Prof. A. de Jonge

TIME FOR MIDWIFERY CARE WITH WOMEN

VU VRIJE UNIVERSITEIT AMSTERDAM

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Inaugural lecture delivered at the acceptance of the appointment of professor in Midwifery Science at the Faculty of Medicine / Amsterdam UMC of the Vrije Universiteit Amsterdam on 22 January 2021.

VU VRIJE UNIVERSITEIT AMSTERDAM

Esteemed Rector Magnificus,

Esteemed audience, albeit digital,

What happened before

Today we are making history. Welcome to the first ever inaugural lecture given by a midwife on accepting a professorship at a Dutch university. This is the pinnacle of the hard work of many, dedicated to ensuring that the science of midwifery can flourish in the Netherlands. To say that I stand on the shoulders of giants would make me a millipede – that is how many people have worked to make this academic chair a reality.

For example, in 1990 the working group on research and education at the Dutch Royal College of Midwives developed the first course on basic principles of scientific research for midwives, organized by midwife Dr Esteriek de Miranda and obstetrician Professor Marc Keirse. In 1985, at the University of Cardiff, Dr Barbara Kwast became the first Dutch midwife to obtain a doctorate and in 1996 Dr Rita Iedema was the first midwife to obtain a doctorate in the Netherlands.

Professors before me have held endowed chairs in Midwifery Science: Professor Simone Buitendijk, Professor Raymond de Vries and Professor Eileen Hutton. Meanwhile, four midwives are professor; apart from me they are: my highly valued colleague Professor Corine Verhoeven, Professor Marianne Nieuwenhuijze and visiting Professor Yvonne Fontein-Kuipers. Additionally, Hanneke Torij and Dr Ageeth Rosman are both applied research professors.

This chair has not come a moment too soon. The Netherlands remains an international example with a tradition of highly skilled midwives and a strong emphasis on women being free to choose where they give birth. All maternity care professions may be proud that we continue to give women the choice to have a homebirth and that this culture has become Intangible National Heritage in the Netherlands.(1) Now we are also catching up in the scientific underpinning of midwifery as a profession.

I want to show you why the time is ripe for Midwifery Science as a scientific discipline and for the field of midwifery in maternity care. It is also time that women, their partners and their representatives helped shape the content of care, education and research.

Midwifery: care for and *with* women

In the chair of Midwifery Science, we carry out research into the discipline of midwifery. I love the word ‘midwifery’ and I always wish there was a good Dutch equivalent. It is made up of the old English words ‘mid’ and ‘wife’ which mean ‘with’ and ‘woman’.(2) So a midwife is a care provider

who is literally ‘with the woman’. Unlike the Dutch term *verloskundige,* the word ‘midwife’ does not refer to the caregiver but to the woman at the centre of the process. As you would expect, midwives are responsible for providing a large part of the midwifery care. But obstetricians, maternity care assistants, nurses, paediatricians and other care providers also give some of this care.

Voices throughout the world are arguing for the focus of maternity care to be widened to encompass midwifery. (3-7) The field of midwifery has been defined on the basis of many studies into what women around the world regard as important in maternity care. Midwifery is supportive care for women that enables them to be pregnant and to have a child in a way that suits them best.(3) This fits well with the definition of positive health in which resilience and self-determination are core values.(8)

In recent decades, maternity care has tended to focus on the small group of women and babies who develop complications. And this has led to good results. Care for women with high blood pressure, for example, has improved enormously, so that fewer women now die in childbirth as a result of it.(9) But these improvements come at a price. Across the world, the emphasis on risks and complications has led to an enormous increase in medical interventions during pregnancy and birth.(3) This exposes large groups of women to the potential side effects of these interventions, leads to fragmented and impersonal care, and drives up healthcare costs which are already reaching unaffordable levels. In an effort to turn this tide, many are now advocating a stronger emphasis on midwifery care.

Time for midwifery care

Time is one of the key factors in midwifery; time to provide personalized care and time to build a relationship with women. But this key factor is under pressure: time is undervalued and in danger of being lost in the pursuit of protocol-based and measurable care.

Since classical antiquity, there have been two concepts of time, each symbolized by its own Greek god: Chronos and Kairos.(10) In maternity care, the balance between these two temporal concepts has tipped too much towards Chronos. Allow me to explain why it is important to restore the balance.

