Perceptions and experiences of pregnant Chinese women in Hong Kong on prenatal meditation: A qualitative study

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ABSTRACT

Background and Objective: Quantitative research has evidences that prenatal meditation has positive effects on maternal health but lack of qualitative data in this area. This study explored the perceptions and experiences of pregnant Chinese women in Hong Kong on prenatal meditation.

Methods: A qualitative study. Data were collected using digitally recorded, face-to-face, semi-structured interviews. Data were analyzed using thematic analysis. Setting: Prenatal meditation program (Eastern Based Meditative Intervention, EBMI) for pregnant Chinese women in Hong Kong who were attending the hospital clinic for routine perinatal care. Participants: 43 participants were chosen from groups of pregnant Chinese women who attended the prenatal meditation program.

Results: Six themes were developed during 1st interview when the participants first attended the course, including self-introduction, changes during pregnancy and how to solve problems, self-reported difference in mental and social condition before and after pregnancy, acceptance of complications arise during pregnancy, beliefs about bio-psycho-socio-spiritual interaction in relation to pregnancy health and child health and reasons why they participate in the intervention. Three themes emerged from the data collected during 2nd interview at 36 weeks, including participants’ opinion in practicing EBMI, effects of EBMI on bio-psycho-socio-spiritual aspects and suggestions on improvement of EBMI.

Conclusions: This research adds to the overall body of knowledge that prenatal meditation is important to facilitate pregnant women in coping with physical distress, better equipped in crisis management, strengthen social relationship and result in spiritual empowerment. Incorporation of meditation in prenatal care will be a necessity in future.

Key Words: Maternal health, Prenatal care, Mindfulness, Meditation, Qualitative

1. INTRODUCTION

Adverse maternal health is well known as an important factor for poor pregnancy outcomes and affects maternal health, infant health and child health.[11–11] Evidences of positive effects on maternal health through perinatal interventions are convincing.[12–34] Most of these researches are quantitative but qualitative studies are important for a broadened perspective on practice and research.[3, 11, 28, 35–43] The author has developed an Eastern based meditative intervention (EBMI) for pregnant Chinese women in Hong Kong.[15] The characteristic of EBMI is that through “self” meditative practice; pregnant women can have right awareness, change their mental process, train and transform their mind. EBMI improves the capacity for recognizing and solving problems,[44] coping with stressful situation,[45] increase positive thinking and pleasant activities, improving self-esteem, increasing
self-care and learning skills to increase social support, and identifying and exploring unrealistic expectations about pregnancy and motherhood.\textsuperscript{[46]} The intervention was delivered in a group format. Contents of EBMI were listed in Table 1. A formal quantitative evaluation to determine the effectiveness of EBMI on maternal health, foetal health and infant health was undertaken in Hong Kong (2007-2009). Two articles demonstrating the results have been published\textsuperscript{[16, 17]} The evaluation also included a qualitative component of individual interviews with group participants, who aimed to explore in depth pregnant women’s experiences on EBMI and was presented in present study. The acceptability and improvement of EBMI can be assessed by present exploratory qualitative research.

Table 1. Contents of EBMI

| • Mindful eating: mindful eating involves paying full attention to the experience of eating and drinking, both inside and outside the body |
| • Mindful walking: we walk simply for the act of walking, knowing that we are walking |
| • Mindful prenatal and postnatal exercises |
| • Daily practice of “self-help, helping others”: self-affirmation increases self-compassion and pro-social behaviours |
| • Crisis intervention: turn curse into blessing |
| • Daily practice of “bliss” |
| • Let go |
| • Three minutes-breathing practice |
| • Body scan: a mindfulness exercise simply to notice and be aware of your body |
| • Mindful breathing: the purpose of breathing mindfulness is to simply notice, accept and be aware of your breath |
| • Four Immeasurables Meditation: generate equanimity, love, compassion and joy towards an immeasurable number of sentient beings |

