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Traditional Chinese medicine

Women's experiences in the treatment of infertility

Background

Infertility affects about 15% of couples. Many women proceed to reproductive clinics for in vitro fertilisation, with some exploring a range of alternative or complementary options. We explored women's experiences with traditional Chinese medicine (TCM) for the treatment of infertility.

Methods

We interviewed 25 women with primary or secondary infertility, recurrent miscarriage or stillbirth who had consulted TCM practitioners. We explored women's experience of TCM and fertility clinics and analysed interviews thematically.

Results

Women appreciated the noninvasive diagnostic techniques TCM practitioners used to identify 'imbalances' causing infertility, learnt how to assess fertility indicators, and valued the focused personal care provided. All noticed improved menstrual cycles. Women wished for integration of holistic therapies in infertility management.

Discussion

Our study highlights the need for patient centred care and fertility education, and suggests that some women see a possible role for TCM as part of infertility management.

Keywords: qualitative research; medicine, traditional Chinese; women; fertility; infertility

Having a child is not always easy, with about one in 6 Australian couples currently struggling with impaired fertility.¹ Infertility, usually defined as the failure to conceive after 1 year of unprotected intercourse or the inability to achieve a live birth, can be caused by male or female factors, and about 22% of cases are unexplained.¹ Couples seeking help are usually referred to assisted reproductive technology (ART), and ART use is growing, with 62 000 in vitro fertilisation (IVF) cycles undertaken in Australia in 2008, an increase of 50% since 2004.¹

However, ART is costly for governments and individuals in Australia. For example, the current Medicare Benefits Schedule (MBS) fees for initial and subsequent IVF cycles proceeding to oocyte retrieval within a calendar year are \$2940 and \$2750 respectively, in addition to corresponding out-of-pocket expenses for individuals of approximately \$2500 and \$2000 per cycle.² Further costs apply for medication, consultations, and any extra procedures such as artificial insemination and embryo transfer. In addition to the financial burden, women undergoing IVF experience physical and emotional costs.³ Moreover, ART does not always achieve the desired outcome. Only 17% of 62 000 IVF cycles performed in 2008 resulted in live births.¹

In many areas of health consumers wish for broad information to support therapy choice, including information about alternative, minimally invasive health interventions.⁴⁻⁶ Complementary and alternative medicine (CAM) use for a range of health conditions is increasing both in Australia and overseas.⁷

While 40% of patients in a United Kingdom private reproductive clinic had used various

forms of CAM in addition to conventional therapy for infertility,⁸ it is not known to what extent women seek alternative treatment for infertility in Australia. However, 1.1% of women in Australia who consulted a general practitioner for infertility used herbal therapies between 1998 and 2004.⁹

Therapies such as traditional Chinese medicine (TCM) might offer alternative approaches to improving fertility.¹⁰⁻¹² Acupuncture to assist conception is increasingly accepted as adjunct treatment with IVF.^{13,14} Herbal and dietary therapies have been used for many centuries in China, and are currently being used both independently and as an adjunct to Western medical approaches.^{15,16} Traditional Chinese medicine diagnosis considers general health, pulse and tongue examination, menstrual health including blood colour, texture and flow, duration and frequency, temperature variation and pain.^{16,17}

While in Australia herbal medicines including those used in TCM are categorised as 'Listed Medicines' by the Australian Therapeutic Goods Administration, they do not require registration, although they are evaluated for quality and safety but not efficacy.¹⁸ English language evidence for TCM efficacy for fertility is growing, but with recommendations for further larger scale research.^{10-12,15} The Cochrane Database is collecting reviews of TCM and other complementary therapies as well as increasing its data base of randomised controlled trials, although currently most Cochrane reviews of TCM are inconclusive, due to poor design and a wide range of study methodologies.^{19,20} Traditional Chinese medicine is practised throughout Australia and while currently only Victorian TCM practitioners are required to be professionally registered, registration of TCM practitioners will be mandatory Australia wide from July 2012.²¹

In 2010, a 3 month treatment period with TCM including consultation, herbal formulae and acupuncture cost about \$600–800.

With the current public debate about costs and effectiveness of IVF and with TCM practice becoming regulated nationally, it seems timely to investigate TCM as a possible approach for infertility management in Australia.^{22,23} Our study is the first to explore women’s experiences of TCM therapy for infertility.

