



The motivation and capacity to go ‘above and beyond’: Qualitative analysis of free-text survey responses in the M@NGO randomised controlled trial of caseload midwifery

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ABSTRACT

Objective: to explore whether women allocated to caseload care characterise their midwife differently to those allocated to standard care.

Design: multi-site unblinded, randomised, controlled, parallel-group trial.

Setting: the study was conducted in two metropolitan teaching hospitals across two Australian cities.

Population: women of all obstetric risk were eligible to participate. Inclusion criteria were: 18 years or older, less than 24 week's gestation with a singleton pregnancy. Women already booked with a care provider or planning to have an elective caesarean section were excluded.

Interventions: participants were randomised to caseload midwifery or standard care. The caseload model provided antenatal, intrapartum and postnatal care from a primary midwife or 'back-up' midwife; as well as consultation with obstetric or medical physicians as indicated by national guidelines. The standard model included care from a general practitioner and/or midwives and obstetric doctors.

Measurements and findings: participants' responses to open-ended questions were collected through a 6-week postnatal survey and analysed thematically. A total of 1748 women were randomised between December 2008 – May 2011; 871 to caseload midwifery and 877 to standard care. The response rate to the 6-week survey including free text items was 52% (n=901). Respondents from both groups characterised midwives as Informative, Competent and Kind. Participants in the caseload group perceived midwives with additional qualities conceptualised as Empowering and 'Endorphin'. These concepts highlight some of the active ingredients that moderated or mediated the effects of the midwifery care within the M@NGO trial.

Key conclusion: caseload midwifery attracts, motivates and enables midwives to go Above and Beyond such that women feel empowered, nurtured and safe during pregnancy, labour and birth.

Implications for practice: the concept of an Endorphin midwife makes a useful contribution to midwifery theory as it enhances our understanding of how the complex intervention of caseload midwifery influences normal birth rates and experiences. Defining personal midwife attributes which are important for caseload models has potential implications for graduate attributes in degree programs leading to registration as a midwife and selection criteria for caseload midwife positions.

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Introduction

Few interventions in maternity have been found to have as many benefits as midwifery-led models of care (caseload and team midwifery) which deliver beneficial clinical outcomes for mothers and babies including a lower risk of preterm birth, regional analgesia in labour, episiotomy, instrumental birth, fetal loss during the pregnancy and neonatal death (Sandall et al., 2016). Furthermore, randomised trials have demonstrated that caseload midwifery is cost-effective (Tracy et al., 2013) and increases the likelihood of maternal satisfaction across the spectrum of maternity care (McLachlan et al., 2016).

Caseload midwifery provides high-level relational continuity whereby childbearing women receive antenatal, intrapartum and postnatal care from a primary midwife and her/his back-up midwives (Beake et al., 2013). Consultation with and referral to other services and health professionals is foundational to midwifery practice (Sakala and Newburn, 2014); within caseload models it occurs as clinically indicated (Australian College of Midwives, 2014). Caseload midwifery is a complex intervention with a number of interacting components that take different forms in different contexts. However, any complex intervention must conform to specific, theory driven processes, which underlie contextual differences (Hawe et al., 2004). While it is unclear how the intervention exerts its effects, the benefits appear to derive from a 'therapeutic relationship' (Sandall et al., 2016) or are 'relationally mediated' (Walsh and Devane, 2012). In this paper, the term 'caseload midwifery' will be used interchangeably with Midwifery Group Practice (MGP); and the terms 'attributes', 'qualities' and 'characteristics' will be used synonymously.

Therapeutic relationships

Rogers (1965) first described the core conditions under which a therapeutic relationship could occur: 1) a genuine and authentic professional who uses appropriate levels of self-disclosure, 2) unconditional respect for the client regardless of their thoughts or actions, and 3) empathy. The concept of therapeutic relationship is explicitly and frequently used in the nursing literature (Milton, 2008; Welch, 2005). Muetzel's model of therapeutic nurse-patient relationships includes the concepts of partnership, intimacy and reciprocity (Richardson et al., 2015). Several authors suggest that nurses require specific personal attributes to engage therapeutically with patients including being caring, compassionate, sensitive and empathetic (Richardson et al., 2015; Shields, 2014; Attree, 2001). In midwifery, instead of a therapeutic relationship the widely adopted 'Partnership Model' characterises the relationship as one of "trust, shared control and responsibility and shared meaning through mutual understanding" (Guilliland and Pairman, 1995, p.7); a 'professional friendship' (Pairman, 2000; Walsh, 1999). The personal characteristics midwives need to work effectively in partnership relationships have not been articulated (Pairman and McAra-Couper, 2015).

Personal attributes

Qualities including being intelligent, friendly, honest and trustworthy, a good listener and communicator, patient and tactful, sensitive and compassionate, positive and tolerant (Waugh et al., 2014; Nicholls and Webb, 2006; Powell Kennedy 2000); are as important to childbearing women as the midwives' clinical knowledge and competence (Borrelli, 2014; Butler et al., 2008). A phenomenological study in the United Kingdom developed the concept of 'emotional capability' as an attribute, which includes empathy and the ability to connect with women (Byrom and Downe, 2008). A Delphi study conducted in the United States identified that the qualities of 'exemplary midwives' included philosophical commitments to: normal birth, family-centred care, women's empowerment, and the midwifery profession (Powell Kennedy, 2000). A systematic review of women's

satisfaction with childbirth reported that feeling supported by care-givers, having a high quality caregiver-patient relationship, and feeling involved in decision-making were factors so important to women that they overrode differences in age, ethnicity and socioeconomic status (Hodnett, 2002).