2. METHODS

2.1 Design
This study was part of a larger project examining the effects of EBMI on maternal health, fetal health and child health in Hong Kong. Data were generated through semi-structured interviews.\textsuperscript{[47]}

2.2 Sample and setting
Participants were pregnant Chinese women who attended the EBMI courses offered by the author in Hong Kong (2007-2009). All women were invited to participate until 43 participants had been recruited. All participants were invited to attend a qualitative semi-structured interview when they first attended the course (first interview at the end of first lesson) (T1) and arranged second interview around 36 weeks (T2). Only one case did not complete the second interview. To summarize, the youngest was 21 years old and the oldest was 43. Half of the participants were of postgraduate educational level and 34 participants were working women. Sixteen of the participants had no religious belief.

2.3 Data collection
There were two interviewers (who were blinded to the study as they did not attend the course and had not taken part in the design of the research) randomly assigned to conduct the interviews but the same interviewer interviewed the same patient. Both interviewers are social workers with relevant training in interview and have full instruction on how to conduct the interviews for present research. The interviews varied from 30 minutes to one hour and were carried out at a venue which was comfortable to the participants. The whole process was audio-taped. A semi-structured interview guide was developed for the first and second interviews. A list of topics with semi-opened questions guided the interviews (see Tables 2 and 3).
2.4 Data analysis

Simple descriptive statistics were used to detail the participant characteristics. Interviews were transcribed in full for detailed analysis. Techniques of thematic analysis were used with the interview data. Broad headings were named by the researcher. The text was divided into codes, sub-categories and categories. Quotes reflecting the different sub-categories are presented. Codes were attributed to the meaning units referring to the same contents and gathered into sub-categories and categories. The qualitative findings are presented as descriptive summaries and interpretations of the key themes identified, supported and illustrated by quotes from the raw data.

2.5 Ethics

I declare that the research is the original work of the author. The research was approved by the Research Ethics Committee (Kowloon Central/Kowloon East), Hospital Authority of Hong Kong.

3. RESULTS

3.1 Qualitative results at first interview

Qualitative data collected at 1st interview (T1) including several main themes:

1) Self-introduction of the participants’ personality, mental health and financial condition
2) Changes including physical, mental and social and how to solve the problems
3) Self-reported difference in mental and social condition before and after pregnancy
4) Acceptance of complications arise during pregnancy, including medical and psycho-social problems
5) Beliefs about bio-psycho-socio-spiritual interaction in relation to pregnancy health and child health
6) Reasons why they participate in the intervention

Theme #1 Self introduction on personality, mental health and financial condition

When asked about self-description of the participants’ personalities, twelve of them said they were pessimistic most of the time:

“...pessimistic, aware that always think in a negative way...behave positive before my friends or the people I don’t know much...” (KP32)

Twenty-five of the participants’ said they were optimistic in their life:

“My job is market research. I am an optimistic person but I would lose my temper if my colleague’s performance is substandard.” (KP86)

Four of them felt life was difficult while 34 of the pregnant Chinese women reported that they enjoyed life most of the time. Nearly all of them had no financial difficulties and nine of them are wealthy. Thirty-four of them were planned to be pregnant.

Theme #2 Changes during pregnancy and problem solving

Fourteen of the participants’ reported that they had minimal physical distress during pregnancy. Seven of them had occasionally physical discomfort. Five of them always had lots of illness feeling like nausea, vomiting, general malaise, and low back pain. They always found that pregnancy symptoms distressing. Seven pregnant Chinese women found that although they had uncomfortable feeling everyday but they did not feel sad. Twenty-four of the participants said that they could overcome physical distress during pregnancy. As specified by a participant, “I have vomiting during the first month and also have gastroenteritis. The symptoms make me feel sick. The symptoms disappeared after three months and now I do not have any physical discomforts. I do not feel sick and suffer. I know that all symptoms and signs are normal phenomenon. I accept all these changes. I tell myself that for the sake of my baby, all these sufferings are worthwhile. I eat slowly, and then I shall feel better.” (KP28)

