


**Brief Report**

## Stakeholder Perspectives on Implementation of Continuous Care by Maternity Care Assistants During Labor in The Netherlands

Amber J.C. Scheenen, BSc<sup>1\*</sup>, Karina V. Chaibekava, MD<sup>2</sup>, Marianne J. Nieuwenhuijze, PhD, MPH, RM<sup>3</sup>, Hubertina C.J. Scheepers, MD, PhD<sup>4</sup>

### Abstract

The results of the Continuous Care Trial suggest that continuous care by trained maternity care assistants reduces the need for epidural and other anesthesia and caesarean sections, making the intervention effective and not more costly than conventional care. Despite good results in several trials and WHO's recommendations, continuous care is not implemented on a large scale. The aim of this brief report is to present the perspectives of various stakeholders that are essential for the construction of an implementation strategy for continuous care by maternity care assistants in The Netherlands. A stakeholders meeting was attended by 13 stakeholders with different backgrounds. The meeting was conducted online and transcribed verbatim. Thematic qualitative content analysis of the stakeholders meeting resulted in four overarching themes: facilitating factors, hindering factors, prerequisites and suggestions for continuation. Despite improving outcomes without increasing costs, the major challenge for further implementation of continuous care is funding due to the current Dutch financing structure of healthcare. Possible pathways must be further explored in order to arrange financing on a national level. Furthermore the prerequisite of sufficient available maternity care assistants, with clear task descriptions and demarcations, must be met. Hereafter tailored regional implementation can be initiated.

**Keywords:** Child labor; Doula; Labor Pain; Health Plan Implementation

### Summary

- There is interest in the implementation of continuous care during labor, in order to reduce obstetric interventions and improve maternity care.
- International popularity of doula care has increased, but is not sufficiently accessible to all women in labor. The national implementation of continuous care is hindered by a lack of implementation strategies and financing.
- International and regional, tailored implementation of continuous care requires sufficient available staff with clear task descriptions and demarcations

### Introduction

Maternal and neonatal survival have improved over the past centuries, mostly because of better hygiene, but also due to better access to care and obstetric interventions, such as labor induction, instrumental birth and analgesic drugs [1]. These interventions during childbirth have become daily practice in many high-income countries and its use has risen enormously [2,3].

Current frequent use of interventions has resulted in a rise in complication rates and costs [4-6]. Hence, the interest in an alternative approach to improve

### Affiliation:

<sup>1</sup>Department of Obstetrics & Gynecology, Maastricht University Medical Centre (MUMC+), Maastricht University, Peter Debyealaan 25, 6229 HX Maastricht, The Netherlands/ School for Oncology and Developmental Biology (GROW), Maastricht University, Peter Debyealaan 25, 6229 HX Maastricht, The Netherlands

<sup>2</sup>Department of Obstetrics & Gynecology, Maastricht University Medical Centre (MUMC+), Maastricht University, Peter Debyealaan 25, 6229 HX Maastricht, The Netherlands/ School for Oncology and Developmental Biology (GROW), Maastricht University, Peter Debyealaan 25, 6229 HX Maastricht, The Netherlands

<sup>3</sup>CAPHRI, Maastricht University / Research Centre for Midwifery Science, Zuyd University, Universiteitssingel 60, 6229 ER, Maastricht, The Netherlands

<sup>4</sup>Department of Obstetrics & Gynecology, Maastricht University Medical Centre (MUMC+), Maastricht University, Peter Debyealaan 25, 6229 HX Maastricht, The Netherlands/ School for Oncology and Developmental Biology (GROW), Maastricht University, Peter Debyealaan 25, 6229 HX Maastricht, The Netherlands

### \*Corresponding author:

Amber J.C. Scheenen, Department of Obstetrics & Gynecology, Maastricht University Medical Centre (MUMC+), Maastricht University, Peter Debyealaan 25, 6229 HX Maastricht, The Netherlands/ School for Oncology and Developmental Biology (GROW), Maastricht University, Peter Debyealaan 25, 6229 HX Maastricht, The Netherlands.