The midwife's personal characteristics and philosophical commitments affect the nature and quality of the partnership in caseload midwifery models (Allen et al., 2016). In the largest trial of caseload midwifery ($n=2314$), participants allocated to the intervention: "felt more in control during labour, were more proud of themselves, less anxious, and more likely to have a positive experience of pain" compared to participants in standard care (McLachlan et al., 2016, p.465). Although caseload midwifery is a 'package of care', researchers have hypothesised that midwives drawn to work in caseload models might have different personal attributes or philosophies of care compared to midwives who elect to work standard shifts (Newton et al., 2016). The purpose of this paper is to explore whether women allocated to caseload care characterise their midwife differently from women allocated to standard care.

Methods

Aim

The aim of this study was to address one of the secondary outcomes of the M@NGO randomised controlled trial (RCT) of caseload midwifery: women's satisfaction with care. The research question which drove the analysis was: *How do the midwife's personal attributes affect women's satisfaction with care?* The objective was to analyse participants' responses to open-ended questions about their maternity care experiences according to allocated model of care.

Design/Methodology

The methodological orientation that underpinned the study was Pragmatism (Creswell and Plano Clark, 2007) whereby researchers pose and attempt to answer specific research questions "in a way that offers the best chance to obtain useful answers" (Johnson and Onwuegbuzie, 2004, pp.17).

The study methods and primary outcomes are described in detail elsewhere (Tracy et al., 2013). Briefly, we conducted a multi-site unblinded, randomised, controlled, parallel-group trial: Midwives @ New Group practice Options (M@NGO: Trials Registry, number ACTRN12609000349246) at two metropolitan teaching hospitals in Australia. Pregnant women booking-in to give birth at one of the two sites during the recruitment period were given written information about the M@NGO study by the booking midwife. Women of all obstetric risk were eligible to participate in the study. Inclusion criteria were: 18 years or older, less than 24 week's gestation with a singleton pregnancy. Women were excluded if they were already booked with a care provider or planned to have an elective caesarean section. Interested potential participants were referred to a research midwife who obtained written informed consent before participants were randomly allocated to receive caseload midwifery or standard care. In both the intervention and control groups care was provided according to the same hospital guidelines and protocols. During the study period, the intervention of caseload midwifery did not deviate from how it was described in the research protocol.

Data collection

Participants' baseline demographic characteristics and birth outcome data were extracted from medical electronic records. Women's experiences of antenatal, intrapartum and postnatal care were collected via email (with link to the survey URL) or postal hard-copy surveys, sent to women approximately six weeks after birth. One week later, a