When asked about how to surmount the physical symptoms complicating pregnancy, most of them had no definite answers. One said she was taking herbal medicine. One believed that psychotherapy might help. One relied on her religious support. Most of them said they accepted all these physical distress for the sake of the baby. As one participant illustrated it, “I am good at overcoming difficulties. I would console myself with the thought that these situations are normal. I have learnt it from the books.” (KP34)

Thirteen of the participants did not feel any emotional distress. Ten of them occasionally found emotional upset. Eight of the pregnant women reported that they had lot of worries every day. Majority of the group did not say how to cope with emotional distress. Twenty-four of the interview group said emotional problems did not affect their relationship with their families. Three said occasionally had problem and only two reported that their emotional distress have an effect on their family bonding frequently. Majority of the participants’ did not feel their emotional problems had effect on social relationship with their friends and colleagues. Only two found hardship on social liaison due to their emotional distress dur-
ing pregnancy. Sixteen of them said they could cope with their emotional distress but most of them did not specify how. Three said they overcome the difficulties because of their religion. One reported that psychological treatment was useful. One said that doing exercise could help, “I go to sleep, bathing or doing exercise to overcome my emotional distress. I blame my husband to express my emotion.” (KP58)

Majority of the patients knew the foetal sex during pregnancy and most of them said that the sex of the foetus did not affect their emotion. Only three of the group said foetal sex was an important index of their emotion. As one participant stated, “I do not care about the sex, but I have interest to know so that I can prepare the clothes, etc.” (KP26)

**Theme #3 Comparisons between pre-pregnancy and pregnancy psycho-socio-spiritual status**

Twenty-one of the group said that they always take care of themselves no matter whether they are pregnant. Twenty-four of the patients always bring fun to themselves before pregnant. Twenty-seven of them always tried to make them happy after they get pregnant. Majority of the group will particularly take care of their daily life and feeling during the pregnancy. For example, “...more positive thinking, forgive my own fault...I am happy when I am pregnant...” (KP56)

Nineteen of the participants’ always care for others happiness before they are pregnant and 21 of the group always bring happiness to others after pregnant. In the words of one participant, “…think more about myself before but want to contribute to the community and help the needy after pregnancy...no specific action, but consider the needy of others more e.g., try to understand the feelings of parents...” (KP32)

One participant reported that she was cruel to herself before pregnant and none said that they were unkind to themselves when they were carrying their babies. Nine of the pregnant ladies said they were easily agitated before the pregnancy. Eighteen of them felt more peaceful after the pregnancy. One woman said, “I am now easier to communicate with my mother-in-law. I feel better relationship with my family.” (KP41)

**Theme #4 Acceptance of complications arising from pregnancy**

Twelve pregnant patients thought that they had the abilities to cope with complications during pregnancy, including both medical and psycho-social accidents. Only four of them said they did not know what to deal with problems arising from pregnancy. Sixteen pregnant women had psychological preparation for medical complications during pregnancy. Thirteen of the group had no idea about medical problems arising from pregnancy. For example, one participant remarked, “I am not sure...I probably have the ability to deal with...I am not certain...I have the experience of managing accidents in the past...Yes, I have...I don’t want to think about it...it is no use to have psychological preparation...We don’t know about the outcome...” (KP26)

Six participants were not worried about congenital abnormalities. Five of them always had the ideas that their new-borns were abnormal. Twenty-two pregnant women will accept that their babies had minor anomalies. Majority of them did not accept to give birth to babies with major congenital problems. Majority of the group did not accept babies with mental deficiency. One woman said, “I don’t let myself to think about the possibility that my baby may have problems...I always worry about the health of my baby...” (KP62)

