

ABSTRACT

Aim: This small qualitative study aimed to explore pregnant women's experiences of participating in a pregnancy program designed around the use of creative activities.

Background: Increasingly childbirth, in resource rich countries, is considered a medical event with limited attention paid to the emotional aspects of pregnancy. However, the use of the creative arts to promote physical and emotional health and wellbeing has also gained increasing acknowledgement and recognition. Based on this latter literature, a program of activities including singing, dancing, storytelling and weaving was developed for pregnant women.

Method: A qualitative descriptive approach was employed. Seven pregnant women participated in six 2-hour creative activity sessions. Data were collected using diaries, interviews, field notes and a brief questionnaire. Thematic analysis was used to analyse the qualitative data.

Findings: Four themes, labelled 'Seeking support', 'Connecting with each other, myself and the baby', 'Finding a place to share, learn and grow,' and 'Finding balance' were identified. The findings suggest that participating in the program afforded women social support, a sense of connection with each other and enhanced perceptions of emotional well-being during pregnancy.

Discussion: The findings provide preliminary evidence that engaging in creative activities during pregnancy may enhance women's sense of emotional well-being. In addition, the findings confirm the growing body of literature that suggests that when childbearing women come together in a supportive sharing environment an opportunity is created whereby women learn or regain their cultural knowledge

about birth and feel confident to make the decisions that best meet their own individual needs and preferences. Although the creative activities program was not designed to prepare women for birth it facilitated the sharing of information which appeared to increase the women's confidence and sense of competence to give birth and transition into motherhood.

Conclusion: While the number of women attending the program was small, the positive experiences expressed by participants warrants further development, implementation and investigation of similar approaches to childbirth preparation. Based on this study, it would seem that such a program is indeed feasible and that women would attend.

Key words: Creative arts; childbirth education; emotional well-being; midwifery; spirituality

INTRODUCTION

‘Childbearing requires an exchange of a known self in a known world for an unknown self in an unknown world’ [1 p. 52]. As such, Hall argues that the process and experience of pregnancy and birth has the potential to be life-changing and creative [2].

As western societies have industrialised, childbirth has been transformed into an increasingly medically managed event [3]. A growing culture of surveillance and monitoring during pregnancy and high rates of intervention during childbirth [4-6] have been associated with high levels of fear, anxiety and depression during pregnancy and emotional distress after birth [7-9]. Mental health difficulties during the perinatal period can have significant long-term consequences for the woman and her infant, as well as negatively impacting on family relationships and the broader community [10]. Given evidence that links perinatal emotional discord with a system of health care that pays scant attention to the emotional and spiritual dimensions of a woman’s pregnancy and childbearing experience, attention has shifted toward alternative responses to facilitate the transition to a positive maternal identity [11-16].

The concept of creativity and its application through various artistic and spiritual activities has been identified as a powerful catalyst for personal growth and emotional and spiritual adjustment in a range of life domains. Premised on the act of making, creativity underpins the conception of meaningful products and ideas through the convergence of cognitive and emotional processes [17], which in its optimal state, strengthens the human spirit and facilitates the natural healing process in the human psyche [18, 19]. According to medical and nursing researchers Samuels and Lane’s [20] review of the available evidence of the time engaging in creative work causes a range of physiological responses that shifts the body into deep relaxation. In this state people’s attitudes, emotional states, and perception of pain have the potential to be changed.

Evidence of the potential health benefits associated with creative and spiritual acts has seen its increasing integration into the health care system as a therapeutic strategy to promote healing and improve the emotional and spiritual well-being of patients and significant others [21-24 and table of evidence cited in appendix A]. Although based on limited scientific inquiry, an association between creative activities and improved health has also been documented in the nursing and midwifery literature. The process of making and viewing art or listening to music has the potential to transport both the patient/woman and care provider into a space of heightened awareness. Lane [25] argues that it is in this space that participants may experience joy and a connection to the spirit facilitating holistic (physical and mental) healing. Additionally, creative art is used successfully in midwifery education as a tool to facilitate learning and understanding of the spiritual side of midwifery [26, 27]. Hall and Mitchell [27], found that creative activities facilitated students' exploration of the creative aspects of themselves which opened their minds and helped them embrace a more holistic approach to their work.

Based on this preliminary scholarship, providing opportunities for women to participate in creative activities during the antenatal period could be one way to enhance feelings of emotional well-being and positive feelings about the transition to motherhood [12]. To elucidate the potential feasibility and value of integrating creative activities as part of a holistic approach to antenatal care, the aim of this small study was to explore, using qualitative methods, how women engaged with and experienced participating in a newly designed pregnancy program, the Creative Activities in Pregnancy Program (CAP-Program). This paper argues that such a program is indeed feasible and that women would attend.

Creative Activities in Pregnancy Program (CAP-Program)

The CAP-Program offered women the opportunity to participate in six two-hour sessions that used the creative art activities of singing, gentle dancing exercise, storytelling and making an art project for the baby (weaving). The activities chosen were informed by a review of the literature around the benefits

derived from different modes of creative arts and activities [28-34 and table of evidence cited in appendix A].

Activity sessions were conducted over a two month period. The first was scheduled to commence when the women were between 20 and 30 weeks gestation. The sequence of each 30-minute activity was 1) singing to establish a sense of group cohesion, 2) dance and movement to energise women, and 3) story telling and weaving to create a relaxing atmosphere. Sessions were facilitated by a midwife with a background in the creative arts and held in a community library that was easily accessible by road and public transport (see appendix B).