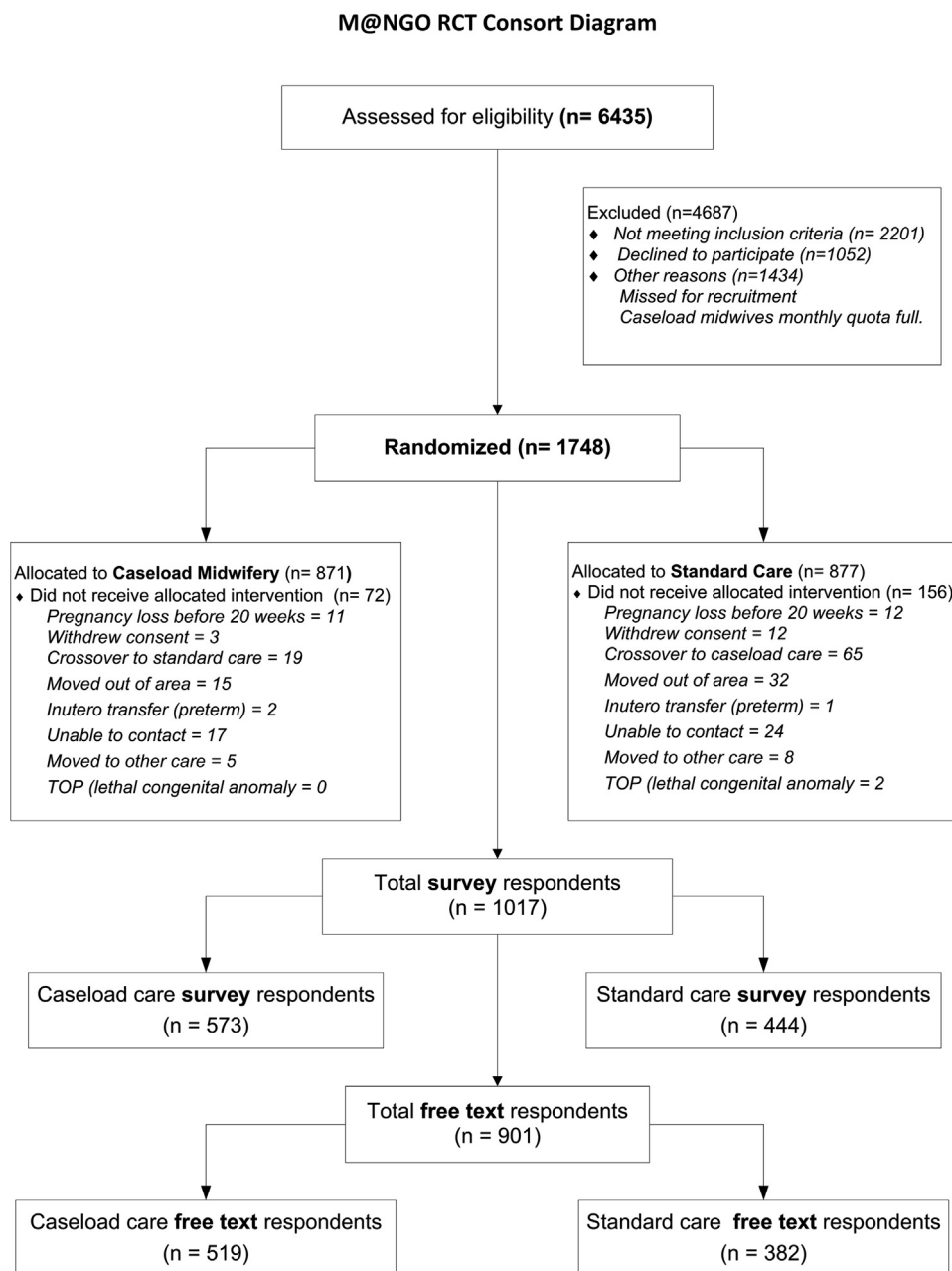


Fig. 1. Participant Flow.

reminder survey was sent to non-responders. Women who had withdrawn from the trial or experienced fetal loss/stillbirth were not sent a questionnaire.

The survey allowed the collection and analysis of both quantitative and qualitative data. Women's experiences of childbirth and maternity care were measured using 7-point scales; the results of the quantitative analysis will be published separately. In this paper, we report on the analysis of participants' free text comments which provided rich and valuable information and are considered a data source in their own right (Tavener et al., 2016). While the survey included eight statements that allowed free text responses, this paper focuses only on the following statements:

- 1) Please describe any things about your pregnancy that you were particularly happy with;
- 2) Please describe any things about your pregnancy that you were particularly unhappy with;

- 3) Feel free to make comments (labour and birth);
- 4) Please describe any things about your labour and birth that you were particularly happy with; and
- 5) Please describe any things about your labour and birth that you were particularly unhappy with.

Women's experiences of postnatal care have been analysed and will be submitted for publication separately. Ethical approval for this multi-site trial was granted through two hospital Human Research Ethics Committees (HRECs)(Site 1: 0805-072 M; Site 2: 1526 M) and three university HRECs (Site 1: 12068, 2008-53; Site 2: Q2011-51).

Data analysis

The data analysis was led by the first author who is a Postdoctoral Researcher in a midwifery research unit and conducted mixed methods

Table 1
Characteristics of trial participants and free-text respondents.

		Total trial participants n=1748	Total free text survey respondents n=901 survey	
		No. (%)	Caseload Group n=519 No. (%)	Standard Group n=382 No. (%)
Age	< 20 years	13 (0.74)	0 (0.00)	3 (0.79)
	20–35 years	1239 (70.88)	412 (79.38)	287 (75.13)
	> 35 years	477 (27.29)	107 (20.62)	92 (24.08)
Parity	Nulliparous	1219 (69.74)	380 (73.22)	285 (74.61)
	Multiparous	510 (29.18)	139 (26.78)	97 (25.39)
SEIFA[*]	Quintile 1	156 (8.92)	39 (7.51)	27 (7.07)
	Quintile 2	339 (19.39)	86 (16.57)	69 (18.06)
	Quintile 3	347 (19.85)	116 (22.35)	66 (17.28)
	Quintile 4/5	887 (50.74)	278 (53.56)	220 (57.59)
Indigenous status	Aboriginal and/or Torres Strait Islander	12 (0.69)	1 (0.19)	2 (0.52)
	Non-Indigenous	1714 (98.05)	517 (99.81)	379 (99.48)
	Vaginal birth	941 (53.83)	298 (57.42)	199 (52.09)
Mode of birth	Caesarean section	387 (22.24)	115 (22.16)	89 (23.30)
	Instrumental	343 (19.62)	106 (20.42)	94 (24.61)
Infants[†]	Low birth weight (< 2500 g)	57 (3.52)	15 (2.89)	12 (3.14)
	Preterm (< 37 weeks)	90 (5.15)	17 (3.28)	21 (5.50)
	NICU/SCN admission	203 (11.61)	67 (12.91)	56 (14.66)

^{*} The Socio-Economic Indexes For Areas (SEIFA) method provides a measure of social and economic wellbeing for Australian communities; using SEIFA quintile a score of 1 is the lowest and 5 the highest.

[†] NICU=neonatal intensive care unit. SCN=special care nursery.

research during her doctoral studies. The second author, who is a Professor of Midwifery, independently verified the themes. The researchers used qualitative software, NVIVO version 10, to code and organise the data using a five-step deductive approach (Pope et al., 2000). The steps included: 1) immersion in the raw data (reading all the free text responses), 2) identification of key attributes (thematic framework), 3) applying the thematic framework systematically to the data, modifying the framework as new themes emerged, 4) abstraction and synthesis of the themes into higher level categories, and 5) developing associations between categories with a view to explanation of findings (Pope et al., 2000). Participants did not provide feedback on the findings.