**Theme #5 Beliefs about bio-psycho-socio-spiritual interaction in relation to pregnancy health and child health**

Twenty-nine of the group thought that religious belief have effects on pregnancy health. Thirty-six pregnant women
spoke about the important of spiritual health in pregnancy. Twenty-nine patients believed that spirituality of the pregnant mother is important in relation to development of the foetus. Twenty-six of the group told us that spiritual health has significant influence on child’s future development. As specified by a participant, “Spirituality affects my daily life. During early pregnancy, I bear a negative viewpoint because I feel that take care of babies are troublesome. Now I change my view, become more positive about my pregnancy because of spiritual empowerment.” (KP29)

Majority of the group thought that pregnancy health is related to future child health. Only two ladies said that there was no relationship between child health and pregnancy. Majority of the participants (n = 40) thought that there is relationship between physical health during pregnancy and foetal development. Thirty-nine participants realized the importance of mental health during pregnancy in relation to foetal health. Twenty-nine pregnant women thought that emotion during pregnancy may affect child health and development. In the word of one participant, “I believe that my baby’ EQ is developing when he or she is a foetus, not just after birth.” (KP50)

**Theme #6 Reasons for participation in the intervention**

Thirty-four of the groups said that they participated in the intervention because they were facing stress coming from pregnancy, family and work. Twenty-nine pregnant women hope that the intervention can improve their physical health. Eighteen of them expected the intervention can help them to develop better mental health. Twenty-seven women wished that intervention can cultivate their spiritual health. Seven of them would like to improve their social relationship. Twenty-nine of the group thought that the intervention can promote foetal health. Twenty-three participants aimed at foetal education. Twelve pregnant women thought that participation in the intervention can lead to better physical health of their children. Nineteen of the group aimed at promoting mental health in their offspring. One participant said, “…understand more about Mind-Body health…helps me to adapt the changes during pregnancy… I feel the stress… I have a role change… I have to take care of my BB… I want to learn more…” (KP26)

3.2 Qualitative results at second interview (36th week) (T2)

Three main themes emerged from the data collected at T2. These were:

1. Participants’ opinion in practising EBMI
2. Effects of EBMI: bio-psycho-socio-spiritual aspects
3. Suggestions on improvement of EBMI

**Theme #1 Participant’s opinion in practising EBMI**

Twenty-four participants’ practised mindfulness by eating frequently. Thirty-four pregnant women like to practise mindfulness by walking. Only one woman practised mindfulness during prenatal and postnatal exercise. Sixteen of them did not do mindfulness prenatal and postnatal exercises. Thirty-six participants had daily practise of “Self-help and helping others”. Thirty-five of the group practised the coping strategies of “crisis intervention”. Nearly all of them (n = 40) practised the action of “bliss” daily. Twenty-nine of them always had the idea of “let go”. Twenty-one pregnant women had daily practise of the “3 minutes breathing exercise”. Only eleven of the group practised “body scan”. Twenty-four participants had frequent practise of “mindful breathing”. Nineteen pregnant women practised “Four Immeasurables Meditation”.

When asked about why the participants have interest in the intervention, the most frequent answers (n = 23) were promotion of self-emotional health and healthy growth of the foetus. Eleven of them said that they have interest in the EBMI as an outlet for the stress they suffered during pregnancy. One woman said, “…can improve my emotional and psychological health…” (KP31) Eleven women thought that EBMI may improve their physical health. As specified by a participant, “Mindful eating is good for my health even when I am not pregnant.” (KP82) Fifteen participants hoped that their mental health can be improved. As one stated, “EBMI comforts my body and mind.” (KP41) Fifteen pregnant women wished to have spiritual empowerment through EBMI. Ten of the group wanted to improve their social health. In the words of one participant, “I hope I am happy after attending the EBMI. My family and friends will be happy if I have a joyful life because our emotions are inter-related.” (KP57) Fourteen of them expected EBMI to promote foetal education (Taijiao, the premise that maternal behaviour will affect the health and future development of her child). Nearly one third of the participants hoped that EBMI may improve child future health, both physically and mentally. For example, one woman remarked, “…I feel my emotion is stable after doing the exercise… I feel more relax and calm… the main motivation of doing EBMI is that I hope there are positive impacts on my foetus…” (KP69)