RESEARCH DESIGN

A qualitative descriptive approach was employed to generate a rich descriptive account of women's experiences of engaging in a creative arts program during pregnancy. Several methods were used to collect data over the course of the program, including personal diaries, interviews, field notes and a short open-ended questionnaire. Qualitative methods were chosen to enable a deeper understanding of the phenomena under investigation by deriving meaning through people's interpretations of their own experiences [35]. The data collection techniques associated with a qualitative approach provided participants with the opportunity to describe their own experiences, express their thoughts and describe what was important to them about being engaged in CAP-Program. Also, given its pilot nature, the explorative approach taken provided a useful means for exploring the efficacy of the program in a real life context [36].

Recruitment procedure and participants

Women were recruited via flyers and posters placed on community boards and emailed through networks such as Maternity Coalition and Childbirth Education Association. Over the three-week recruitment period, 19 women enquired about the project via telephone or email. All potential participants were

contacted via telephone and provided with information about the program and participation requirements. To be included in the study, women had to demonstrate proficiency in English in order to take part in an in-depth interview, maintain a diary and complete a questionnaire. Women who were currently participating in professional or recreational choir, dance or other art activities were excluded. Ethical approval to conduct this study was granted by the University's Human Research Ethics Committee.

The first six primigravida and first six multigravida women meeting the inclusion criteria were invited to participate in the program and accompanying study. However, only nine women attended the first session with seven attending all further sessions. Lack of child care and motivation were the main reasons for non-attendance at sessions. Of the seven participants remaining, three were primigravida (Mary, Amy and Lorna) and four were multigravida (Tammy, Yantis, Petra, Leila). Pseudonyms were assigned to each woman.

Participants were aged between 26 and 38 years. All were Australian citizens, with two being born overseas. The education level of participants varied; four women had a Bachelor Degree, one had a diploma and one had finished Year 12. Six women stated that they were married and one was in a de facto relationship. The average gestational age was 25.7 weeks (range 20 to 30) at commencement of the program. One woman was booked at a private hospital, three were booked at a public hospital, two women were planning to birth at home and one woman had not made a decision on place of birth at the commencement of the program.

Data Collection

At the beginning of the first session the organisation of the program and the qualitative study accompanying the program were reiterated with the participants. Women were given another opportunity to ask questions and, if still willing to be involved, asked to sign a consent form. Once this was completed women were asked to complete a brief demographic information sheet to obtain personal details such as

age, ethnicity, current relationship status and educational and occupational histories. General information about the planned place of the birth and gestational age at commencement of the study were also recorded, along with details of any past experiences of group singing, dancing, storytelling and creative art.

Participant diaries. Over the course of the six sessions, participants were asked to keep a written diary of their feelings, impressions, and reactions to each session immediately following each session. As the CAP-Program covered a two month period, diary writings were advantageous as they captured the women's experiences, feelings and perceptions soon after the event, thereby minimising the potential for retrospective bias [37]. The range of topics and issues that emerged from participant's diaries also informed the interview schedule as they identified areas requiring further exploration. Diaries were collected after the program was completed. Four of the seven women made an entry after every session and three provided a typed summary of their thoughts and feelings about the program.

Interviews. Each woman participating in the program was interviewed once, within one month of the last session. A semi-structured approach to interviewing was undertaken to ensure that topics relevant to the aim of the study were addressed. This approach also allowed flexibility and the freedom for conversations to diverge if necessary, pursuing an idea in more detail [35, 38, 39]. The interview guide was constructed around transcribed diaries, field notes and the published literature. All interviews were electronically recorded on a digital voice recorder, lasted between 60 - 90 minutes, and took place at a time and place convenient to the woman (one took place in a public park, and the others were conducted in the women's homes).

Field notes. Field notes were collected by the first author throughout the recruitment process and delivery of the CAP-Program. A simple framework was developed, based on the work of Minichello *et al.* [40] and included attendance, perceptions of how the women responded to each activity and a reflection on the researcher's role as facilitator.

Self-administered questionnaire. After the interview each woman received a self-administered questionnaire with a reply paid envelop. The aim of the questionnaire was to gather basic technical and structural information about the program (for example what did the women like the most, how many sessions would they attend? The questions and summarised results are presented in tables 1 & 2).

Data analysis

Simple descriptive statistics, in the form of means and frequencies, were used to detail the characteristics of participants. Given the small number of participants this task was undertaken manually.

Narrative data obtained through diaries and interviews were transcribed verbatim by the first author to facilitate familiarity and immersion in the data [38, 39, 41, 42]. A systematic approach to thematic analysis was used to explore and reveal key patterns underlying women's perceptions and experiences of the CAP-Program. Interview transcripts were initially read in a superficial manner to gain a broad perspective on what the women were saying. Each transcript was then subjected to the careful process of 'line by line coding', whereby words and phrases that captured the concepts related to what the women were saying were highlighted and assigned a descriptive label or code in the margin. Repetitively asking the question "*What is happening here*" while coding the transcripts helped the researcher to remain sensitive to subtle meanings and emerging ideas in the data and ensured the analysis remained grounded in the women's accounts.

Codes with shared meanings were then grouped into concepts through a dynamic process of constant comparison, whereby each new transcript was simultaneously compared with existing data to expand on and verify emerging concepts [43]. For example "wanted to be supported", "wanted to be supported by information" "wanted to be supported emotionally" "wanted a special place" were clustered together. Through this process, tentative themes and natural variation across participants were discovered. Finally,

links and relationships between themes and sub-themes were sought to provide an organised description of women's experiences [38, 39, 42].

Activities to ensure trustworthiness of the findings included discussing and debating the emerging themes, sharing these with colleagues at research meetings and using audit trails to ensure the rationale for analysis decisions were clearly transparent. The first author, who conducted the C-CAP Program, also kept a reflective journal. The journal was not only used to document field notes but also to capture the first authors reflections on the research process, her assessment of her own ability to conduct the program and as a way of examining her own assumptions and biases within the research process [39].