Findings

Participant flow

Fig. 1 reports the flow of participants through the trial. The 6-week survey response rate was 58%, the survey response rate from participants who answered one or more free text questions was 52%. At least 50% of respondents from each allocated group responded to each open-ended question. The majority of trial participants (76%, n=1328) derived from Site 1 with 24% (n=420) located at Site 2. The response rate to the free text questions on the 6-week survey reflected similar representation from both sites; 79% (n=707) and 22% (n=194) respectively.

Table 1 presents the characteristics of the free text respondents compared to all trial participants. Participants who were aged 20–35 years ($p < 0.001$), those living in the most highly advantaged socio-

economic areas ($p=0.027$), and those who had a vaginal birth ($p=0.028$) were more likely to respond to the free text questions compared to other trial participants.

Key findings

Both participant groups reported midwife attributes which were categorised as *Informative*, *Competent* and *Kind*. Through thematic analysis the first author identified additional attributes, which were commonly reported by respondents from the caseload group but rarely reported by participants allocated to standard care. These additional attribute categories were conceptualised as: *Empowering* and *‘Endorphin’* (defined below). Fig. 2 provides the thematic map which includes the over-arching theme with a view to explaining the association between the five categories.

Illustrative quotes to support the findings are provided along with diverse cases and minor themes. Quotes are identified by the study number and allocated model of care: Standard (S) or Caseload (C). Participants from Site 1 and Site 2 have study numbers that begin with the corresponding numeral. *Italicised* verbatim quotes have been corrected for spelling and typographic errors, deleted words are indicated by ... whereas word changes for grammatical fluency or to maintain anonymity are indicated within [square brackets]. Midwives names have been replaced with pseudonyms*.

Overarching theme: Above and Beyond

Caseload participants uniquely commented that their midwives put in “extra effort” and went beyond their expectations of midwifery care:

“She seemed to go out of her way to make things as easy for me as possible.” (P11232, C)

“During the birth of my baby I felt the midwives looking after me - Rita and Susan* - went above and beyond the call of duty to help me to have a really healthy, joyful birth.” (P20208, C).*

The capacity to go *Above and Beyond* was predicated on an intimate and trusting midwife-woman relationship. Participants in the caseload group were effusive about how much they enjoyed having their own midwife:

“This was my second labour and couldn't believe how amazing everything went. Helped massively by having a dedicated midwife that I knew and trusted.” (P10556, C)

“I thought my caseload midwives were sensational. They always made us feel like we were top priority.” (P10608, C)

“I had a fantastic midwife Sam who was always there to give support. She made me feel very special and important each time I saw her.” (P20186, C).*

Respondents often referred to having a “bond” with their primary midwife and compared their relationship with the caseload midwives to other significant relationships in their life like friends or family:

“My family lives overseas and the support and care I have received throughout the pregnancy and after the birth made me feel safe and loved.” (P10715, C)

“My midwife Leanne was absolutely amazing! She is a lovely person, who genuinely cared about us...I will actually miss not seeing her...” (P11320, C).*

Particularly significant was having the midwife's time and attention such that the woman felt known and understood:

“I absolutely loved having my own midwife, who got to know me, what I wanted and who was there to support me during and after the birth of my baby.” (P10382, C)

“The support of the midwives was amazing...I was ever grateful for how much effort and attention they gave me” (P11267, C).