When asked about whether the participants found EBMI complicated, only one of them replied it was very difficult for her to practise. Majority of them (n = 32) reported that they did not encounter any problems. Nine women said that they encountered physical difficulties in practising “mindful eating”. Eight of them found their mind and body action were not in harmony during “mindful eating”. Eighteen participants reported that sometimes the environment was not suitable.
for them in practise “mindful eating”. Most of the participants found no difficulties in practise “mindful walking” and among all; it was the most favourable items in EBMI. In the word of one participant “…mindful eating is difficult to practise…I cannot practise mindful eating when I have lunch with others…mindful walking is the easiest, this is similar to my normal way of walking because I usually walk slowly…” (KP69) Another item that the participants loved most was the practise of ‘bliss’. They said that they could carry out the action at any time and any place and did not need to have any adjustment. One said, “It is a wonderful experience facing the mirror to practise ‘bliss’.” (KP39) As regards the “3 minutes breathing exercise”, those who perform the intervention encounter problems such as difficulties in the adjustment of mind and finding a suitable environment. The participants reported that they encountered physical and mental barriers when doing “body scan”. They had difficulties in getting appropriate location in performing this item. Seven of the group found that they had physical and mental challenges when doing “mindful breathing”. Seven pregnant women said it was not easy to find suitable places to practise “mindful breathing”. For example, one participant described her experience, “I cannot practise those items that require concentration because I am easily fell asleep when I calm down.” (KP80) Seven of them had difficulties in physical and mental tuning in practise “Four Immeasurables Meditation” but one woman said, “Four Immeasurables meditation is the easiest because I can apply it to my daily life.” (KP45)

The most common factor that affects the participants to practice the intervention is “busy”. They are too busy with their works. Lack of supervision is another reason in giving up the intervention. Physical problems, emotional distress, working conditions and insufficient sleep were the cause of aborting “3 minutes breathing exercise”. Small number of participants practised “body scan” because the pregnant women were occupied by other activities. Nine of the participants said that if there were evidences in supporting the effect of EBMI, they would carry on their participation. Six pregnant women said that they continued to join the intervention because they were encouraged by their “foetus”. As one participant illustrated it, “…nobody supervise me…I practise more when I attended the lectures…I am lazy at home…I have to complete other projects before I can practise EBMI…I force myself to do the intervention…I have a chart for me to fill in to check whether I have done the homework…I find that EBMI can improve my mental health, calm me down to become more optimistic and less stubborn. These are the motivations for me to practise the intervention.” (KP26)

Twenty-one pregnant women thought that the time they spent on EBMI is enough to have their expected effects. Majority (n = 34) of the group agreed that the effect of EBMI is time dependent, most frequent practise will have the best results. As stated by one woman, “…if I can persist, I can see the effect after a period…” (KP26)

Six participants said that the most valuable gain they had after their engagement in the intervention is the understanding of the important of “spirituality in pregnancy”. All participants were in the opinion EBMI is useful and they would encourage pregnant women to engage in EBMI. One participant described as, “…information on the aspect of the relationship between foetal health and emotional health of pregnant women is most useful…” (KP80)

**Theme #2 Effects of EBMI: bio-psycho-socio-spiritual aspects**

Twenty-eight pregnant women found spiritual empowerment after EBMI. As specified by a participant, “I know how important spiritual health is. I know how to take care of myself and less persistent. I am aware of the importance of spiritual empowerment and spiritual health to my foetus.” (KP32)