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the experience of childbirth and reduce adverse outcomes postpartum has grown.

Randomized controlled trials suggest that continuous mental, physical and practical support during labor increases the rate of vaginal births, with less need for obstetric intervention [5,7].

The Continuous Care Trial was a multi-center randomized controlled trial conducted in the Netherlands. In this trial the practical implementation of continuous care by trained maternity care assistants was analyzed for effectiveness in reducing need for epidural anesthesia and costs [8]

In the Netherlands, a maternity care assistant assists the midwife in low-risk births, at home or in hospital, and provides postnatal care. A vocational training is required to become maternity care assistant in the Netherlands. Results from the trial suggested that continuous care provided by trained maternity care assistants is effective in reducing the need for epidural anesthesia and caesarean sections [8]. The employment of a maternity care assistant is less costly than that of a midwife or other medical personnel. The associated reduction in hospitalization time after labor and thus cost reduction seemed to outweigh the additional costs of continuous care by a trained maternity care assistants [8].

These results, like other trials, reveal the beneficial effect of continuous care during labor [5,7].

However, despite good results and WHO's recommendations, continuous care is not implemented on a large scale in high-income countries [9,10]. Implementation rates have risen in other countries like the United States, where continuous care is more often referred to as doula support [11,12]. However implementation is far from satisfactory as doula support is poorly accessible to women with a low socio-economic status, due to its high costs. It is often this at-risk group that has most benefit of continuous support during labor [13,14].

The perspectives and input of stakeholders is needed for the development of an implementation strategy. This report presents the hindering and facilitating factors for implementation of continuous support by maternity care assistants as suggested during a stakeholders meeting conducted as part of the Continuous Care Trial.

## Methods

In order to enhance the implementation of continuous care in the Netherlands, various maternity care organizations were contacted via email to put forward suitable candidates for a stakeholders meeting aiming to explore the barriers and facilitators for implementing continuous care.

On October 8<sup>th</sup> 2021, this meeting took place online, hosted by Maastricht University Medical Centre (MUMC+), the Netherlands.

The meeting was preceded by a plenary presentation on the Continuous Care Trial. Consequently participants were asked to comment on the presented results, express their interest in implementation and share their opinion on the hindering and facilitating factors for the implementation of continuous care from their perspective. Discussion during the meeting was stimulated and led by the chair of the meeting.

The following organizations, including representatives of organizations of obstetrical care professionals, policymakers, knowledge institutes, patient representatives and insurance companies were invited to participate in the stakeholders meeting (Table 1): ZonMw, Academie Verloskunde Maastricht, Netwerk Regionale Consortia Geboortezorg (NRCG), Perinatal Care Board (CPZ), Ministerie van Volksgezondheid, Welzijn en Sport (VWS), Nederlandse Zorgautoriteit (NZA), Koninklijke Nederlandse Organisatie van Verloskundigen (KNOV), Nederlandse vereniging voor Obstetrie en Gynaecologie (NVOG), Vereniging O en G verpleegkundige, Kenniscentrum Kraamzorg, Stichting Zelfbewust zwanger, Kraamzorgcentrum Bo Geboortezorg, Stichting HELLP, Centraal Ziekenfonds (CZ), Onderlinge Nationale Verzekering tegen Ziekenhuiskosten (ONVZ), independent primary care midwife.

## Data collection and Analysis

The stakeholders meeting took two hours. The subsequent discussion was recorded in Teams. The recording was transcribed verbatim.

Thematic qualitative analysis of the transcript was done using the methodology of Graneheim and Lundman, following consecutive steps: identifying notion of semantic units, abstraction and coding of semantic units, classification of sub-themes and combination of sub-themes to determine main themes [15].

In order to validate the abstracted themes, a second researcher independently coded the transcription of the stakeholders meeting. The abstracted themes were compared among both researchers to gain consensus on the final themes.

## Findings

Twenty stakeholders were invited to the online meeting. Thirteen stakeholders attended the online meeting. The stakeholders present at the meeting were described in Table 1.

