

Calibrating care in midwifery

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Valorisation

This valorisation addendum completes the dissertation: ‘Calibrating care in midwifery: Weighing the evidence on weight and weight gain for pregnant women’. In this addendum we explain the societal value of our studies and describe how the findings can be used to benefit (inter)national maternity care.

Relevance

Obesity

Given the already high, and increasing, prevalence of obesity in the Netherlands and in the world - and the negative health consequences of being overweight^{1,2} - there can be no doubt about the relevance of our research. We know that obese women face more reproductive problems than normal weight women,^{3,4} and there is growing evidence of an association between obesity in pregnancy and the health of future generations.⁵ Although myriad studies report adverse outcomes for obese women in pregnancy and childbirth, there is only limited evidence on what the appropriate care for obese pregnant women should be, and this is especially true in the context of the Dutch dual maternity care system. Obesity is not included in the OIL.^{6,7} In their 2009 guideline, ‘pregnancy and obesity’, the NVOG defines class-III obesity (BMI ≥ 40 kg/m²) as a medical condition requiring obstetrician-led care, but this recommendation was based on professional opinion and not on evidence.⁸ The research questions examined in this dissertation originated in daily midwifery practice and were explored in order to contribute to the knowledge necessary to provide optimal care for women with obesity.

Being able to safely assign women to primary care, referring to secondary care only when necessary - as described in chapter 3 - is critical for the provision of the best possible care for mother and child. Adequate risk assessment avoids the problems that occur when a woman is improperly labelled as being at ‘high risk’, including unnecessary interventions, negative psychological sequelae,⁹ and reduced choices throughout pregnancy and around the birth.¹⁰

The impact of maternal BMI on perinatal outcomes has implications for the use of obstetric resources,¹¹ underscoring the economic relevance of having a clear view of what is needed to address the needs of pregnant women who are obese. We found, for example, that midwives play a prominent role in the support of obese women (chapter 3), leading us to study how the use of antenatal care by obese women (chapter 6) influences the workload of primary care midwives.

Weight gain

Like obesity, weight gain in pregnancy is related to perinatal outcomes: insufficient or excessive GWG is harmful to women and babies.¹² Excessive GWG may result in

inadequate weight loss after pregnancy, which is associated with an increase of complications in subsequent pregnancies^{13, 14} and may lead to higher BMIs and general health problems for the mother later on in life.¹⁵⁻¹⁷ There is no consensus, internationally, on optimal weight gain, resulting in a great variation in formal and informal policies for the management of GWG.¹⁸ In the Netherlands, there are no national-level guidelines for GWG in primary care, leaving midwives on their own when advising women about GWG. In our first study on patterns of GWG (chapter 2) we found that if the 2009 IOM guidelines were to be implemented in primary care settings, a substantial personal, organisational, and financial investment would be needed. Our research and the research of others confirms the social, scientific, and economic relevance of the study of the effects of too much or too little GWG on perinatal and health outcomes in low-risk populations.

Target groups

Because our research focused on the results of primary care midwifery in relation to weight and weight gain, our findings are, first and foremost of interest to primary care midwives. This group of health care providers should critically appraise our results, using them to update local protocols for their practices and their collaborations with other providers. Our study of the factors influencing midwives' clinical decision-making will inspire midwives to reflect on their professional and personal skills and attitudes in the context of local multidisciplinary maternity care collaborations and can empower them to explore the 'new' EBM model by realising a more woman-centred approach.

Of course, primary care midwives do not work alone and cannot change care pathways on their own. Therefore, our findings are also of interest to midwives working in secondary care, and to obstetricians and obstetric nurses. Our studies are also of interest to an international audience. In several countries around the world midwives work autonomously - in midwife-led units or in the community - and take care of low-risk pregnant women. In our review of international studies of clinical decision-making by midwives we learned about the many dimensions of this process and the challenges midwives must meet in multidisciplinary collaboration. With adjustments for local contexts, our findings can be applied to their populations and their work settings.

Our studies contribute to the body of knowledge on weight and weight gain and are therefore interesting for the developers of national guidelines and for the teachers of midwifery, who should incorporate this new knowledge in their midwifery programs.

Our study of clinical decision-making is especially useful for the creation of educational programs for (student)midwives, and will provide them with the competencies needed for clinical decision-making in the context of the integrated maternity care movement. The KNOV should encourage this kind of education, which

will empower midwives by developing the skills and attitudes needed to succeed in their role as promoters and protectors of physiological pregnancy and birth.