Chronos is associated with time as measured by clocks: a concept defined by order and structure. It is universal, static, quantitative and linear.(10) ‘Chronos time’ is vital to ensuring that many processes in our society run smoothly, such as trains running on time. (10) ‘Kairos time’ is a very different concept, characterized by the interruption of clock time: those periods in which we literally ‘forget time’, when space is created for new experiences and possibilities. The god Kairos is depicted with a

long lock of hair that sways back and forth so that you have to grasp it at the right time if you want to catch it. This symbolizes the need to seize the moment. Kairos time is subjective, dynamic and qualitative. It is all about doing the right things at the right time. You do not have to be a midwife to understand that Kairos is extremely important in maternity care. There is no standard model when it comes to pregnant women, and no two births are the same. It follows, therefore, that maternity care should also be tailored to the individual needs and characteristics of women and their families. Which brings us back to the root of the word midwifery: being *with the woman* at this crucial moment.

In modern-day maternity care, Chronos rules the roost. In a time when giving birth at home is no longer the norm and an increasing number of children are being born in a hospital setting, women are subject to the rules and standards of institutionalized medicine. (11) As soon as a woman enters a hospital, she receives many explicit and implicit messages about how to behave. A growing number of protocols prescribe, for example, how long pregnancy, dilation and labour should last and when a woman is permitted to return home. The hospital is a business that focuses on keeping production processes running smoothly, rather than serving the needs of women.(12)

In some ways, this can also be said about midwifery care in the community: primary midwifery care. I work as a primary-care midwife in Amsterdam. If two women are having contractions at the same time, I call a midwife from another practice and ask her if she can to do a vaginal examination, for example. However, I find it much more difficult to ask a midwife to take a few hours to sit with a woman who needs support but is still a long way from giving birth. And that is strange. It should be just as acceptable to call a colleague to provide 'Kairos care' – by which I mean offering support – as it is to ask them to provide 'Chronos care' in the form of a medical procedure.

Things are changing, however, and these changes bring hope. Now that greater attention is being paid to value-based healthcare, the emphasis is shifting from standard protocols to the provision of care in line with patients' personal values.(13) This is no easy change, certainly not while care is still funded based on medical procedures performed by care providers and much less on the support they give. Yet research tells us that providing support is at least as important to the good health of mother and child as performing medical procedures.

For example, an international metasynthesis has been done on care in birth centres.(12) In this review, women indicate that midwives at birth centres have much more time than the staff in hospital delivery rooms to simply be present during the birth instead of having to do things all the time.(12) Less Chronos and more Kairos, in other words. Birth-centre midwives have more time to build a relationship with the women in their care, which in turn enables women to experience more

control over their birth. This relationship between women and their care providers appears to be an important reason why women at birth centres undergo fewer medical interventions and are therefore less exposed to the side effects of those interventions. In the Netherlands, too, this could well underlie the finding that women with a low risk of complications who are already in obstetrician-led care in hospital at the start of labour are three times more likely to undergo a Caesarean section than women in midwife-led care in primary care.(14)

Writer Abdelkader Benali had this to say about the birth of his daughter and the role of the midwife, and I quote (15):

'In the birthing room, you supported my wife, alternating gentle words with firm encouragements. You read her body like a sea captain reads the water. You told my wife what was happening in her body, what her body was going to do. You told my wife what she could do to allow her body to move with the desire to bring a child into the world.'

Abdelkader Benali's words beautifully express the care for which Marianne Prins and Beata Franso coined the term 'watchful attendance', a kind of care often, but not exclusively, provided by midwives. Simply being present and responding to a woman's needs at all times requires medical knowledge in order to guide her through the physiological processes of pregnancy and childbirth, and also to carry out or advise on medical interventions if considered to be needed. It is much more difficult to 'watch' based on evidence and to act at the right time, than it is to routinely execute a protocol.

Incidentally, limiting interventions is not an end in itself. Although women worldwide prefer to give birth with as few medical procedures as possible(16), Kairos care is about doing the right thing at the right time. And the right thing could well be arranging for an epidural during the first contractions in response to a woman's own well-informed choice. However, we have shown that the numbers of women undergoing procedures such as an episiotomy or a Caesarean section differ so significantly between countries and regions that the difference cannot be accounted for by medical factors or women's own wishes.(17, 18) The key is to ensure that women are not subject to too many or too few medical interventions.