Four overarching themes emerged from the thematic qualitative content analysis: facilitating factors, hindering factors, continuation and prerequisites. The associated subthemes are presented in Table 2.

## Facilitating Factors

Several factors were mentioned facilitating successful implementation.

All stakeholders responded positively to the presented research results. Reducing obstetric interventions during labor is considered an important topic. The attendees, as well as the people they represent, expressed their interest in the implementation of continuous care, stating “Let’s do the most to realize implementation.” The subject is popular in the media, there is high demand for continuous care among pregnant women and previous comparable trials also had positive results. Stakeholders expressed their interest and willingness to contribute.

The maternity care assistant organizations expect a rise in interest for the profession, as a result of the opportunity to provide continuous support during labor.

### Hindering Factors

The stakeholders agreed that implementation of continuous care is still low despite positive results and sufficient demand of women. One of the reasons suggested was the lack of an appropriate implementation strategy.

Results of the Continuous Care Trial suggest that the intervention is cost-saving, especially in hospital-setting. Still, the stakeholders from the health insurance companies stressed the difficulty of implementation due to the Dutch healthcare financing structure, where each hospital negotiates total budgets for their care with the insurance companies. It is difficult to adjust and especially lower the budgets of the hospitals to cover the costs of maternity care assistants, who are paid through specific maternity care assistant organizations, as all hospitals have their own agreements with various (regional) insurance companies. It would require

changes on a national level to solve the financial issues around continuous care.

Another issue some stakeholders raised was the potential hindering effect of the woman being unfamiliar with the maternity care assistant prior to labor. From experience, stakeholders emphasized women’s wish to be accompanied by a familiar face while giving birth, though no consensus was reached on this topic.

### Prerequisites

Beside facilitating factors and hindering factors, the stakeholders mentioned conditions which must be met before further steps towards implementation of continuous care can be taken.

Sufficient maternity care assistants must be available and willing to contribute to the provision of continuous care. Their task description and demarcation must be clear to them and the medical staff they work with, to improve collaboration.

The large-scale implementation of continuous care needs to be done nationally, “a number of things need to be set on a national level, before we can implement regionally” A clear prerequisite formulated in the stakeholders meeting is that financing must be arranged on a national level, before implementation is feasible in the region. Negotiating on financing in separate regions with each insurance company is too labor intensive and open to random availability. The actual provision of continuous care is very context specific and needs tailored strategies for each region. “It is not self-evident, .. , to transfer this from one region to another.”

**Table 1:** The organization characteristics of the 13 attending stakeholders

Organization	Number of attendees	Description of the organization
ZonMW	1	Dutch funding organization for innovation and research in healthcare
Academie Verloskunde Maastricht	1	School of Midwifery
Netwerk Regionale Consortia Geboortezorg (NRCG)	1	Regional maternity care consortium, including midwives, obstetricians and organizations for maternity care assistants
Perinatal Care Board (CPZ)	1	National organization for maternity care
Ministerie van Volksgezondheid, Welzijn en Sport (VWS)	1	Ministry of Health
Nederlandse Zorgautoriteit (NZA)	1	Dutch Health care Authority, independent government body monitoring healthcare and healthcare insurance
Koninklijke Nederlandse Organisatie van Verloskundigen (KNOV)	1	Royal Dutch College of Midwives
Nederlandse vereniging voor Obstetrie en Gynaecologie (NVOG)	1	Dutch College of Obstetricians
Kenniscentrum Kraamzorg	1	Expertise center for maternity care assistants
Kraamzorgcentrum Bo Geboortezorg	1	National association for organizations of maternity care assistants
Stichting HELLP	1	Patient organization for women with pre-eclampsia and/or HELLP syndrome
Centraal Ziekenfonds (CZ)	1	A Dutch healthcare insurance company
Onderlinge Nationale Verzekering tegen Ziekenhuiskosten (ONVZ)	1	A Dutch healthcare insurance company