FINDINGS

Four major themes and a number of sub-themes were derived from the analysis. These were labelled; 'Seeking Support', 'Connecting with each other, myself and the baby', 'Finding a place to share, learn and grow', and finally 'Finding Balance' (see table 3).

Seeking Support

This theme was derived from the data that explored women's motivation for participating in the CAP-Program. All women were intrigued by the project and the use of creative activities. Leila's comment perhaps best captures the sentiment of all the women; "*an interesting, special approach to pregnancy and motherhood*". However, when explored further the main stated reason for attendance was that women were searching for an emotionally supportive space in which to learn and prepare for childbirth. As Lorna stated, "*It sounded more of a naturalistic approach to motherhood, not something that was structured or intellectual classes....., it was very appealing, seemed to be relaxed.*"

The three first-time mothers were particularly interested in learning from other women. Amy expressed that as none of her friends were having babies she was very keen to meet other pregnant women: "*The*

real reason why I came along was to be able to gain....from other people's experiences." Mary moved to Australia two years ago and for her there was a desire to better understand childbirth in her new environment, and *"to meet other pregnant women and see how things are going with them."* For Lorna, who said her main goal in life was becoming a mother, it was very important to be well prepared and she considered CAP-Program as an opportunity to achieve her goal.

Tammy, Yantis, Petra and Leila, were all expecting their second child and talked about looking for something that could make the present pregnancy feel special. Yantis commented, *"I was looking for a space which is totally dedicated to the pregnancy"*. For Tammy and Yantis, this feeling was underpinned to an extent by a sense of guilt over not experiencing the current pregnancy as quite as *"special"* or *"miraculous"* as the first. They considered the group to be a place where they could find the time to indulge in being pregnant and feel good about it. For Leila, engaging in the activities not only provided an opportunity to meet other pregnant women, but the creative approach was *"inspiring"*. She expressed feeling very excited to do something she did not do in her first pregnancy.

Becoming Connected

This major theme was elicited from women's feelings about, or experiences of, participating in the creative program. There were three distinct sub-themes.

Connecting with each other

All the women expressed some *"uncertainty"* at the beginning of the program. For some, feelings of discomfort were generated from the thought of having to *"do things"* and in essence be *"open"* with people they didn't know: *"you have got these strangers in the room there all singing together for the first time, naturally you are a little bit nervous"*. Tammy's initial uncertainty was revealed through her perception of everyone being different: *"we all appeared to be really quite different from each other"*. Yantis raised a similar concern: *"if I was choosing them I would have chosen different women"*.

However, all the women reported that feelings of discomfort and uncertainty dissipated after a few sessions. Participating in the activities enabled them to become open to each other and they all felt some level of connection. Amy, Leila and Yantis commented how singing together in a group, especially using harmony, engendered a sense of trust and comfort between them all: *“it was nice to see how we progressed and how we all got quite comfortable with each other”* (Leila). Petra, who described herself as a *“fairly closed person”*, also commented on how singing with other women encouraged her to be more open: *“during singing everyone sort of smiled and relaxed and loosened up, that was very good.”* All spoke of how this helped them feel comfortable to really share in an open fashion during the storytelling activity.

Dancing was the activity that the majority of participants felt most uncomfortable with. Engaging their bodies in movement in the presence of others was an activity the women needed more time to become familiar with. However, as a group exercise it resulted in a similar effect to the singing. Mary who described herself as more of an *“athletic person”* believed that the dance *“helped everybody to ease off as well, like the singing”* including herself. As the program progressed, in relation to dance, Amy said, *“I have got more comfortable with everybody”*. Moving their bodies to music facilitated a sense of fun. Women were observed to become more playful and through laughter and enjoyment became closer to each other. The interview data supported this observation. For example Lorna said, *“I liked doing it as a group ...kind of made it fun”*. As time passed they became more familiar with each other and were able to trust each other in the movement. The circle of dance symbolised the meaning of connection with each other. As Tammy said *“as a group it just reiterated the feeling of a bit of celebration, just gave us strength.”*

Connecting with self

The group singing and dancing also encouraged a stronger connection with themselves and their pregnancy. Women who had limited experience of singing found this activity helped to “*release their voice*” and in one case, be “*brave*” in the presence of others. Women then associated this with the physical benefit of voice releasing in labour. For example, Tammy linked the use of voice with the ability to relax in labour and as a way to “*open the body*”. For the women who were more confident in the use of voice, the classes reminded them of how “*very special and wonderful*” using their voice could be.

Despite the women’s initial apprehension, the dancing activity became especially useful in helping women to relax, enjoy themselves and experience a connection with, and confidence in, their body. Belly dancing fostered acceptance of the body by concentrating their focus on their body and how it moved. Lorna particularly enjoyed the symbolic meaning of the dancing, becoming more confident as the program progressed: “*it was a very nice way of preparing and relaxing and visualizing*”. Leila compared the dance activity with her experiences of pregnancy yoga, stating that the dance activity was a “*better exercise than the pregnancy yoga*” because the movement to music created “*positive emotions and growth*”. She described this activity as “*a very uplifting and encouraging exercise*”.

Connecting with the baby

Another sub-theme of ‘Becoming Connected’ was how women described feeling about their baby. All of the women believed that the various activities helped to strengthen the “*bond*” with their baby. The data suggested that the singing activity was the most powerful in facilitating these feelings of connection. Women talked about being “*surprised*” at this. Amy said “*I really did not even think before that I would sing to my baby... but now it is obvious that we have a connection there, he likes Pura Mame (a song), he starts kicking me*”. Mary commented, “*I never thought that I would be singing, but I really like the idea of singing to my baby, it makes me feel good... I’m doing it at home as well*”.