Technological progress can serve to strengthen the expansion of maternity care to encompass midwifery. For example, prediction models based on women's characteristics and their laboratory and ultrasound results may indicate whether a particular woman will benefit from more or fewer medical interventions during pregnancy.(19) But even if these prediction models improve, it is vital that care providers continue to think critically and talk to each woman about her own individual needs. Personalized medicine should start with personalized prevention and support.

I see positive changes that are bringing Chronos and Kairos more into balance throughout the maternity care continuum. The guidelines recently issued by the World Health Organization are called *Antepartum* and *Intrapartum care for a positive childbirth experience*.(20, 21) This is the first time that the title of these WHO guidelines have centred on the woman's own experience. These documents stress, for example, that dilation varies greatly from one woman to the next and that the commonly used guideline of one centimetre per hour is far too optimistic.(21) The recommendation is, therefore, to hold back on intervention to speed up labour, provided that both mother and child are in good condition.

The art of doing nothing

That said, in practice the temptation to intervene is often far from easy to resist.(22, 23) Doctors and midwives take the Hippocratic oath and promise above all to do no harm with their actions. In light of this, you might think that they would be more severely criticized for complications resulting from unnecessary medical intervention than for similar complications arising from the natural course of a pregnancy or birth. Nothing could be further from the truth. If a serious complication occurs and a midwife did not refer the patient to an obstetrician, or did so too late, or an obstetrician did not perform a Caesarean section, questions will be asked in a perinatal audit in which healthcare providers discuss births that have had a serious outcome. It is rare for questions to be asked about procedures that have been performed unnecessarily. An analysis of cases reported to the inspectorate revealed that while failure to provide care or delay in providing care *was* described, unnecessary care that might have caused side effects was not.(24) As long as the system makes care providers more concerned about being judged on what they do *not* do, as opposed to what they do unnecessarily, it is only logical that hospital referrals and medical interventions will continue to increase.

Making a much needed shift from focusing on risks and complications to strengthening resilience and personal control sounds like an ideal strategy. But we will have to work very hard to put such a change into practice. Care providers, pregnant women and society as a whole have an unrealistic high level of confidence in the elimination of risks through medical intervention.

Many techniques and medications continue to be widely used even though their efficacy has yet to be established. This is even true for some that are known to be ineffective or to have side-effects. Yet at the same time, preventive care that has proven to be effective is often not implemented. Allow me to illustrate this with two examples.

Fatima Akin *is pregnant with her second child and would like to give birth in a bath at home. Around 30 weeks into the pregnancy, the midwife offers to make an extra ultrasound even though she has no*

reason to doubt the baby's health. The sonographer observes that the baby is on the small side and Fatima is referred to the hospital. Subsequent ultrasounds continue to reveal that the baby is relatively small. At 39 weeks the decision is therefore made to induce labour to prevent perinatal mortality due to growth restriction. Son Ibrahim is born healthy, turns out to be bigger than expected and goes home with Fatima after the birth.

Ellen van Gaal *is pregnant with her first child. She starts her care at a midwifery practice and gets to know all four midwives. Ellen suffers from stress and calls the midwife on duty frequently with all kinds of questions. At 29 weeks, she is referred to the hospital because she does not feel her baby moving properly, even though electric fetal monitoring reveals nothing out of the ordinary. Midwives and obstetricians at the hospital take over responsibility for her care. At 33 weeks Ellen is admitted to hospital with abdominal pain and gives birth to her daughter Anouk. Anouk is doing well and is able to go home after two months. Ellen will take her for regular hospital check-ups due to the increased likelihood of developmental problems because she was born preterm. (25)*

If the care that Ellen and Fatima received were to be discussed in a perinatal audit, the actions of the care providers would not be called into question. Nevertheless, I dare say that both women received sub-standard care. True, the care providers did their utmost within the maternity care system as it exists.