Twenty participants found physical improvement after EBMI. Fourteen of the group found beneficent effect on sleep quality. Half of the group (n = 25) found that they were easier to overcome physical distress after practising EBMI. As one stated, “When I feel physical discomfort, such as abdominal cramp, I focus on my breathing and the symptoms will be relieved.” (KP43)

Majority of the patients (n = 35) found improvement in emotional health. Eighteen women found changes in their personality. Majority of the group (n = 40) said they always “bliss” after the intervention. Twenty-nine participants found that they were more relaxed after EBMI. Nineteen women said they accepted their self-image. More than half of the group (n = 30) know how to take care and forgive themselves. For example, one participant remarked, “I am happier than before. I become more considerate after EBMI.” (KP56)

Twenty-eight pregnant women said they were less easily agitated. This is what one participant said, “I am now able to bear with my bad temper. In one occasion when I quarrel with others, I walk away for a while to calm down my emotion.” (KP58) Twenty-four of them said they always have some action to bring joy to themselves. Twenty-two participants have increased awareness of their stressful environment. Nearly three quarter of the group (n = 36) found increased awareness of their emotion and easier to cope with emotional distress. Twenty-eight of them said they were able to cope with the stress. Eighteen participants found that they seldom compared with others in all aspects after they take the EBMI. More than half (n = 28) of the participants said they were less stubborn and insist their opinions than before. Like one
said, “... in facing changes, first calm down... view things from different perspectives...” (KP26)

Twenty-one of the group said EBMI can promote social relationship. Half of the participants (n = 20) said their relationship with relatives and friends were in harmony. Eighteen of them said they found it easier to communicate and get alone with new friends and strangers. Seventeen pregnant women said they would forgive others’ faults after EBMI. Twenty-eight participants more care about others emotion and take care of others. Half of the group were more willing to bring happiness to other people and help others. They appreciate others joyfulness easily. In the words of one participant, “We have more common interests to share... I view things from multiple perspectives now... before I was quite isolated from strangers... I am more open now, not so anxious but easy to communicate with others... discuss things from others point of view ... remind myself not to criticize others... There is improvement in social relationship. I can make friends with strangers now...” (KP26)

Thirty-four of them felt that EBMI have improvement on maternal-foetal relationship. Majority of the participants (n = 38) thought that EBMI will achieve the aim of “foetal education”. They thought that the intervention would promote foetal health. One participant stated her experience, “When I calm down during EBMI, I can feel my foetus in a more peaceful condition.” (KP39) Ten of them said they were more acceptable to give birth to babies with congenital problems after EBMI. 30 participants said they appreciate the joy of giving birth. Half of the pregnant women reported that they were well prepared now and have confidence to deal with complications arising from pregnancy.

Theme #3 Suggestions on improvement in EBMI

Seven participants said they may gain more from the EBMI if the number of sections is increased. Six women from the group said it was easier for them to practise if the design of the intervention became simpler. Four pregnant women said it was useful if more group discussion is organised. Eight pregnant women said they needed support after the sections. One participant stated, “I am less motivated to do the exercises after the lectures. If we continue to have a time schedule to do the exercises, I shall practise more frequently. It’s good to have group discussion after the lectures.” (KP42)

4. DISCUSSION

Qualitative method is chosen for the present research in order to supplement the inadequacy of quantitative analysis.[17] Qualitative methods assisted in revealing the multiple and complex nature of the participants’ realities and multidimensional analysis of the effect EBMI in pregnancy in recent study. The characteristics of present research is that qualitative data was collected at the time of entering the research (the first lecture on intervention) (1st interview) (T1) and 36th week (2nd interview) (T2). Qualitative data at T1 allows us to have a more comprehensive view of the background of the participants and psycho-socio-spiritual aspects of pregnancy. Qualitative data at T2 concentrates on the changes of the pregnant Chinese women after the intervention.