Methods

We targeted women of reproductive age (20–45 years), who at the time of the study were consulting or had previously consulted a TCM practitioner for infertility treatment. We included women with primary (nulliparous) or secondary infertility (primi- or bi-parous), recurrent miscarriage (≥3 gravida) or stillbirth (>20 weeks gestation). Women may have received treatment in fertility clinics. We excluded women whose partner had been diagnosed with male factor infertility.

We recruited Australia wide between November 2008 and February 2010, through newspaper advertisements and internet forums and through TCM practitioners. We sent study information, demographic data forms and consent forms to 26 women who expressed interest in participating before the interview, and collected completed forms either at the interview or by mail. One woman was not eligible due to multiparity >3. All communication was in English. Participants were given a shopping voucher to compensate for costs.

Semistructured interviews were conducted face-to-face for South Australian women and by telephone for interstate women. Most interviews were conducted at the University of Adelaide, South Australia.

We explored women’s experiences with infertility, why they chose TCM, their physical and emotional experiences of any ART and TCM, and their perceptions of Western and traditional Chinese medicine approaches.

The hour-long interviews were conducted by a qualified, experienced female counsellor/researcher (AA), in view of the sensitive nature of the issues and the potential for emotional distress. The researcher maintained awareness of personal views, the potential for bias and

the importance of maintaining objectivity.²⁴ Recruitment ceased when thematic saturation was reached.²⁵

The interviews were audiotaped, transcribed and analysed by two researchers independently using thematic analysis and the computer program NVivo 8. Any differences in interpretation were scrutinised for meaning. Quantitative information was analysed by SPSS 15.

The study was approved by the University of Adelaide Human Research Ethics Committee.

Results

Study participants

We interviewed 25 women, recruited through three TCM practitioners (64%), other participants (16%), two internet forums (12%), and advertisements in two newspapers (8%) Australia wide. Women came from varied educational and employment backgrounds. Most had tertiary qualifications (*Table 1*).

Women’s infertility history

Most women in our study had problems with conception (n=19, 76%), of these the majority had been diagnosed with unexplained infertility (n=11), others with polycystic ovaries or polycystic ovary syndrome (PCOS) (n=4), endometriosis (n=3), or poor egg quality (n=1). One-fifth had not been able to carry a pregnancy to term suffering unexplained recurrent miscarriages (range 3–5, n=3) or stillbirths (n=3). Three women in our study had secondary infertility.

Reasons women chose TCM therapy

Most women (n=17, 68%) had attended a fertility clinic and had then proceeded to TCM, of those 14 (56%) had been unsuccessful with IVF and were seeking other means to continue their quest for having a child, while three (12%) preferred to try a less invasive therapy initially. Others (32%) had attended TCM first and indicated that they wanted to understand the underlying causes of infertility before considering drug therapy or IVF:

‘I’ve sought TCM rather than IVF path, mainly because I don’t like drugs... I like the holistic approach.’ (ID 3)

‘The doctors seemed to have washed their hands of me because there was nothing visibly wrong with me... there’s no reason why. I don’t

know if that’s right because normally there’s a reason why. I don’t believe in unexplained, there’s got to be some reason.’ (ID 25)

Two-thirds of women (n=17, 68%) had heard about TCM through friends, three (12%) had read about TCM online and in internet forums, three (12%) had seen a TCM practitioner for health problems unrelated to fertility, and one was referred by her GP.

The following four major themes were identified.

Emotional pain

All the women expressed the emotional pain of infertility.

‘It’s horrible, it’s very horrible... it’s so frustrating to wait and wait, and not know when you’re ovulating – it’s very disheartening and at the moment having a cycle that’s gone for so long, sometimes I just think “what have I done to my body that this is happening, what did I do?” ’ (ID 3)

Table 1. Participants’ demographic information

| | | n=25 | % |
|--|-------------------------------|------|----|
| Age group at time of interview (years) | 30–34 | 6 | 24 |
| | 35–39 | 12 | 48 |
| | 40–44 | 7 | 28 |
| Work status | Working | 21 | 84 |
| Education | Secondary school | 6 | 24 |
| | Postsecondary vocational | 5 | 20 |
| | University degree | 11 | 44 |
| | Postgraduate degree | 3 | 12 |
| Place of birth | Australia | 20 | 80 |
| | Overseas English speaking | 3 | 12 |
| | Overseas non-English speaking | 2 | 8 |
| Place of residence | South Australia metropolitan | 20 | 80 |
| | South Australia rural | 2 | 8 |
| | Interstate | 3 | 12 |

'Fair enough you can't dance or you can't cook or you can't sew but to not be able to have a child! I just couldn't fathom that at all, and I'd always been really fit and healthy and played top level sport and thought my body is a temple, it's got to work, what are you talking about?' (ID 17)

They empathised with other women facing fertility difficulties and wished to help them by sharing their experiences, hoping to reduce isolation and raise awareness of TCM through this study.