Through the use of “*beautiful song*”, the women established some level of communication and connection with their babies which they valued greatly: “*When you sing you go through a lot of wonderful emotion....it makes me very happy, I can have a very positive relationship with my baby*” (Lorna). Tammy described how, as a group, the singing activity created a new level of “*communication*” between the women and their babies: “*I was talking to the others about it, we were all feeling that our babies are responding, and I think that was coming across when we were singing, it seemed to be special for a lot of us and you could feel that in the group.*”

A stronger connection with their unborn babies was also attributed to the weaving activity, describing it as “*their bonding time*”. Amy commented “*While I was weaving I was thinking about the baby because the weaving was for the baby.... it gave me a nice feeling*”. Similarly, Petra appreciated the weaving activity because it afforded quiet time to think about the baby in her everyday home environment: “*it was a good way to get me to sit and focus on Caramello*”.

Sharing and receiving something special

Women described the storytelling activity as a “*rewarding*” and “*empowering*” experience from both the perspective of hearing a story and telling a story. Their sense of connection with, and respect for each other, which had been fostered through singing and dancing, had also “*opened*” them up to different ways of thinking and enabled them to “*relate*” to each other.

The analysis revealed some differences between participants in relation to their expectations of the program. The multigravida women were keen to talk about their first experience, their plans for the next birth and to share with and learn from each other. As Petra said “*I was interested in seeing how other second time mums became more empowered after their first birth.... they’ve sort of gained a bit of control over the next one*”. These women also considered the storytelling activity as an opportunity to share and help those having their first baby, which in turn increased their sense of satisfaction. As Tammy said of

the storytelling activity: it was “...*really rewarding to see the first time mothers getting a lot out of the story time*”.

Initially, first time pregnant women Amy, Leila and Mary expressed being more interested in gaining specific information that would prepare them for “*their*” first labour and birth. However, as they participated in the sessions they began to broaden their understanding of what birth meant. For example, both Amy and Leila started to experience a change in their attitudes and beliefs around birth. Amy found that the storytelling “*really opened (herself) up*” to seeing birth differently. The information shared in the sessions was considered “*new*” and it challenged her to revisit her childbirth expectations, especially around how to work with the pain of labour.

Similarly, Leila talked about how the storytelling shaped her view on birthing: “*it made it a lot less scary, a lot more human and real*”. Leila added that although the routine antenatal class she attended provided her with “*scientific knowledge*”, it did not give her an opportunity to share her feelings and concerns or the confidence to follow her “*own path*” during labour and birth. Mary also valued the information shared in the sessions as it reinforced and supported her plan to work towards a natural birth: “*I feel strong ...the storytelling made me more confident*”. All the women valued learning from each other and expressed the importance of real life experiences as opposed to what a ‘book’ might offer.

While initially scheduled as separate activities the women soon decided that they would like to weave while they shared their stories. The women commonly described how “*calming*” and “*relaxing*” the weaving activity was. They really liked the continuity of the activity and seeing their progression. This was nicely expressed by Leila when she said: “*it was a journey, from start to finish I really enjoyed the weaving, it was very relaxing...*”

Some of the women also mentioned that it was “*really good*” to be able to engage in such a feminine activity that made them feel very special during the sessions as well as at home. Being able to take their weaving home was highly valued because it gave the women an opportunity to focus, relax and experience a sense of calmness in their everyday circumstances. Yantis, who described herself as “*not the house working type*”, really appreciated the calming and “*inspirational*” effect of creating something. She said: “*I have been working pretty hard and I haven’t had a lot of spare time to rest mentally ... it has helped me to relax into that feminine mode....and that is a big deal for me.*” Petra expressed this sentiment: “*it highlighted my impatience, just a need for me to slow down...yeah it was just a good way to get me to sit down.*”

Finding balance

This theme emerged from women’s description of their overall experience of participating in the program. Commonly the women referred to traditional antenatal preparation as an “*intellectual*” experience which only provided “*scientific information*” and did not recognise the emotional needs of pregnancy or childbirth. In comparison the CAP-Program provided a different dimension; “*I wouldn’t class myself as a very earthy person... but it really gave me that extra level that I needed to prepare and connect with myself and others... on more of a humanistic level, not text book level*” (Leila). There were three dimensions to this theme.

Being balanced in pregnancy

The most important outcome for all women was that the CAP-Program facilitated a sense of “*balance*” during their pregnancy. Tammy regularly referred to the program as her “*emotional pill*” that balanced the physical and psychological aspects of her pregnancy: “*when you’re pregnant, in looking after the baby physically, making sure that you eat properly, resting well and all that side of it... this course just reminded me to nurture the emotional side of pregnancy, put back a bit more balance there.*”

Mary, who described herself as “*not an arty person*”, and initially thought the creative approach was a “*bit farfetched*”, came to love the program: “*I really enjoyed it ... it gave me something extra... it is hard to explain... something like emotional balance. It made me really like being pregnant even more*”. Leila and Amy both found the CAP-Program fostered emotional and spiritual balance, which was instrumental in assisting them “*get in touch with themselves during pregnancy*”. For Yantis the importance of finding balance is articulated in the following extract: “*Consciously taking myself to a space that was dedicated to my pregnancy that was almost the most important part for me and what we did in that space is all good...I felt doing (the activities) was getting in touch with that side of myself, the feminine, more nurturing side of myself*”.