Yet Fatima was exposed to unnecessary diagnostic tests and therefore to their side effects. In the IRIS study, we have shown that routinely offering ultrasounds to women without medical indications does not lead to better outcomes in babies and is associated with slightly higher rates of labour inductions, compared to care in which ultrasounds were only carried out if the care provider considered these necessary. (Figure 1) (26)

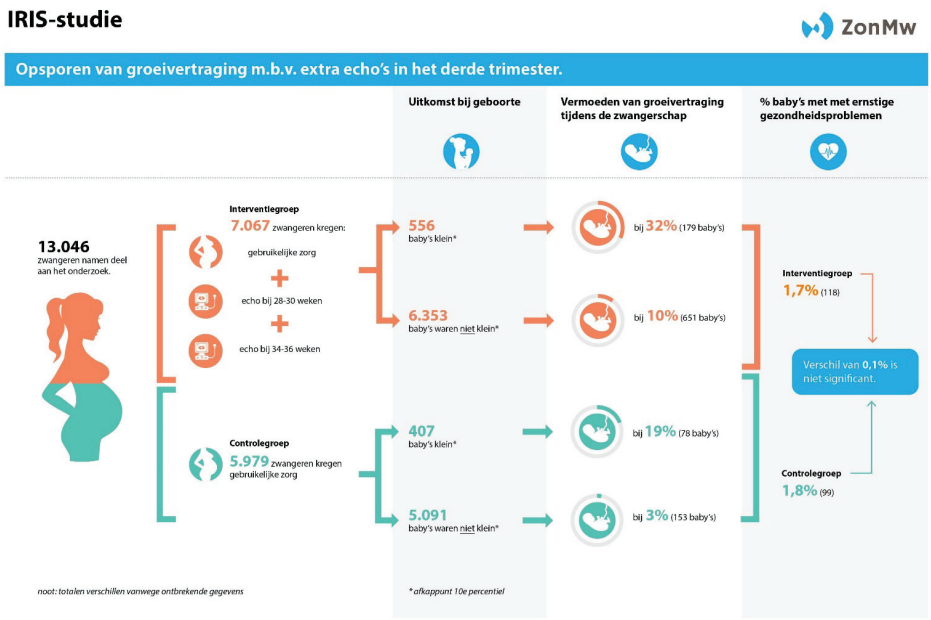

Figure 1: Outcomes of the IRIS (IUGR Risk Selection) study on offering two standard ultrasound scans in the second half of pregnancy to women with a low risk of complications and the effect on neonatal health outcomes and costs.

Because Fatima had a routine ultrasound without medical grounds and was then referred to hospital, the rest of her pregnancy she was looked after by an unfamiliar team of care providers, she was unable to give birth at home and was given a drip which prevented her from giving birth in a bath. In addition, she and baby Ibrahim were exposed to oxytocin from the beginning of labour to augment contractions. Oxytocin can lead to stress in the baby and so Ibrahim's heart rate was continuously monitored. Our research on the basis of large data sets from Australia has revealed a link between the use of oxytocin during labour and, for example, hospital admissions for childhood infections up to the age of five.(27) While this does not necessarily indicate a causal relationship, these findings do call for further research and restraint in medical interventions if their usefulness is uncertain.

Ellen had a preterm birth. She was not prescribed a medicine that is known to reduce the number of preterm births by a quarter. Hearing all this, you may well be surprised that care providers would

find no evidence of sub-standard care in her case. That is because this medicine is not as easy to administer as a pill or an injection. It has to do with the way in which care is organized.

Continuity of carer

Various studies show that fewer preterm births occur if women are cared for by the same midwife or team of midwives during pregnancy, labour and the postpartum period.(28-30) (Table 1) Starting from the relationship with a woman and focusing on her needs and wishes, a midwife plans, coordinates and provides care in close cooperation with other care providers where necessary. (Figure 2)

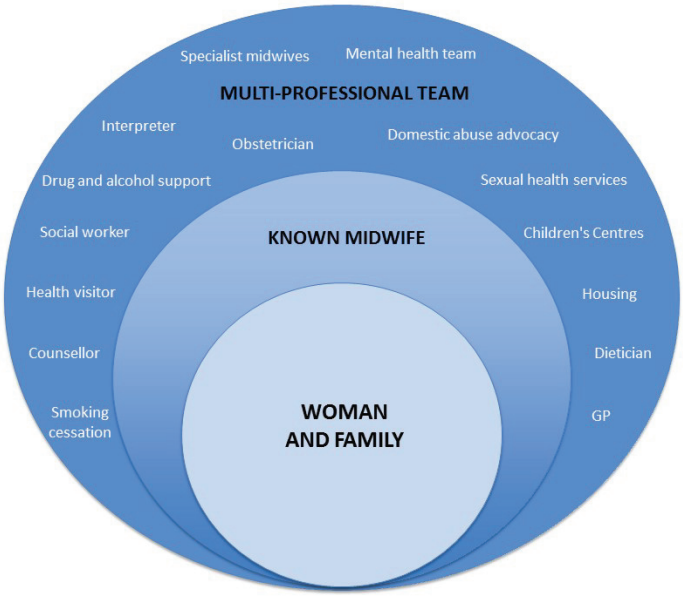

Figure 2: Continuity of care by midwives.