Women's experience of TCM

All women in the study received Chinese herbal remedies, often in combination with acupuncture, as well as lifestyle and dietary advice according to TCM diagnostic principles. The following four subthemes emerged.

Holistic and personalised approach

Women appreciated TCM's holistic and personalised investigation into underlying causes of infertility. Traditional Chinese medicine practitioners investigated women's general health, menstrual history and lifestyle characteristics such as diet. Practitioners used noninvasive diagnostic techniques including the basal body temperature (BBT) chart and examination of pulse and tongue.

'The TCM practitioner looks more at your whole body. She checks your pulse and looks at your tongue. She's not overly interested in one specific area, whereas at the gynaecologist it's very specific.' (ID 15)

'I felt more of a person with the TCM practitioner. Whereas at the IVF clinic you're just another client... you've got to go through their process, there's no looking at individual differences.' (ID 20)

Continuity of care

Women benefitted emotionally from ongoing personal care by TCM practitioners and believed that the ongoing personalised therapy supported improvements in reproductive and general health. This contrasted with reported fragmented, impersonal care by reproductive specialists.

'To have somebody who felt like they were on your side, just made a really big difference.' (ID 1)

'They could do more before you start that IVF process to empower you a bit more rather than you feeling like you're just a cog in the machine. You rock up and you leave and I know they have to do that for the efficiency of their business but it can be quite disempowering in terms of you as an individual going through that process... I just felt like I was getting tossed around in the wind.' (ID 19)

In addition, women reported continued TCM care during pregnancy, for example, monitoring their BBT daily to detect slight temperature changes alerting to the influence of certain foods on early pregnancy stability.

'It is really great with both of the TCM practitioners I saw, once I did fall pregnant they continued the treatment through the pregnancies to ensure that not only I kept the baby but also to ensure that the baby was as healthy as it could possibly be... both practitioners I saw on a weekly basis right through the pregnancies.' (ID 6)

'I take my temperature every day, I text the TCM practitioner.' (ID 16)

Education about fertility indicators

Women felt informed and empowered by better understanding of fertility indicators. They learnt how to keep and understand a BBT chart to follow temperature fluctuations and observe other changes in their menstrual cycle. In addition to BBT pattern, the quality of the menstruation, manifested by colour, flow, length, and frequency and mucus quality provided them with clues to their fertility status.

All women reported menstrual changes after 1–3 months of TCM therapy, including regulation of temperature pattern and cycle length or changes to blood and mucus quality.

'My periods changed, they were heavy and painful and dark blood and then very light for those second, 3 days following. After some months of TCM treatment they became much more steady flow and a brighter red colour and far less painful.' (ID 1)

'I had a very irregular cycle... I would have 1 week, then 6 or 7 week cycle, then an 8 week cycle, I was so far out. The TCM practitioner was the first one to start pulling that back. I was getting results, have more regular periods. It's taken 5 or 6 years to get to this point, to actually have a 28–30 day cycle every month. I think I ovulate most of the time, too.' (ID 2)

'My temperature has changed, it has dropped. When I first started seeing the TCM practitioner I was always in the 36.6, 36.7 [in the follicular phase], I've definitely dropped, but not quite as much as she'd like me to drop.' (ID 26)

Women learnt that these changes indicated enhanced quality of reproductive environment, including the oocytes and endometrium, and therefore likelihood of conception and implantation.

'The TCM practitioner explained the importance of a healthy mind and body. Your body is the soil and IVF is the seed, so if you've got a quality seed with IVF and you've got rubbish soil, nothing is going to grow in there.' (ID 23)

In addition, women learnt that diet can play a pivotal role in influencing fertility.^{16,17,26}

Observing BBT charts showing changes to their cycle through dietary adjustments helped women to persist with treatment and dietary advice.