Being ready for the upcoming birth

The four multigravida women also spoke about how feeling emotionally balanced during pregnancy positively impacted on how they anticipated their upcoming labour and birth. As Tammy said, “*when it boils down to labour, it is raw emotion. It is important to be ready and in balance*”. Petra, who described herself as a “*practical person*”, found that the creative activities reminded her that “*the mind is important in birth*”. She went on to say, “*they [the activities] helped to quiet the mind, prepared you emotionally*”. She also said that the activities enhanced her understanding of the natural birth process and her own ability to deal with the challenge, as opposed to childbirth classes where they just told her facts like “*this is an epidural or gas...*”. Similarly, Leila mentioned that the creative activities prepared her for birth in an “*emotional way*” and was just as important as what was she described as “*intellectual knowledge*”.

Taking the balance home

The third sub-theme of ‘Finding Balance’ was related to the effect participating in the program had on the women’s home environment. All four multigravida women mentioned how they liked the singing and weaving activities because they could share them with their toddler. Listening and practicing their singing at home also meant the whole family became involved. As Leila said “*my daughter, she really loved me*

coming home with new songs... I had to teach her the songs so she knew all of them." Tammy also explained how her daughter loved to sing along and that other family members started to refer to the songs as the *"baby's songs"*. Petra used the singing and sharing of songs to prepare her young daughter for the new arrival. Similarly, Yantis articulated how her daughter became inspired by the weaving activity and started decorating the house *"for the baby"*.

Three of the women also shared how their partners had responded to their participation in the program. Leila and Yantis both expressed how their partners wished that they could also participate in the course and take the same emotional journey as a couple. They suggested that some consideration be given to involving the fathers as well. Mary's story is particularly important to highlight. At the beginning of the program she said that her husband Michael was too scared to attend the birth of the baby. However, as the program progressed he became so inspired by Mary's involvement in the activities that they enrolled and attended a mosaic class together, making a picture for the baby. After this Michael changed his mind about supporting Mary through labour and being present at the birth of their baby.

Although not all of the partners wanted to participate, every woman reported a positive effect on family life. Their partners liked to see them being *"happy, rejuvenated and excited"*. Leila's description probably best captured the family effect: *"I came home you know feeling happy ... if the mother of the house is feeling good then everyone else feels good."*

DISCUSSION

Several key findings emerged from this small study. Firstly, engaging in the CAP-Program provided women with an opportunity for social contact and support during pregnancy. Secondly, participants perceived that the program assisted them to find spiritual and emotional balance, which in turn facilitated a sense of connection within themselves, to their unborn baby, and within their family life. Thirdly, the CAP-Program offered a creative learning environment where cultural knowledge about pregnancy, birth

and early parenting could be discovered and shared. While the number of women attending the program was small, the positive experiences expressed by the participants warrants further development, implementation and investigation of similar approaches to antenatal education.

The role of social support in preparing for motherhood

Revealed through women's experiences of engaging in creative activities, the CAP-Program facilitated not only social contact but also a sense of social connection during the transitional time of pregnancy. A desire to be part of a social network was an important factor in the women's initial decision to participate in the program.

There is a growing body of literature dedicated to the study of social support. Defined as an individual's perception that they are cared for, loved and a valuable member of a network with mutual obligations [44], research shows that there are strong associations between the level of social support and an individual health status and emotional well-being [45-48]. Over the past three decades, research in this area has diversified to accommodate the multiple dimensions of social support available in different settings [e.g., instrumental/tangible, informational and emotional support], yet its application in the context of maternity care remains scarce. Of the few studies that have been conducted among high-risk pregnant populations such as teenagers, women of low socio-economic status and women with pre-existing emotional disturbances, evidence supports the feasibility of utilising a social support framework to improve maternal and infant well-being [49-51]. Particularly in circumstances where pregnancy is faced with greater uncertainty and/or a woman perceives lower levels of support from family and friends, strategies that foster a stronger sense of support and belonging appear to facilitate preparation for motherhood by improving self-esteem, decreasing levels of depression [50] and promoting overall positive psychological well-being [49].

Despite a woman's designated risk status, women's interpretations of their experiences in the CAP-Program suggest that there is a level of emotional and informational benefit from experiencing a sense of social support and connection with other women, which in this case was facilitated through participating in creative activities. Consistent with previous work [52, 53], engaging in group song and dance created a shared space that helped women feel connected with others and enhanced their self-confidence, self-awareness, interaction and communication. For most, their sense of well-being and emotional relief also transcended beyond the group sessions and into their family and social lives. Reminiscent of the "secret sisterhood" [12 p. 34] that occurs when pregnant women engage and bond with each other, intentions of continued contact with group members represented the important transformation of social support networks during the pregnancy journey.

Reconnecting with creativity

During pregnancy, the women in our study considered their emotional and spiritual well-being as equally important as their physical well-being; a finding that resembles the belief of pregnancy and childbirth as the greatest emotional and spiritual experiences of a woman's life [11-14, 16]. Engaging in the creative activities did indeed provide a space for women to reconnect with themselves and experience a sense of spiritual and emotional balance. Their reflections on "*a lot of wonderful emotion*", particularly through song and dance activities, support notions of music and dance playing a significant role in human life through the ability to act as a conduit for emotions, spirituality, improved mental functioning and healing [28, 29, 54].

Establishing and maintaining a well-balanced psychological state during pregnancy is also of significance for the baby. Developing a healthy maternal-fetal attachment is a fundamental component of optimal psychological adjustment for pregnant women and an important aspect of transitioning to motherhood [55]. Further, developmental psychologists claim that the prenatal mother-child relationship has a strong bearing on the postnatal mother-child relationship and subsequent behaviour and well-being of the child

[56, 57]. In our study, creating a project for the baby fostered inner peace and calm that enabled women to relax and feel connected to their unborn child. Coinciding with past research that suggests unborn babies receive emotional sensations produced by the sound of its own mother [58], the women described singing lullabies as something that strengthened their awareness of, and bond with, their baby.