Qualitative analysis can provide information on how “minor ailments” such as “nausea and vomiting” affect pregnant women from psychosocial perspectives.[49] Locock & Rozmovits[50] explored 73 women’s experiences of nausea and vomiting in pregnancy in United Kingdom. They said that nausea and vomiting as something to be expected, survived, resisted, resented and acknowledged by others. Present research had the same findings and most of the participants found that they can overcome physical distress during pregnancy after EBMI.

Szwajcer et al.[51] did an in-depth, face-to-face interview with five groups of 12 women about nutrition awareness and pregnancy. In respect to nutrition awareness, they identified three groups of women: (1) those who are “going all the way” i.e., try to live precisely by the book, (2) those who are “taking the flexible way”, i.e., more aware of their nutrition, but are more flexible in handling it, and (3) women who “continue the same way”, i.e., have a no-nonsense mentality and do not experience essential shifts in their nutrition awareness. All participants in present study care about their diet and daily activities during pregnancy. Recent study also found that the participants accept herbal medicine during pregnancy, data which can only be collected by qualitative study.

Due to the advance in prenatal diagnosis, many congenital problems can be diagnosed early in pregnancy and lead to emotional problems for pregnant women.[52–54] Hunt et al.[55] did a secondary analysis of narrative qualitative interview data on parents’ experiences of decisions after ending a pregnancy for fetal abnormality. Many of the decisions that people face in the immediate aftermath of a termination for fetal abnormality are upsetting. They described their experiences, and often distress, of facing painful decisions consequent upon their decision to terminate the pregnancy and their sense of being unprepared for these decisions. Recent study particularly asked about these issues. Current results showed that most of the participants did not accept to give birth to a baby with congenital abnormalities and mental deficiency. They are not prepared for such misshapen. Averting the avoidable loss of women’ lives in pregnancy and childbirth has been a subject of research for the last two
These include disruption of bodily integrity through injury, frequently by the loss of the baby and by further significant disruptions in three overlapping dimensions of women’s lives. These include disruption of bodily integrity through injury, ongoing illness and loss of strength and stamina; disruption of the household economy through high expenditure, debts and loss of productive capacity; and disruption of social identity and social stability. From current data, only two of the pregnant women interviewed have ideas about major obstetric complications during pregnancy and all of them were not prepared to encounter “near-miss” condition. Present study had the feeling that they will suffer from major psychological trauma if they encounter major complications because they have no psychological preparation for such condition. Present research revealed that participants have confidence to deal with complications arising from pregnancy after EBMI and was more acceptable to give birth to babies with congenital problems. EBMI improves the coping stress response of the participants particularly in crisis management.

Qualitative study showed that cultural belief is important in all aspects of pregnancy. Savarimuthu et al.[57] employed qualitative methodology to assess psychosocial causal factors of post-partum depression in a representative sample of women in rural South India. They found that many social and cultural factors have major impact on post-partum depression. Wittkowski et al.[58] used a mixed method systematic review to determine culturally determined risk factors for postnatal depression in Sub-Saharan Arica. Present research showed that cultural factors are best investigated by qualitative research and awareness of the impact of cultural effect on psycho-social experience of pregnancy will help health professionals to provide a woman-centered model of care that is culturally sensitive.

Qualitative method is useful in studying the effect of EBMI as there is no existing instrument to assess its effectiveness[58, 59] and little data in the literature for comparison.[60] Duncan & Bardacke[20] utilized both quantitative and qualitative methodology to assess the results of their MBCP program. They found that qualitative reports from participants expand upon the quantitative findings, with the majority of participants reporting perceived benefits of using mindfulness practices during the perinatal period and early parenting. Present qualitative data revealed that the participants have improvement in all aspects after EBMI, which fit into the model of holistic health, and the bio-psycho-socio-spiritual dimensions. They told that there were improvements in physical discomforts during the conversation and their sleep quality were improved. It is interesting that some participants reported desirable changes in their personalities. There was upgrading of their self-images and they found spiritual empowerment. They were more care of themselves and others. They were more relaxed and less easily agitated. Half of the group said they were more confident in crisis management like giving birth to an abnormal child or facing obstetric complications. They were less stubborn than before. They appreciated the joy of life and the joy of giving birth. There was improvement in maternal-fetal relationship. The pregnant women said they found easier to communicate with their relatives, friends and strangers.