Finally, our findings will be of interest to insurance companies, providing the basis for the purchase of appropriate care for the group of overweight women. Our work can be used to support the development and evaluation of new models of care that put women at the centre of evidence-based integrated maternity care.

Innovative character of the study

The innovative character is evidenced in its choice of subjects and in the design of the studies, done in the context of Dutch midwife-led primary care. Obesity and GWG - in relation to risk assessment done by primary care midwives and to the outcomes of midwife-led primary care - have not yet been studied in the Netherlands.

Regarding the design of the studies, it was important for us to consider the complete care pathway of women through midwife-led and obstetrician-led care in pregnancy and childbirth.¹⁹ Therefore, to study the outcomes of women in primary care with regard to BMI and weight gain, we began our research with women eligible for midwife-led care after antenatal booking. We followed this group of women and studied the population of women remaining in midwife-led care at the onset of labour and the women who delivered in midwife-led primary care. In the obesity study (chapter 3), we examined both referred and non-referred women during pregnancy and childbirth.

In line with the ongoing discussion of relevant outcome measures of midwife-led care²⁰⁻²² we chose to use salutogenically-focused outcomes in our obesity study (chapter 3). These outcomes reflect health and well-being rather than illness or adverse events.²³ We did this because we were especially interested to learn if obese women could experience the benefits of a physiological childbirth. In the GWG study (chapter 5) we used referral in pregnancy and in childbirth as primary outcomes. The use of this composite outcome allowed us to study the overall perinatal outcomes for different GWG classes, which are known to have differing effects for mother and child.²⁴ Using a composite outcome also helped us to overcome the power problem of low prevalence of some adverse outcomes in primary care populations.

Activities

As mentioned earlier, we initiated our research because of the need for better insights into the subjects of weight and weight gain in midwife-led primary care. That is why, beginning in the early stage of our research activities, we disseminated the knowledge we had gathered. We presented our findings at a variety of national and international

conferences and also in meetings of local maternity care collaborations. We reached a multidisciplinary audience of (student) midwives, obstetricians, professionals in the field of public health and health promotion, policy makers in maternity care and public health, and professionals involved in education in these domains. We did poster presentations at conferences, and four of the five studies of this dissertation are published and available for an (inter)national audience. The fifth study has been submitted to an international journal. Details of these activities are listed below.

After the publication of the dissertation, we will continue to disseminate the findings by including the newly gathered insights into the midwifery educational program and by looking for (financial) opportunities to study the topics we identified as important subjects for future research. We will also use what we have learned to develop and evaluate a 'new' EBM model in the context of integrated maternity care. In the most recent KNOV factsheet on obesity our research project is referenced and we expect that our results will be used to update guidelines on obesity in pregnancy and GWG.²⁵

Publications

Daemers D, Wijnen H, van Limbeek E, Budé L, De Vries R. Patterns of gestational weight gain in healthy, low- risk pregnant women without co-morbidities. *Midwifery*. 2013 May;29(5):535-41.

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Daemers DOA, van Limbeek EBM, Wijnen HAA, Nieuwenhuijze MJ, de Vries RG. Factors influencing the clinical decision-making of midwives: a qualitative study. Submitted.

Poster presentations

Daemers D, Spaan J, Wijnen H, Peters L. Obesitas, risicofactor in de zwangerschap? Kennispoort Verloskunde conferentie, Amersfoort. December 2007.

Daemers D, Spaan J, Wijnen H, Peters L. How many obese women in a Dutch low-risk population experience a normal birth? Kennispoort Verloskunde conferentie, Utrecht. December 2009.

Daemers D, Spaan J, Wijnen H, Peters L. How many obese women in a Dutch low-risk population experience a normal birth? Symposium Quality in midwifery, good practice in care and education, Gent. February 2010

Daemers D, Wijnen H, van Limbeek E, Bude L, De Vries R. Patterns of gestational weight gain in healthy, low- risk pregnant women without co-morbidities. Congres: The future of homebirth in The Netherlands, Maastricht. September 2012.

(Conference) papers

Daemers D, Spaan J, Wijnen H, Peters L. How many obese women in a Dutch low-risk population experience a normal birth? Triennial congress of the International Confederation of Midwives, Glasgow. 5 June 2008.

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Daemers D, Wijnen H, van Limbeek E, Budé L, Nieuwenhuijze M, Spaanderman M, de Vries R. Obesitas en zwangerschap. Mini-symposium Regio Rivierenland, Tiel. 25 October 2011.

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