Finally, our study provides some evidence that by engaging in creativity activities, women transferred their positive emotional and spiritual experience into their home environment and relationships with their male partners. Although the physical transformation of pregnancy is experienced exclusively by the woman, having a baby transforms the whole family [59]. While studies investigating the presence of male partners at childbirth suggest that it does not impact on clinical outcomes, involving the father in this unique experience can create an emotional bond within the family [60, 61]. As the majority of research has focused on the male partners' role during childbirth and the early postpartum period, their role during pregnancy remains largely unknown. The scant published literature suggests many men feel isolated and excluded from the experience [61].

Creative activities as an empowering teaching tool

Although the CAP-Program was not designed to formally prepare women for birth and motherhood, the participating women reported that the environment facilitated the sharing of information and/or cultural knowledge about birth. According to Walker *et al.* [62] health professionals have long felt that education and preparation have a profound effect on women's experience of pregnancy, birth and the postpartum period. Yet, whilst women in developed nations have access to more information about pregnancy than ever before, many continue to feel powerless and a lack of control over decision-making [33]. The need for innovative strategies to assist women to feel confident and competent to give birth is now recognised [33, 62, 63]. Our findings suggest that creative activities may provide a novel approach to engender a sense of achievement and confidence in expectant mothers. For example, creating a product for the baby was described as a rewarding activity, whilst storytelling provided an opportunity to listen and learn from

each other's experiences in a supportive environment. Aligning with research that finds the personal experiences and non-idealised accounts of birth stories by peers can significantly affect orientation toward pregnancy, labour and birth [64], our findings suggest that storytelling may provide a useful real life teaching tool in childbirth education.

Limitations

There are several limitations of this study. The first relates to the restricted recruitment period of three weeks due to a delay in receiving ethics approval (originally a recruitment period of approximately 8 weeks was planned). A longer recruitment period could have provided a better picture of the potential interest in attending the CAP-Program and increased participation rate. The second factor that may have influenced participation rates was that recruitment occurred in winter in the midst of Australia's swine flu pandemic. Public health messages particularly targeted pregnant women as they were deemed to be at increased at risk. This may have prevented some women from considering participating in group sessions.

Self-selection to the program needs to be considered as an influence on outcomes. As the findings suggest, while women may not have fully appreciated the nature of the activities when first signing up for the program, they perhaps already expected to receive some benefit from participating. A future study could include a group of participants that are not self-selected. In addition, future work could give consideration to targeting vulnerable women as well as collecting data in the early postpartum period to explore any effect of program participation on the relationship between mother and baby (for example; breastfeeding, bonding and mood).

CONCLUSION

The findings of this small qualitative study suggest that engaging in a group program of creative activities during pregnancy may enhance women's sense of social support and, as described by the women,

facilitate emotional and spiritual well-being. Participating in the program enhanced women's sense of connection with themselves, their baby, their family and each-other. Being together and involved in creative activities provided additional benefits that nurtured women's maternal instinct. In addition, the findings suggest that engaging in creative activities had a positive influence on women's sense of confidence and competence to give birth and make the transition to motherhood.

Our findings provide preliminary evidence that using creative activities during pregnancy is an effective teaching tool, or medium, through which women can learn or regain their cultural knowledge about birth. Facilitating confidence in women to make the decisions that best suit their own individual needs and preferences is an important aspect of antenatal care. Whilst a larger more robust study needs to be undertaken the evidence gained from this small study would suggest that such a program is indeed feasible and that women would attend.

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TABLE 1: Women’s most and least favorite creative arts activities

Most Favourite Activity	N	Reason
Singing	2	It facilitated the most obvious communication with the baby.
Dancing	0	
Story Telling	1	Highly valued the opportunity of sharing.
Weaving	4	Calming and relaxing and was the most visible thing that they made for the baby.
Least Favourite Activity		
Singing	1	Because she did not like her voice.
Dancing	3	One of these women stated that this was because she considered the time allocated too limiting.
Story Telling	0	
Weaving	2	Because they would have liked to spend a bit more time on it.
One woman could not identify any activity as the least favourite because she liked them all.		

TABLE 2: Summary of women’s comments on the structure of CAP-P sessions

Question	N	
<p>Comment on the structure of the sessions and activities</p> <ul style="list-style-type: none"> • Well structured • Too many activities in one session • Not enough activities in one session 	7	<p>Although everybody found that the sessions were well structured, they all reported that there were too many activities in each session. Two women suggested that maybe there should be one activity per session. This would allow more time for each activity. However, five women suggested that two activities per session would be the most suitable. For example; one week singing and weaving, next week dancing and story telling.</p>
<p>Number of sessions you would attend</p> <p>7-9 10 – or more</p>	<p>4 3</p>	<p>Four women reported that they would attend between 7 and 9 sessions while the remaining three women stated that they would be happy to attend 10 or more sessions.</p>
<p>Duration of session</p> <p>2 hours 3 hours</p>	<p>5 2</p>	<p>Everybody liked the two hours duration and two women indicated that three hours would be acceptable.</p>
<p>Venue and timing</p> <p>Please comment on the sessions being held on a Monday night and the venue.</p>		<p>Holding the class on the Monday night was suitable for everybody. However, one woman, who worked full time, would have preferred the class to be on the weekend. The women liked the venue, as it was spacious and private and included the kitchenette, which gave them the opportunity to share refreshments with each other.</p>

TABLE 3: Overview of the themes and subthemes

Themes	Subtheme
Seeking Support	
Becoming Connected	<ul style="list-style-type: none">• Connecting with each other• Connecting with the self• Connecting with the baby
Sharing and receiving something special	
Finding balance	<ul style="list-style-type: none">• Being balanced in pregnancy• Being ready for the upcoming birth• Taking the balance home