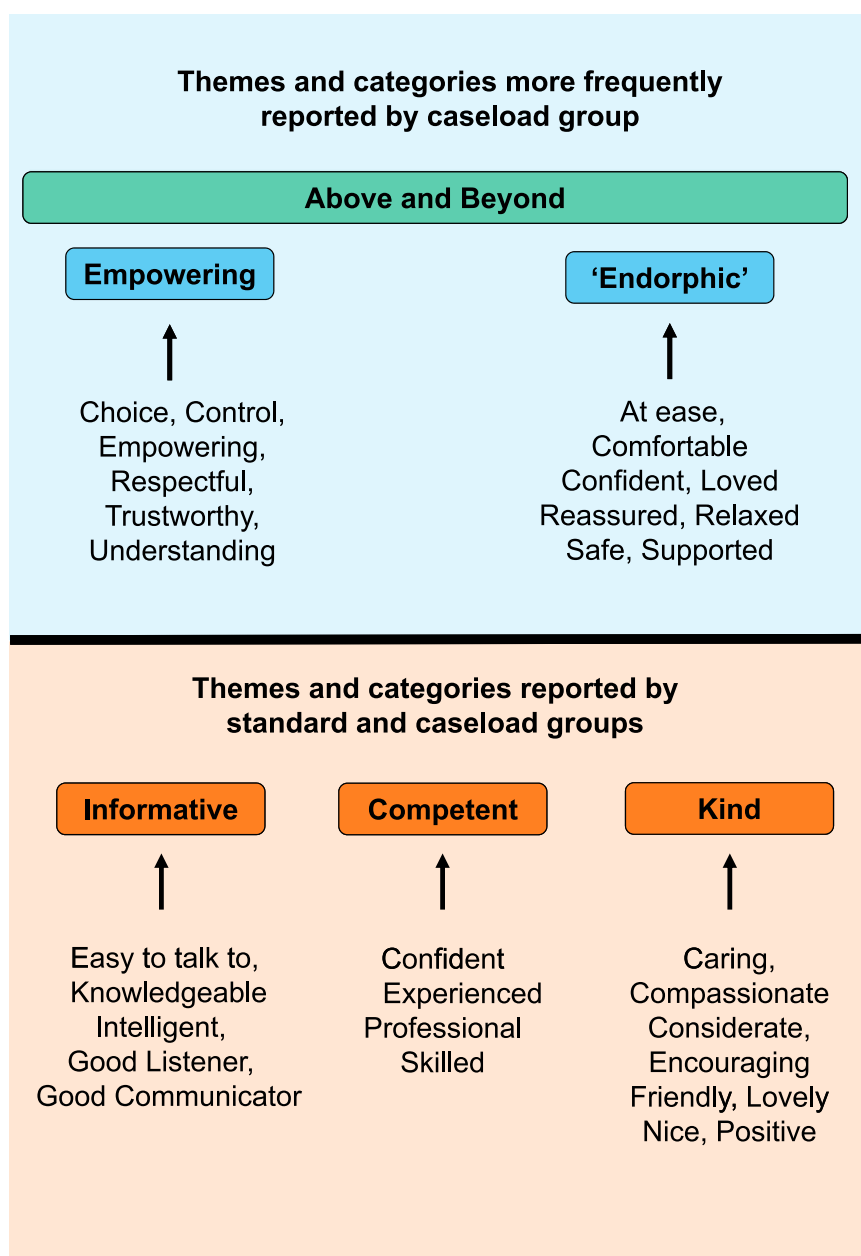


Fig. 2. Thematic Map.

"...you end up developing a relationship with them and they know everything about your pregnancy and what is important to you and your partner" (P20415, C).

Some respondents perceived that caseload midwives researching their concerns between appointments, or accommodating their birth preferences during labour, was connected to loving midwifery:

"I felt as though they really cared about their jobs and loved what they did." (P10836, C).

While respondents from the standard group often commented positively on the informative, kind competence of their midwife; none asserted the midwife went *Above and Beyond*. Indeed several participants in the standard group interpreted that midwives were *"desensitised...just doing their job"* (P10790, S).

Theme 1: Informative

Respondents from both standard and caseload groups described

their midwife in terms conceptualised as *Informative*. Women in both groups referred positively to receiving accurate, timely and consistent information:

"(During) my check-ups with my midwife I was always given thorough information and always made to feel comfortable." (P10844, S)

"I couldn't have got through this pregnancy and birth without [the midwives'] professional knowledge..." (P20164, C)

Respondents from both groups appreciated having their concerns validated and their questions comprehensively answered:

"My midwife Jane was...incredibly knowledgeable, supportive and always answered my questions confidently." (P10992, C)*

"Midwives were all very friendly and helpful. My partner was welcomed [and] included...no question seemed too trivial or silly" (P10565, S).

However, because women in the standard group frequently saw a different clinician at each antenatal visit, the information could be perceived as repetitive rather than individualised:

“A lot of time went in to providing the same information at every visit. If I had any questions I often got the feeling that they were keen on getting me out in order to see the next person...” (P10389, S).

Participants commented on the constraints of midwives in the standard model that affected the time they had available to provide information. Conversely, in caseload care the information may have been more readily accepted because of the relationship between the woman and her midwife:

“I knew about [the midwives] as people and we shared experiences, this made me more comfortable and trusting of them and their information” (P20414, C).

Theme 2: Empowering

Respondents from the caseload group described their midwife in terms conceptualised as *Empowering* more commonly than those in the standard group. Empowering midwifery clients is predicated on the midwife's professional knowledge and the development of a trusting relationship; it requires a dynamic use of complex communication skills that enable women to make informed decisions (Hermansson and Martensson, 2011). There were many examples of empowering interactions for women in the caseload group:

“The time the midwives took with their care, and ensuring I understood everything they said, empowered me to make my own decisions.” (P10139, C)

“...all of my personal decisions about what kind of birth I wanted were discussed and the pros and cons were explained.” (P10661, C)

“My decisions were respected and supported and my midwife explained every step of the process including each conceivable outcome...” (P11216, C).

Feeling empowered was also connected to feeling involved and in control during labour and birth:

“My midwife really made my husband and I feel like [birth] was just our moment and I thank her for that.” (P11146, C)

“Very thankful to the personal one on one care received [which] made us feel like it was our experience that we were in control of...” (P10849, C)

“The midwife supported me in every decision I made regarding the way I wanted to give birth. She made me feel like I was in total control...” (P11026, C).

While many respondents from the standard group perceived their midwife as *Informative*, there were scant examples of empowerment:

“She truly listened to me, understood my situation, and empowered me and assisted me obtain my ideal birth.” (P20384, S).