'The TCM practitioner said that from the two pregnancies my pancreas is very stressed so I'm producing too much insulin, and eating bread and cereal and fruit makes me produce a lot of insulin. And the fluctuation of insulin affects your progesterone, so if my insulin is high my progesterone is low and also my temperature is very erratic. It would be difficult to maintain a pregnancy when your progesterone is low and your temperature is erratic. So the diet can influence that.' (ID 15)

Observed fertility and pregnancy changes

Women attributed improved fertility and pregnancy outcomes to TCM. At the time of writing, five women in the study had given birth and one was pregnant following TCM treatment alone. In addition, five women conceived through IVF following TCM treatment (two births and three pregnancies at time of writing) after previous unsuccessful IVF treatments (range 2–15 cycles). One of these had suffered multiple miscarriages and a stillbirth and one had experienced miscarriage and ectopic pregnancy.

Integrative care

Women perceived TCM and Western medical treatment as complementary. Women recognised the specific strengths and complementarities

of ART and TCM and felt that it would benefit women if Western and TCM practitioners were to work in cooperation with each other to improve choice of treatment and fertility outcomes. In particular they wanted GPs to be informed about TCM.

Women believed that common diagnostic tools used in TCM such as characteristics of the menstrual cycle could be adopted by GPs to identify fertility problems earlier and facilitate exploration of causes through TCM, which might avoid the need for IVF and reduce the trauma and financial burden of addressing infertility. In addition, women saw that TCM might increase the likelihood of IVF success by preparing the body for conception.

'People shouldn't have to go through the infertility journey without knowing [about TCM]. Then they can make a choice, they can try TCM, they don't have to, but at least they know about it.' (ID 5)

'I've tried for 3 years and nothing has happened... The doctor needs to be informed. I went from my doctor to IVF – if I had gone to TCM before IVF I think this would have helped me a lot more than IVF on its own.' (ID 16 [conceived in the first IVF cycle after TCM])

Earlier fertility awareness

Women reported being undereducated about fertility. All the women regretted not knowing earlier that achieving and maintaining pregnancy might not be easy, that the menstrual cycle reveals fertility information, that lifestyle affects fertility and that holistic therapy, such as TCM might help prevent, diagnose and treat fertility problems early. They emphasised the need for early education for young women about fertility, and risk factors beyond the current focus on contraception and diagnosis of disease.

'I never knew what getting pregnant involved because so much of the education was around, whatever you do, don't get pregnant.' (ID 19)

Discussion

In our study women viewed their experience of TCM therapy positively, as they appreciated the personal diagnostic approach of TCM and the continuity of care compared to their experience of fragmented care in the Western medical system. Women further appreciated

being educated about how to recognise fertility indicators and factors affecting their fertility. This gave women control, enabling them to influence their fertility through lifestyle change and targeted treatment. The noninvasive therapy suited their preference for minimal intervention.

In our study of women who had difficulty with conception and/or pregnancy, almost half conceived after TCM therapy (at the time of writing). Many of these women had previously undergone IVF unsuccessfully. Women observed improvements in the fertility indicators used in TCM by systematic observation of their menstrual cycles, as described in the literature, such as blood colour and texture in addition to temperature pattern and cycle frequency.^{16,17}

This group of women suggested a possibly broader future role for TCM in enhancing fertility, as well as potential for improved integration of care for couples facing infertility.

The women in our study were all current or recent users of TCM who were satisfied with TCM. Women who may have had negative experiences of TCM were not represented. Also, 14 women had proceeded to TCM after unsuccessful IVF treatment, and their perceptions of IVF procedures may not be representative of successful IVF participants. We recognise the small study population, and particularly the self selection bias, potentially limits the generalisability of these findings. However, the sample size was sufficient to reach thematic saturation and is in line with other qualitative studies on related topics.²⁷

To our knowledge, this is the first study examining women's perceptions of TCM therapy for fertility. Women appreciated being educated about fertility indicators by TCM practitioners. Women desired a better and earlier fertility education to enable well informed decision making, and preferred minimal levels of health intervention where possible. Women wished for doctors to be aware and inclusive of complementary therapies when giving information, and desired personal, targeted treatment.^{4–6} Our study expands on previous work demonstrating the distress caused by fragmented and impersonal care for women experiencing infertility.^{3,6,28} It reinforces the role for GPs in providing education, personal support and continuity for women referred for fertility treatment.^{28,29}

Implications for general practice

Our study suggests that:

- women with fertility concerns appreciate a holistic, personalised approach
- education of women about the usefulness of detailed observation of the menstrual cycle may be desired
- further research investigating fertility outcomes from TCM diagnosis and treatment, would assist in defining its role in integrated care.

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