Appendix A: Evidence reviewed that informed the development of the CAP-Program

Study	Sample & Design	Interventions	Measurements	Relevant findings
Anshel & Kipper (1988) Israel	96 male adults assigned into four groups 24 participants in each group Quantitative control design	Group 1: single session singing Group 2: listening music Group 3: poetry reading Group 4: film viewing	Giffin-Trust-Differential questionnaire and Prisoner's Dilemma Game	The tendency of group singing to enhance trust and cooperation was traced to the influence of two elements, music and activity. The trust ($p < .001$) and cooperation scores ($t(47) = 3.43, p < .01$) of the singing group were significantly higher than the scores of the rest of the other groups. Additional results: better communication, greater group cohesion, trust, and positive self-image.
Unwin, Kenny & Davis (2002) Australia	107 healthy Community sample, 23 males 84 females Quantitative control design	Experimental group half hour singing session Control group sat and listened to the singing group	Profile of Mood Status Questionnaire before and immediately after the singing session and 1 week later	Singing and listening to singing positively altered mood, immediately after singing. Significant changes in mood over pre-test baseline occurred on each sub-scale: tension $F=21.52, df=1, p < .001$ anger $F=23.17, df=1, p < .001$, vigour $F=17.73, df=1, p < .001$ confusion $F=25.16, df=1, p < .001$, fatigue $F=21.35, df=1, p < .001$ The effects for the singing group were more robust but not significant
Kenny & Faunce (2004) Australia	77 patient with chronic pain Quantitative control design	Experimental group participated nine 30 minutes group singing activity Control group participated nine 30 minute listening to music activity	Profile Mood States Questionnaire pre and post test to test short term impact To test long term impact: Profile Mood States Questionnaire, Zung Depression Inventory, Pain Self Efficacy Q Pain rating Self statement, Pain Disability Q pre and post test	Singing group showed improvements on all mood, coping and perceived pain variables Active coping $F(1.24)=5.78, p = .024$, pain self efficacy $F(1.24)=4.54, p = .044$, however, these improvements were also observed among comparison participants. While singing may enhance active coping in some individuals suffering from chronic pain, the differences between the groups failed to reach statistical significance. Positive effects in active coping were not maintained with the singing group at 6 months follow up.
Chang, Chen & Huang (2008) Taiwan	236 pregnant women 116 experiment group 120 control group RCT	Experiment group received 2 weeks music therapy during pregnancy. Control group received only general antenatal care.	Pre and Post Tests of Perceived Stress Scale (PSS), State-Trait Anxiety Inventory (STAI) and Edinburgh Postnatal Depression Scale (EPDS)	After 2 weeks music therapy intervention group showed significant lower scores in all measurements than the control group. PSS scores $p < 0.001$, STAI scores $p = 0.01$, EPDS scores $p < 0.001$
Clark, McCorke & Williams (1981) USA	20 pregnant women 13 in the experiment group 7 in the control group Quantitative control design	Experiment group received 6 individual music therapy sessions during the 3 rd trimester plus music administered during labour. No intervention for control group.	15-item Childbirth Experience Questionnaire	Experiment group had significantly more positive childbirth experience. The greatest differences were found in anxiety and level of pain and discomfort. $p < .05$
Ritter & Low (1996) USA	Meta Analysis	Inclusion, Exclusion criteria were Dance Movement Therapy (DMT) intervention, published data including means and SD or statistical analysis in the form of F test, t test or Chi square test.	Rosenthal's procedures, the effect size (r) for each study was calculated	23 studies reviewed for meta-analyses. The combined effect size of all studies was $r = .38$ and the effect size of the case-control studies was $r = .30$. The result of the analysis showed benefits of DMT for a number of populations. The most notable improvement the anxiety symptom showed (average $r = .70$) while the lowest effect the self-concept showed (average $r = .27$).