For some caseload respondents, feeling empowered was associated with their desire to avoid unnecessary medical intervention and experience a normal birth:

“My strong beliefs and wishes against a high degree of intervention in birth were respected.” (P10365, C)

“[I particularly liked] feeling like decisions were up to me and that I could have a pregnancy and birth that I wanted (active and as natural as possible).” (P11080, C).

Women from the caseload group uniquely commented that their midwife “believed in me” which was associated with believing in the woman's ability to give birth normally:

“The strength and encouragement from Natasha a fantastic midwife who believed in me.” (P10654, C)*

“The midwives were excellent and they made me believe I could

deliver naturally even though the doctors were doubtful.” (P10916, C).

For some women, the midwife's confidence in their ability to birth normally affected their self-belief:

“I was in strong pain. But as soon as I saw my midwife's face, I knew I could cope with this pain and could give birth...” (P11239, C) .

Other respondents interpreted that caseload midwives pushed a normal birth “agenda” that was not consistent with their own approach:

“...midwifery group practice is a great system of care only if ...the midwife does not have an agenda of her own she wishes to enforce on her patient.” (P10038, C)

“[The midwives were] clearly pushing us towards certain points of view on things like breastfeeding, natural labour etc. While they were careful to say afterwards it was our choice to make...I was expecting more obvious support for individual choices.” (P20075, C).

In an ‘all-risk’ setting, caseload midwives were ideally placed to facilitate the woman to feel empowered during complex decision-making:

“When complications arose, the midwives assisted me in seeing doctors and in asking the right questions and helping in finding my way around the administrative processes at the hospital.” (P11097, C) .

Women appreciated it when their caseload midwives attended medical appointments such that the consultation included all parties and focused on the woman's choices:

“Loved the way the midwife and doctors interacted and included us in their conversations” (P10508, C) .

However, there were rare instances when participants reported they felt excluded from the decision-making process:

“The decision [to plan a caesarean] was discussed between the doctor and midwives. I felt I didn't get a say in the decision made.” (P20230, C) .

Women in both groups wanted to be central to the decisions made regarding their maternity care.

Theme 3: Competent

Respondents from both groups described their midwife in terms conceptualised as *Competent* with similar frequency. Participants in both groups valued midwives who were clinically-skilled and experienced:

“I loved my midwife; she was professional, competent and a joy to have with me during one of the most important moments of my life!” (P10145, S)

“The midwives and the care they provide is so reassuring and competent. What a joy it was to have my baby...” (P10418, C).

Respondents commented positively on the midwives' clinical skills in promoting normal birth:

“The midwives helped me change positions for active birth. Our birth plan was respected and used. The midwives were very encouraging and kind. A mirror was positioned so I could see the birth. My husband received the baby then placed him onto me. It was beautiful.” (P10157, C)

“I could not have achieved a natural birth without [the midwives] great encouragement, support, advice, positive energy, humanity, understanding, kindness, psychology. I did not feel it was a shame not to know the midwife before the labour.” (P10863, S).

These skills extended into keeping birth as normal as possible for women experiencing medical intervention:

"I was able to have a very empowering, wonderful and otherwise natural birth despite having to be induced before my due date with the Syntocinon drip due to the support and encouragement I received from the midwives..." (P20208, C)

"My labour was induced... [I] delivered my daughter naturally, in a squatting position, without any form of pain relief throughout the labour and birth... [The midwife] was fantastic, and met each of my needs perfectly." (P20384, S)

Occasionally respondents from both groups described their midwife as lacking passion or skill in normal birth promotion:

"The [back-up] midwife kept disappearing during my labour to 'write notes' so I did not feel I had any support or guidance from her...she pushed for me to use gas and later pethidine rather than offering other active birth strategies." (P10612, C)

"My first midwife offered little help or strategies to ease the back pain from the posterior position of my baby. She seemed a little disinterested in what was happening." (P20174, S).

The woman's perception of the midwife's competence was often linked with her perceived kindness and associated personal attributes: *"competent and a joy"*.

Theme 4: Kind

Respondents from the standard group described their midwife in terms categorised as *Kind* more frequently than those in the caseload group. In the caseload group, midwives were often characterised in more effusive, friendship, or 'endorphic' terms (see Theme 5); all of which are *Above and Beyond* the attribute of *Kind*.

Respondents from both groups enjoyed feeling that the midwives cared about them, their baby and their pregnancy and making sure they received appropriate support and assistance:

"I believe the positive support and encouragement I received from [the midwives] enhanced the success of my pregnancy and birth." (P10388, C)

"I always felt that my concerns were taken seriously and the midwives were very genuine. Sarah and Leanne* were especially caring and I always felt supported." (P10977, C)*

"The midwife who welcomed us and brought my baby into the world was amazing...was kind and strong." (P10656, S)

"Most of the other midwives I saw throughout the pregnancy and also after the birth were caring, patient, compassionate and very helpful." (P11295, S).

In rare instances women in both groups reported uncaring behaviours from the midwife:

"All midwife and hospital appointments were very impersonal (as it was a different person each time) and NO-ONE spoke to or really even acknowledged my husband..." (P20393, S)

"Pregnancy is a very personal, sensitive experience and I felt like just another number. There wasn't a huge amount of sensitivity with the midwife care, my check-ups were just another medical procedure." (P10365, C).

No matter how technically competent, a lack of kindness affected women's experience of midwifery care.