**Table 2:** Overarching themes and associated subthemes

Theme	Subthemes
Facilitating factors	Positive response to the results of the Continuous Care Trial
	Interest in implementation
	Profession of maternity care assistant becomes more attractive
Hindering factors	Financing: funding, problem hospital finances
	Unfamiliar face maternity care assistant
Prerequisites	Sufficient available maternity care assistants
	National rollout of financing
	Regional implementation (context specific intervention)
Suggestions for continuation	Consortium as communication channel
	Explore pathways of financing in expert meeting
	Customization of maternity care: implementation in LIP
	Publication of results in work field
	Further analyses: qualitative research, subgroup analysis

**Abbreviations:** LIP, Landelijk Indicatieprotocol Kraamzorg = National protocol for indication of maternity care

Regional parties will have to play a large role to ensure successful implementation in their area.

### Suggestions for Continuation

Concrete suggestions have been made to continue the writing of an implementation strategy. Stakeholders have offered to function as a communication channel within the further project and strategy, as they are able to reach many people.

Furthermore, all stakeholders agreed that an essential step towards an implementation strategy is to further explore and arrange financing. This stakeholders meeting has raised issues that require further discussion. An expert meeting on financing and funding is indicated the involved stakeholders have expressed their willingness to further explore the possible routes of financing.

In case national changes in financing are not feasible, a stakeholder of the maternity care assistants suggested the implementation of continuous care in the national protocol with indications for care by maternity care assistants, as they are currently reviewing the protocol. Possibly women can be offered to exchange hours of maternity care postpartum for continuous care during labor. These suggestions can be further considered.

The available results of the Continuous Care Trial have been published in media. Involved obstetricians and midwives expressed the importance of further transferring the available results among professionals via symposia. Stakeholders have offered to further assist in the dissemination of the research results.

With regards to continuation of the study, interest in further qualitative and subgroup analyses of the Continuous Care Trial has been expressed.

### Discussion

The importance of reducing obstetric interventions in maternity care are recognized by stakeholders and interest has been expressed in the implementation of continuous care during labor. The proven effectivity of continuous care, high demand among pregnant women and it's positive effect on the profession of maternity care assistants are expected to facilitate successful implementation.

Stakeholders expressed their worries regarding the unfamiliar face of the maternity care assistant, which might make their provision of continuous care less interesting to women, as from their experience this is of great importance during labor. Since not all stakeholders were in agreement, additional exploration of women's opinion on this matter is necessary. Untrained lay companionship could however increase workload for maternity care providers due to a lack of boundaries and preparation [16]. The Continuous Care Trial will be broadened with qualitative research on the perspectives of participants and healthcare providers involved in the trial.

Current implementation is largely hindered due to the Dutch financing of healthcare. It appears healthcare providers are stimulated to be efficient with financial means. However, once an intervention is proven to be effective and a cost reduction can be expected, the implementation is impeded by the current financial system in healthcare.

The Continuous Care Trial and involved stakeholders are situated in The Netherlands. Financing and insurance can therefore only be applied to healthcare in the Netherlands. The other overarching themes can be applied in broader and international context. The implementation of continuous care in a broader context is desirable [10]. The international

popularity of doula support has increased, but is not yet offered routinely. Its accessibility is limited as most doulas are within the white, upper and middle class and barriers are faced due to high costs [13]. In order to further facilitate international consideration of continuous care during labor and explore routes of financing in other contexts, the Continuous Care Trial will be broadened with qualitative research exploring the perspectives and current implementation strategies of continuous care during labor in various countries.

## Conclusion

Implementation of continuous care by maternity care assistants in the Netherlands is facilitated due to its current relevance among both women and stakeholders.

However despite good clinical results and high demand, an implementation strategy for continuous care during labor is lacking. Implementation is hindered due to the current Dutch financing system of healthcare. National changes are required, before tailored regional implementation is achievable.

Indicated further steps in the implementation of continuous care by maternity care assistants in the Netherlands and within a broader international context include subgroup and qualitative analyses on the Continuous Care Trial, further dissemination of results and most importantly the exploration of possible routes of financing.

## Conflict of Interest

The authors have no conflict of interest to disclose.

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