Grabner, Goodhill, Hill & Von Neider (1999) USA	21 university volunteer students 10 in the experimental group and 11 in the control group Design RCT	The experimental group participated in five movement sessions (DMT) of 35 minutes duration for two consecutive weeks. The control group had no intervention.	Pre and Post Tests Test Attitude Inventory (TAI)	The result showed that the experimental group demonstrated a significantly greater reduction in TAI total score ($t = -2.01, p = 0.050$) compared to the control group. The results suggest that DMT may be an effective intervention for reducing self-reported levels of test anxiety.
Goodwin, Astbury & McMeeken (2000) Australia	65 women 25 in the exercise group, 22 in the middle exercise and 18 in the non-exercising group Design: Prospective longitudinal	The women were allocated into 3 groups according to the frequency, duration and intensity level of their recreational exercise during their pregnancy.	Self-report exercise history questionnaire and a 10-item Body Cathexis Scale, completed on two occasions during the pregnancy at 17 weeks and 30 weeks gestation. The scores on depression and anxiety were only collected at 30 weeks gestation through the General Health Questionnaire (GHQ-28) Semi-structured interviews	Statistically significant difference between the exercise group and the non-exercise group in late pregnancy for some items on the GHQ-28 such as somatic symptoms anxiety and insomnia (unpaired t-test, $p < 0.05$). Although there was no significant difference in depression between the groups a higher level of psychological well-being were found in the group undertaking exercise.
Da Costa, Rippen, Dritsa & Ring (2003) Canada	108 pregnant women	Examined the association between participants leisure time physical activity (LTPA) pattern and psychological well-being. The women were asked to fill out questionnaires once a month from the third month of pregnancy and participated in three structured interviews.	Lubin Depression Adjective Checklist, Pregnancy Experiences Questionnaire, State-Trait Anxiety Inventory (STAI) and Hassles Scale. Structured interview questions were developed for each trimester. Demographic data and pre-pregnancy LTPA patterns were collected during the initial interview	After data analysis, the results shows that women in the exercise group reported significantly less depressed mood in the first ($p = 0.001$) and second trimesters ($p = 0.005$), daily hassles in the first ($p = 0.001$) and second trimesters ($p < 0.005$), anxiety in the first ($p = 0.001$) and second trimesters ($p < 0.005$) and pregnancy specific stress in the first ($p = 0.001$) and the second trimester ($p < 0.005$).
Banks-Wallace (1998) USA	28 African American women Qualitative design Feminist Theory Action Research	Story telling in Sisters In Sessions (SIS): Focus Groups as a Research Tool and Intervention for Working with Women of African Descent. Four focus groups were convened during a six-week period for 2-3 hours	The data source the transcribed audio taped discussion from SIS	The six-part narrative analysis included providing information about the historical setting for the study, demarcating transcripts into individual stories, analysing the context in which the stories occurred and the content of specific stories, grouping stories according to themes and functions, comparing story themes and functions across sessions, and reviewing stories for conspicuous absences. Group story telling provided opportunities for women to share pain, frustration, joy and wonder. The main finding showed six major functions of storytelling 1. To provide contextual grounding, 2. To provide a means of bonding with other participants, 3. Validating and affirming women's experiences, 4. To provide a means of catharsis and for resisting oppression, and 5. To provide a vehicle for educating other participants.
Walsh, Martin & Schmidt (2004)	40 family caregivers of patients with cancer Pre and post-test Quasi-experimental design	ArtKart" was given to the participants, which listed and explained the choice of one of five activities: healthy image poster, monoprnt art activity, mandala making, silk wall hanging and silk rubbing. The nurse-artist intervention team provided the art materials and demonstrated how to complete the chosen activity	Pre and post-test of the Mini Profile of Mood States (MINI-POMS), Beck Anxiety Inventory (BAI) and Derogates Affects Balance Scale (DABS)	Every participant reported significantly reduced stress ($t(40) = -3.42, p = .001$), lowered anxiety ($t(40) = -5.00, p < .001$) and increased positive emotions ($t(46) = 11.87, p < .001$) following CAI participation. CAI promoted short-term well-being in a family caregiver sample.

Doric-Henry (1997) USA	40 Nursing home residents 20 in the experimental group 20 in the non experimental group Mixed Methods	Eight pottery classes	Quantitative evaluation was based on Pre and post test Coppersmith Self-esteem Inventory, Beck Depression and Inventory State-Trait Anxiety Inventory Qualitative evaluation based on client self-evaluation as a subjective measurement, case progress notes, journal notes and photographs	Quantitative evaluation was based on Pre and post test Coppersmith Self-esteem Inventory, Beck Depression and Inventory State-Trait Anxiety Inventory Qualitative evaluation based on client self-evaluation as a subjective measurement, case progress notes, journal notes and photographs
Foster, Foster & Dorsey (2003) USA	60 pregnant women, 20 from a high risk outpatient clinic, 20 from a high risk inpatient ward and 20 women from a low risk outpatient prenatal clinic.	A single 1-hour session per participant with a certified Art Therapist. Every woman in the sample was asked to draw four drawings on the following topics; 1) Draw yourself pregnant, 2) Draw a fear or conflict, 3) Give the fear or conflict what it needs and 4) Draw a pregnancy circle. Participants were given 10 minutes for each of the four drawings followed by the specific phenomenological questions, <i>What do you see?</i> , and <i>How do you feel?</i>	FEAST and Content Tally Sheet	The structural elements of the drawings scored with the FEAST indicated that the two high risk groups consistently scored low while the low risk group scored high. This study result demonstrated the viability of Human Figure Drawings for investigating the depression in women with high risk pregnancies.

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APPENDIX B: The Creative Activities in Pregnancy Program (CAP-P).

Activities

Singing

This activity was designed to encourage women to use their voice. The singing material was selected by professional musicians and consisted of lullabies from all over the world. At the beginning of the course a recorded CD of the songs was handed to the participants for them to listen to at home. At the beginning of each session the women listened to the song selected for that particular session. After becoming familiar with the melody, and with the help of the facilitator, the group learnt the song. Most of the songs had harmony parts and if the women were confident the group was split and sang in harmony.

Gentle Dancing

This activity was based on the ancient tradition of belly dancing [34]. This activity was chosen for two reasons. The first was to encourage each woman to participate in an exercise activity which ensured movement and engendered trust in their body. The second reason for this activity was to ensure a balance within the program; dance is a dynamic activity as opposed to storytelling and weaving. In this activity the women were asked to form a circle and follow the facilitator's instructions.

Story telling

The inspiration for the story telling activity was based on the increasing evidence of childbearing women's need to share their stories [33]. The women were encouraged to talk about issues related to birth. After the first session this activity was participant led; the women identified any topic that they wanted to share. In this activity the women sat in a circle and shared their stories. The duration of this activity changed over the course of the program. The original timeframe was half an hour but when the women became familiar with each other and the fourth activity, weaving, storytelling became a part of that. While the women were weaving they kept sharing their stories.

Art project for the baby

The art activity was based on the beneficial psychological engagement known to be associated with art [32]. This activity was designed to provide an experience of creating an enduring object. The women were taught how to make a weaving in a small wooden frame. All the material was provided. The theme of the weaving was a spiral, a symbol of strength, femininity and birth. The theme was given to the women and they chose their own colour combination. This activity was intended to continue throughout the program. The women were able to take the weaving home with them to work on in their own time. The final product was either kept as a wall hanging or sewn onto a pillow for the baby. The duration of this activity was intended to be half an hour, but as previously indicated, the participants preferred this to be integrated with the story telling, which allowed the duration to be extended to an hour.