Theme 5: Endorphin

Respondents from the caseload group described their midwife in terms conceptualised as *Endorphin* more often than those in the standard group. Women in caseload care frequently commented that the midwife *"makes me feel: relaxed, reassured, loved, nurtured, safe and/or comfortable"*. We could find no English word to describe this

ability or attribute. Endorphins are hormones that are released in the brain during normal labour that help alleviate pain and stress as well as facilitate feelings of relaxation and energy (Buckley, 2015). We conceptualised the term 'Endorphin' to describe the midwife's ability to elicit these feelings (and associated hormones like endorphins and oxytocin) in pregnant and birthing women. The Latin suffix '-ic' forms an adjective from other parts of speech (Dictionary, 2016); i.e. endorphin becomes 'endorphin'.

During pregnancy women from the caseload group described how their midwives had a relaxing effect on them by being reassuring and helping alleviate their concerns:

"Our midwife Andrea was exceptional in every way. I was always reassured that everything was good, and never felt worried or concerned for the wellbeing of myself or my child" (P10830, C)*

"My midwife was very helpful, caring and put my mind at ease time and time again! (P20119, C).

A significant component of helping women feel relaxed was the quality of preparation for labour and birth the midwives provided:

"My midwife...made me feel relaxed about the process of pregnancy and giving birth." (P10468, C)

"All the midwives were wonderful... [they] relieved any anxieties I had, and I went into the labour feeling quite relaxed and unafraid..." (P10877, C)

"I was very anxious prior to the birth...the midwives in the midwifery group made me feel much more relaxed and prepared for the birth." (P20204, C).

Women in the caseload group frequently associated the continuous supportive presence of their midwife to having a positive birth experience:

"I had an amazing birth, it was everything I could have hoped for and she was there every minute of it, not like in private where I had my first baby and didn't feel like I received much support at all." (P10294, C)

"My midwife was excellent. She let the natural course of labour take place without much intervention and she never left my side and was a positive strong presence...because of her it was the best birth I have had" (P10418, C)

"The midwife that delivered my baby was extremely considerate of my needs and provided the support and reassurance that I needed. I think my birthing experience would have been considerably harder had she not been there" (P11216, C).

This positivity was particularly pronounced for multiparous women who were able to compare their experiences with previous birth experiences in different models of care.

Confidence in the midwife enabled women to *"feel totally safe in her hands"* during labour and birth:

"I felt like my midwife had everything under control and that I could relax and do what I needed to do" (P10401, C).

"I thought the midwives were wonderful and felt confident they could deliver my baby safely...I felt safe in their care." (P11313, C)

"Midwife mainly observed through the labour, allowed my husband and I to feel like it was our journey not a medical condition. Felt very safe, AND I knew my baby was in good hands, she was safe also." (P20380, C).

However there was one example from the caseload group of a woman who felt she did not get the supportive presence she needed:

"I felt I was left alone and it was my partner and I alone, with the midwife just doing the checks and giving of options. There was no guidance and support or encouragement..." (P10720, C).

Feeling safe was reported on occasion by standard group participants *"during labour, I had the best support from the (midwives). They were fantastic and made me feel safe." (P10501, S).*

Discussion

Main findings

Regardless of model of care, participants generally perceived their midwives as *Informative*, *Competent* and *Kind* which is consistent with the integrative review of what makes a 'good' midwife (Nicholls and Webb, 2006) and Australian midwifery competency standards (Nursing and Midwifery Board of Australia NMBA, 2006). We interpret the caseload model provided midwives with the motivation and capacity to go *Above and Beyond*; to be *Empowering* and *Endorphinic*. These concepts highlight some of the active ingredients that moderated or mediated the effects of the midwifery care within the M@NGO trial.

Strengths

The M@NGO trial is the largest trial of caseload midwifery to include women of any risk status. To our knowledge, we have now conducted the largest qualitative study of women's experiences of caseload midwifery; which includes women of all risk. The open-ended nature of the questions ensured participants were able to focus on the elements of maternity care that were significant to them. The credibility of the findings is supported by the randomisation of participants; which means differences in their experiences of midwifery are credibly associated with model of care rather than baseline characteristics. The large sample size drawn from two hospitals in different cities strengthens transferability of the findings to the wider population of midwives and childbearing women in similar maternity care contexts. Confirmability is strengthened through the analytic approach that ensured that themes were derived from that data; combined with a description of diverse cases and discussion of minor themes. A second researcher independently verified the themes.

Limitations

The survey was based on participant's recall, six weeks after birth, of antenatal and intrapartum midwifery care. While there is a potential for recall bias to affect their perceptions of care; one study has found that women still remember their childbirth experience clearly after five years (Takehara et al., 2014). Whether this applies to women's experiences of antenatal care is unclear and therefore recall bias is a potential limitation.

The response rates could limit the generalisability of the findings with 60% of caseload participants and 44% of standard participants providing free text comments on the survey. There is limited academic agreement on significant or meaningful response rates for surveys and a general consensus that at least half of a sample should have completed the survey instrument.

There remains the possibility of non-response bias for both caseload care and standard care survey data (Draugalis et al., 2008). Participants were less likely to respond to the free text survey if they were younger than 20 years or older than 35 years, were socio-economically disadvantaged or had experienced a caesarean section. Women with these characteristics may have perceived their midwifery care, and the attributes of their midwife, differently than those women who did respond. Therefore the generalisability of the findings may be limited.

