The benefits of yoga during pregnancy: a literature review

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Yoga has become a popular form of complementary alternative medicine, and is often advocated for a wide range of conditions. Yoga explores the mind and body. Every woman goes through a different pregnancy journey with a variety of physical and psychological symptoms. In today’s western world, health services focus a great deal on the medical management of pregnancy. The aim of this literature review is to offer insight into and understanding of the benefits of yoga in pregnancy. Electronic data bases of PubMed, CINAHL and Science direct were searched in December 2017 for primary research studies published in the English language from 2005 to 2017. A total of 12 studies were included in this review. Three themes emerged; ‘benefits on mental health’, ‘reduction in pain’ and ‘birth outcome benefits’.

Introduction
Yoga has gained wide popularity as a holistic mind-body therapy approach to physical, mental and spiritual wellbeing (Bijlani 2008). The word ‘yoga’ means ‘to unite’, to join the mind, body and spirit, and direct one’s attention by calming the restless mind (Nagarathna and Nagendra 2008).

Pregnancy is a transformative time, during which the overall wellbeing of the mother is critical, with distinct physiological changes, accompanied by stress due to the unique physical and psychological demands (Kinsella and Monck 2009).

Yoga during pregnancy is an extensive practice, and its benefits have been recognised internationally. Pregnancy yoga is a gentle form of yoga in which instructors are aware of the unique needs of pregnant women (Kinser and Lyon 2008). The aim of this review was to evaluate some of the recent literature that highlights the effects of yoga during pregnancy.

Methodology

A literature review was undertaken in December 2017 by searching the databases of PubMed, CINAHL and Science direct, with inclusion criteria limited to primary research studies published in the English language, for a 12-year period from 2005 to 2017, that reported on the effects of yoga during pregnancy. Search terms such as, ‘yoga’, ‘complementary medicine’, ‘woman’s’, ‘antenatal’, ‘postnatal’, ‘intrapartum’, ‘experience’, were combined using Boolean operand ‘and’ to develop a search string (Boolean operand – such as ‘and’ or ‘or’ – are commonly used in reporting literature reviews or systematic reviews to broaden or narrow the search results). The retrieved papers were reviewed for selection by title, abstract and full text, and data were extracted from included studies, and analysed to derive themes.

Search results

The search resulted in 406 studies; 296 of these were excluded from screening by title and abstract and 98 studies were excluded from selection by full text. The remaining 12 studies were further reviewed for data extraction and analysis to derive themes (Table 1 presents results of screening and selection).

Of the 12 studies included, eight had used a randomised control trial (RCT), two a qualitative design and a prospective-matched and observational design, and one had used a survey design, involving a total of 1,152 women from seven countries (Table 2 presents the summary characteristics of each included study). Three major themes were derived; ‘mental health benefits’, ‘reduction in pain’ and ‘benefits related to birth outcome’. 
**Mental health benefits**

Benefits of yoga related to women’s mental health, were reported in seven studies. Pregnancy yoga has been reported to be effective in improving the quality of life of pregnant women who were distressed by the overwhelming physiological, psychological and emotional changes in pregnancy (Rakhshani et al, 2010), reduction in mental health concerns and improvements in pregnancy experiences (Satyapriya et al, 2013).

Yoga practices during pregnancy were identified to be significantly associated with optimism, power and wellbeing (Reis and Alligood 2014), and reduction of physiological anxiety and persistence of these effects after repeated yoga sessions (Newham et al 2014; Smith et al, 2007).

Studies on women’s experiences of participating in prenatal yoga suggested that yoga was sought by women to deal with feelings of stress and depressive symptoms, and offered a complementary-health approach to self-manage their stress (Kinser and Masho 2015a). Women perceived yoga to be an effective means of reducing stress levels, isolation and physical discomforts, and enhancing relationship-building with others (Kinser and Masho 2015b), also developing more patience and a relaxed mood to face the bodily changes (Sun et al, 2010).
Reduction in pain

The benefits of yoga in terms of reducing pain are reported in four studies. Yoga is a non-pharmacological therapy, which improves maternal strength and flexibility while simultaneously enhancing the woman’s ability to become more in tune with her body and prepare her for labour (Sun et al, 2010).

Yoga as a non-pharmacological and complementary therapy was identified to be an effective and viable method of managing pain, and was associated with a significant reduction in epidural rate (Levett et al, 2016). A significant reduction in pain during labour
and improved maternal comfort and satisfaction were some of the frequently reported key findings (Chuntharapat et al, 2008; Jahdi et al, 2017; Sun et al, 2010).

**Birth outcome benefits**

Benefits of yoga in relation to positive birth outcomes have been reported in four studies. Yoga, by its holistic approach to health, appears to be safe in pregnancy, and this leads to improved outcomes.

The secondary clinical outcome as a result of practising yoga found that women were more likely to experience a normal vaginal birth, less likely to be augmented, and reduction in birth by caesarean section (Jahdi et al, 2017), with reduced perineal trauma and shortened second stage of labour (Chuntharapat et al, 2008), with decreased medical interventions and increased personal control for women (Levett et al, 2016). Other reported benefits of yoga included a significant increase in mean gestational age of babies and decreased percentage of intrauterine growth retardation (IUGR) and IUGR associated with pregnancy-induced hypertension (Narendran et al, 2005).

**Discussion**

This review demonstrates multiple positive effects of yoga including emotional and psychological wellbeing, physical benefits, pain management and positive birth outcomes.

Anxiety and depression have been identified as two common responses to stressfully demanding situations affecting healthy progression of pregnancy (Rakhshani et al, 2010). One of the key findings of this review suggested benefits of yoga in terms of mental health, by empowering women to manage their stress and facilitating optimism (Satyapriya et al, 2013). Yoga during pregnancy is significantly associated with reduced levels of pain (Levett et al, 2016) and positive birth outcomes (Chuntharapat et al, 2008) for both mother and baby. This is relevant to midwifery practice. Supporting a woman and helping her to cope with pain during labour and birth is one of the primary roles of a midwife. Awareness of the evidence about benefits of yoga can help midwives and other healthcare professionals play this role efficiently and effectively making it a positive experience for every woman they care for.
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<tr>
<td>Satyapriya et al 2013</td>
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<td>Smith et al 2007</td>
<td>To investigate the health benefits of yoga in reducing stress, anxiety and poor quality of life in pregnant women</td>
<td>Randomised comparative trial with 117 women in South Australia</td>
<td>Questionnaires</td>
<td>Intention-to-treat SPSS V12.0.3</td>
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<td>Kinser and Masho 2015a</td>
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<td>Kinser and Masho 2015b</td>
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### Limitations

Findings of this review are limited to studies published over the 12-year period.

### Implications

Future research to examine the benefits of yoga on women’s antenatal, intranatal and postnatal health can provide strong evidence for practice. This will empower midwives to implement this evidence in practise during antenatal education, preparation for birth and as a form of non-pharmacological pain relief. **TPM**

### References


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