WM treatment recommended | 17 | 19.5 | 37 | 42.5 | 22 | 25.2 | 11 | 12.6 |
| Pregnancy related conditions (n=87) | | | | | | |  | |
| Birth Preparation | 34 | 39.0 | 50 | 57.4 | 2 | 2.2 | 1 | 1.1 |
| Induction | 30 | 34.4 | 49 | 56.3 | 5 | 5.7 | 3 | 3.4 |
| N&V | 24 | 27.5 | 58 | 66.6 | 2 | 2.2 | 3 | 3.4 |
| LBPGP | 13 | 14.9 | 64 | 73.8 | 6 | 6.8 | 4 | 4.5 |
| Breech | 9 | 10.3 | 65 | 74.7 | 8 | 9.1 | 5 | 5.7 |

PCOS (Polycystic ovarian syndrome), ART (Assisted reproductive therapy). N&V (Nausea and Vomiting). LBPGP. Lower back and Pelvic girdle pain

**Referrals**

When asked how patients were referred to them, word of mouth was the primary referral pathway (Table 4). For those treating in pregnancy, referrals were more frequently from medical health professionals (54 [65.8%]) than for those treating fertility (16 [19.5%]) and menstrual patients (8 [ 9.7%]).

Table 4. Referrals received by acupuncturists (N=82)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Menstrual  n % | | Fertility  n % | | Maternity  n % | |
| Word of mouth or previous or current patients | 64 | 78.0 | 76 | 92.6 | 75 | 91.4 |
| Advertising | 50 | 60.9 | 61 | 74.3 | 58 | 70.7 |
| Complementary or alternative (CAM) practitioners | 23 | 28.0 | 42 | 51.2 | 42 | 51.2 |
| Medical health practitioners (GP, Nurse, midwife, Specialist) | 8 | 9.7 | 16 | 19.5 | 54 | 65.8 |
| Unknown | 19 | 32.1 | 19 | 32.1 | 19 | 32.1 |

**Discussion**

Findings from this survey demonstrated that acupuncturists belonging to ACT were interested in and actively treating pregnancy related conditions. The high reponse rate of 86.8% from these ACT practitioners indicates an interest in participating in research projects around the topic of women’s health. In contrast a survey of women’s health amongst general acupuncture practitioners in Australian and New Zealand achieved a 11.3 % response rate (Smith et al 2014). Despite these differences it is interesting that most frequently treated pregnancy conditions for both populations were nausea, birth preparation, induction, pregnancy related back and pelvic pain and breech. It was also reported within both surveys that those practitioners were treating a wide range of pregnancy related conditions including anxiety and depression and headaches and migraines. This corresponds to reports from a hospital based maternity outpatient clinic in New Zealand were although women most frequently present for lower back and pelvic pain and birth preparation a wide range of conditions are also sought by women (Betts et al 2016, Soliday & Betts 2018).

It was interesting that the most frequent use of acupuncture was that of birth preparation (84 [96.5%]) and that this category had the highest number of practitioners estimating they had treated more than 11 women in the past year (34 [39.0%]. Currently there is no quality research examining the use of acupuncture in this way. There are anecdotal reports from midwives that women receiving birth preparation acupuncture (that does not focus on points to stimulate the onset of contractions), present in early labour with favourable indications related to cervical ripening, the baby’s presentation and experience efficient labours (Betts 2006). A small observational study of New Zealand midwives using this birth preparation acupuncture did demonstrate reduced inductions and caesarean sections for both women having their first baby and subsequent mothers (Betts & Lennox 2006) however, randomisation to a control group is required to explore these findings. It may be confounding factors for women interested in receiving acupuncture and time and attention during treatment contributed to the findings. It was also part antenatal preparation by these New Zealand midwives to give interested women information about the use of acupressure for use in labour. Acupressure has demonstrated statistically significant in reducing induction and caesarean section rates when used as part of an antenatal education programme (Levett et al 2017). It may be that as part of antenatal education acupressure also has an important role in preparing women for an efficient labour.

Although the use of acupuncture to induce labour was reported by these ACT practitioners as amongst one of the most frequent treatment delivered in the past year (79 [90.8%]), and that a third estimated they had treated more than 11 women in the past year (30 [34.4%], there is currently no quality evidence base to support this as effective. While the latest Cochrane review (Smith et al 2017), indicates some promising research relating to acupuncture promoting cervical maturity, the use of acupuncture did not show significant differences for the onset of natural labour or improved birthing outcomes for the women compared to controls. This was both in terms of reducing medical intervention and increasing the incidence of natural vaginal births. This may be due to the research methodology being unable to reflect clinical practice. However, it may also be the perception from practitioners and women that changes following treatment, such as the onset of contractions, will promote a natural vaginal birth. Whereas in reality, this type of stimulation may not change eventual birthing outcomes.

Although LBPGP is a common presentation in pregnancy and featured in the most frequently treated conditions treated (77 [88.5%]), only 13 practitioners (14.9%) estimated they treated more than 11 women in the past year. This is surprisingly given that LBPGP is estimated to effect up to two thirds of pregnant women and that there is promising evidence for the use of acupuncture in pregnancy related pelvic pain over usual care (Liddle 2015). With an interest amongst physiotherapists in using acupuncture to treat LBPGP (Bishop et al 2015; McDowell et al 2019) and with observational studies indicating women perceive positive clinical benefits from treatment (Betts et al 2016; Soliday & Betts 2018) this may be an important area for acupuncturists to promote as part of their clinical practice.

It was interesting that in this survey the majority of referrals from medical health professions were for pregnancy related treatment. This acceptance of acupuncture by medical health professionals for treatment in pregnancy is mirrored in the author’s (DB) experience in New Zealand, where midwives can practice acupuncture, hospital guidelines include the use of acupuncture in pregnancy and maternity acupuncture services are advertised on a hospital website. Many practitioners practice in isolation and have a focus on individualise clinical practice. It may be that by belonging to a group such as ACT would assist practitioners to expand their networks and promote acupuncture an a non -pharmacologic treatment during pregnancy with interested medical colleagues.

**Limitations**

While there was a high response rate to this survey the generalisability of these findings is limited as it reflects reflect the practice of a small group of acupuncturists with the UK. There were also a number of questions respondents did not answer which in a small sample size may have influenced the results reported.

**Conclusion**

Acupuncturists belonging to ACT were treating a wide range women health issues. The most frequent menstrual conditions treated were for irregular periods, menopause and premenstrual syndrome, while women seeking treatment due to a medical diagnosis, general fertility health and stress and relaxation were the most frequent fertility issues. Although the most frequently treated pregnancy conditions were for nausea, birth preparation, and induction, over 50% of practitioners also treating pregnancy related lower back and pelvic pain, breech, threatened miscarriage and headaches and migraines. Only a minority of practitioners were attending births. Referrals from medical health professionals were more common for pregnancy related conditions than for fertility or menstrual health. It may be that acupuncturists from other countries would benefit from modelling this approach of creating specialised groups to support their practice in women’s health, especially maternity acupuncture to build referral networks with medical health professionals.

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**Authors’ contribution**

Debra Betts and Mike Armour designed the survey and Nicola Robinson advised on content and ethical approval. Mike Armour helped with data analyses. All authors were involved in drafting and critically revising the manuscript. All authors have read and approved the final manuscript.