The analysis of free text survey data is limited because unlike interviews, there is no capacity for researchers to clarify participants' meaning or invite feedback on the findings.

Interpretation

The caseload model motivates and enables midwives to go *Above and Beyond* in their provision of maternity care.

Motivation

The concept that exceptional midwives have a passion for midwifery and go *Above and Beyond* the call of duty has been identified by other qualitative studies (Carolan, 2013; Powell Kennedy 2000). In standard care, midwives do not have overall responsibility for their clients, work within organisations that prioritise institutional needs, and are less likely to advocate (Finlay and Sandall, 2009). Whereas caseload midwives have described experiencing a higher level of responsibility and accountability compared to their previous role as a shift worker (Newton et al., 2016). Therefore midwives motivated to work in caseload models might have different personal attributes or philosophies of care compared to midwives who elect to work standard shifts (Newton et al., 2016). Furthermore, when the caseload model provides the context for a genuinely caring ongoing relationship, the midwife is motivated to do their utmost (Jepsen et al., 2016). Balanced exchanges between midwife-woman where there is 'give and take' on both sides is emotionally rewarding and affirming both professionally and personally for the midwife (Hunter, 2006). The ability to know the woman's individual circumstances, provide tailored assistance and support, and receive feedback from clients provides immense job satisfaction (Jepsen et al., 2016; Newton et al., 2016). It may be that the caseload model works to attract midwives who are capable of excelling as empowering and endorphinic midwives who, once in the model, are motivated to go *Above and Beyond* in their provision of one-to-one care.

Capacity

This study confirmed that caseload midwifery equips midwives with some capacity to avoid many of the known constraints of hospital routines and react more responsively to the individual needs of the women in their care (Finlay and Sandall, 2009). Childbearing women want to be offered support and choice that enables them to feel in control (Borrelli, 2014). In standard models, the absence of continuity of carer and "time poverty" can see midwives focussing on the bio-medical aspects of care while ignoring the psycho-social-emotional dimensions (Boyle et al., 2016).

Caseload midwifery gives midwives the capacity to form trusting relationships, and the time to share information, such that women feel empowered in decision-making (Boyle et al., 2016). For respondents in the caseload group, control was commonly related to avoiding medical intervention and having a normal birth. Indeed, women in the caseload group had a higher rate of spontaneous onset of labour (OR 1.33, 95% CI 1.09–1.61, $p=0.005$) which was related to a lower rate of both induction of labour (24% versus 28%, $p=0.05$) and planned caesarean section (8% versus 11%, $p=0.05$) (Tracy et al., 2013). For women experiencing complexity, continuity of midwife carer is particularly important in terms of developing trust, navigating the system and optimising support (Foureur et al., 2016). While some studies of caseload midwifery have included women of moderate and high risk (Sandall et al., 2016; Hartz et al., 2011), this trial was the largest study of caseload midwifery to include women of any risk (Tracy et al., 2013). This is significant as more Australian caseload models are becoming 'all risk' or 'no exit', which means that women can enter the model with risks factors and/or continue to receive care from their known midwife with additional medical input if complications occur (Lewis et al., 2016).

Women do not value continuity of carer for its own sake; quality of care is just as important (Green et al., 2000). Fragmented midwifery often sacrifices the relationship element of care (Fahy and Parratt, 2006) for a technocratic approach developed to enhance throughput and reduce system errors whilst treating all births in a standardised way and normalising intervention (Romano and Lothian, 2008). Caseload midwifery requires relationship skills that potentially increase the emotional and psychological aspects of the midwife's work (Hunter, 2001) but enable the midwife to optimise the interconnected biological, psychological, emotional and social processes that occur during labour and birth (Sakala and Newburn, 2014; Fahy et al., 2008). As in other qualitative studies, knowing their midwife resulted in caseload women feeling calmer and less anxious in the lead up to labour (Huber and

Sandall, 2009) as well as feeling more able to manage fear of pain in labour (Leap et al., 2010). A critical review reported that feeling safe with the continuous support of the midwife was fundamental to managing feelings of fear during labour (Van der Gucht and Lewis, 2015). When the midwife is perceived as a friend or family member, like they were by caseload respondents in this study, it helps women feel relaxed and comfortable, and safe enough to 'let go' (Anderson, 2000). Our findings suggested caseload midwives reduced women's anxiety and fear (adrenaline) and supported them to feel safe and loved (oxytocin, endorphin). There is a significant correlation between women's anxiety state and degree of pain during labour (Floris and Irion, 2015). Therefore, lower levels of anxiety-pain may be associated with the clinical outcome that reported a higher proportion of women in the caseload group used no pharmacological analgesia during labour (OR 1.74, 95% CI 1.37–2.20; <0.0001) (Tracy et al., 2013). The Endorphin midwife is important not only in terms of maternal satisfaction but significant in terms of facilitating physiological birth (Buckley, 2015) by optimising psychophysiology (Fahy and Parratt, 2006).

Conclusion

Caseload midwifery attracts, motivates and enables midwives to go *Above and Beyond* such that women feel empowered, nurtured and safe during pregnancy, labour and birth.

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