Qualitative study can give insight on intervention how the processes work.[61–63] Current research found that how EBMI works come from the integration of the practice into daily life activities. EBMI results in spiritual empowerment and enlighten them to appreciate the meaning and value of life. This is the reason how the pregnant Chinese women work through their physical discomforts. Beitel et al.[61] developed a manual-guided, spirituality-focused intervention–spiritual self-schema (3-S) therapy—for the treatment of addiction and HIV-risk behavior. It is theoretically grounded in cognitive and Buddhist psychologies and may be suitable for individuals of diverse faiths. They did semi-structured interviews following completion of the therapy and their findings support the value of integrating spirituality-focused interventions into addiction treatment. Spiritual empowerment is one of the targets of EBMI and most of the interviewed pregnant women found that they can attain this goal from qualitative analysis. Present research shared the findings that EBMI is acceptable for pregnant Chinese women irrespective of their religions. All participants have the idea to encourage other pregnant women to practice EBMI. The participants reported that they have increased awareness of their emotion and this is the underlying mechanism for improvement in mental health and social health.
provider while also offering community with other women. Darvill et al. [69] found that first-time mothers face difficult periods both early in the pregnancy and after the birth and have unmet needs for supports in those periods, particularly the support of other new mothers. They suggest providing more information about early pregnancy before conception which may enable women to get more accurate expectations of this period. Facilitating contact between pregnant mothers will help them to establish a more appropriate support network prior to birth. Garder et al. [38] explored the lived experience of postnatal depression in West African mothers and found that these findings have implications on how services should be designed to increase their accessibility to African women. Ong et al. [39] found that there is a need for more innovative advertisement to promote antenatal classes and improve attendance rate. Shorey et al. [40] explored the perceptions of pregnant women on the contents, delivery and personal impact of postnatal psychoeducation programme and their findings indicate that the programme is beneficial for maternal wellbeing and confidence in maternal roles and therefore, is promising to be introduced to the multi-racial primiparas in Singapore. Present research showed that the participants have achieved beneficial effects on psychosocial aspect of pregnancy from the intervention. They have the opinion that they can extend their social network through participation in the intervention. They found support from the other participants and tutors are important for them to practice EBMI. Some husbands also participate in EBMI. Some mention that support from their husband is important. Group discussion in sharing their feelings and experiences were also important. Mason & Hargreaves [70] conducted a qualitative study of MBCT for depression. They emphasized the role of continued skills practice for participants’ therapeutic gains. Recent research had the same findings that participants believed that they will get more benefit if they spent more time on EBMI. The main difficulties they encountered were the lack of time to practice. They said that increased number of lectures, group discussion and practice during the lecture will enhance their confidence in the program.

As ever, it is important to recognize the limitations of qualitative research. It should be noted that this study cannot collect in-depth data from the participants during interviews and thus, limit the effectiveness of qualitative study. Although it is possible on the basis of purely qualitative data to identify thematic patterns in pregnant women’s responses, how individual women will respond to different psychosocial factors cannot be predicted.

5. CONCLUSIONS

Present study discloses the effectiveness of EBMI and the participants’ opinion on the intervention. Prenatal meditation can help pregnant women to cope with physical distress during pregnancy. Through improvement in coping stress response, pregnant women are more prepared in crisis management. EBMI can improve emotional well-being and develop better social relationship. EBMI results in spiritual empowerment and enlighten the pregnant women to appreciate the meaning and value of life and give birth to a baby. Incorporation of prenatal meditation in prenatal care will be a necessity in future.

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CONFLICTS OF INTEREST DISCLOSURE

The author declares that there is no conflict of interest.
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