Copied with kind permission from Sandall J, Coxon K, Mackintosh N, Rayment-Jones H, Locock L, Page L (2016). Relationships: the pathway to safe, high-quality maternity care. Sheila Kitzinger symposium at Green Templeton College, Oxford: Summary report, October 2015.

This care also leads to fewer cases of fetal mortality before 24 weeks of pregnancy, fewer medical interventions, greater satisfaction among the women receiving care and lower costs.(28-30) The benefits appear to be even greater among women in vulnerable situations.(29-31) In the literature and guidelines of the World Health Organization, midwife-led continuity of care is recommended in countries with well-functioning midwifery programmes.(3, 20, 21)

Table 1: Comparison of midwife-led continuity of care with other care models in which obstetricians or general practitioners were responsible or care providers had joint responsibility on a 'shared care' basis. (Cochrane systematic review of randomized trials) (28)

Outcome	Number of studies	Number of women	Average risk ratio, 95% confidence interval, RR (95% CI)
Stillbirth before 24 weeks of pregnancy	14	17,674	0.81 (0.67 – 0.98)
Perinatal mortality from 24 weeks of pregnancy	12	17,359	1.00 (0.67 – 1.49)
Preterm birth	8	13,238	0.76 (0.64 – 0.91)
Instrumental vaginal birth	13	17,501	0.90 (0.83 – 0.97)
Oxytocin to augment contractions during childbirth	12	15,194	0.88 (0.78 – 0.99)
Episiotomy	14	17,674	0.84 (0.77 – 0.92)
Epidural anaesthesia	14	17,674	0.85 (0.78 – 0.92)
Caesarean section	14	17,674	0.92 (0.84 – 1.00)
Admission of baby to intensive care unit	13	17,561	0.90 (0.78 – 1.04)
Satisfaction	10	Measured differently, women were more satisfied in most studies.	
Costs	7	Measured differently, trend towards lower costs.	

International research shows that midwives who provide continuity of care experience greater job satisfaction and are less prone to burn-out; not unimportant in a time of significant staff shortages in the healthcare sector.(32) Continuity of care is therefore not only good for mothers to be, but also for midwives.(33)

It is worth noting that continuity of care by other care providers, also outside maternity care, has positive effects as well. For example, it appears that a continuous relationship between patients and general practitioners or specialists results in lower rates of mortality.(34) In the UK, experiments are being conducted with models of continuity of care for women during childbirth involving a team of midwives in collaboration with the same obstetrician.(35) It is likely that women who are in

obstetrician-led care in hospital throughout their pregnancy will also benefit from having the same team of obstetricians and midwives.

It has long been known that continuity of care has only positive effects and no side-effects, and it is therefore surprising that it is only now receiving worldwide attention in maternity care. Medicines with less certain effects and with potential side effects are introduced into the system far more rapidly and only then are studies conducted to see if and how they work in practice. For example, it is common practice for women with preterm contractions to be given labour inhibitors. Luckily, the Dutch Obstetric Consortium is currently conducting a promising line of research to evaluate whether it makes sense to give contraction inhibitors and if so, which ones and for how long.(36)

It is easier to give a drug the benefit of the doubt than it is to do the same for something as complex as prevention. The Covid-19 pandemic, as horrific as it is, shows how important non-medical factors are to health. One interesting finding is the decrease in the number of preterm births during the early stages of the pandemic.(37) More research is needed to establish the causes and to ascertain that this decline has not been accompanied by an increase in stillbirths. But one thing is clear: the number of preterm births has not decreased due to more care and more medical procedures. Whether this decrease is the result of fewer interventions, better hygiene, less stress due to working from home or any number of other reasons, this finding shows that non-medical factors have a huge impact on health. In this light, the effect of continuity of care by midwives on reducing preterm birth can be better understood.

The right care at the right time by the right care provider

The introduction of continuity of care is made easier by the effective collaboration that already exists in our country between all professionals in maternity care. We were recently asked to participate in a study by the National Academies of Science, Engineering and Medicine (NASEM) in the United States.(38) The question was to describe four national maternity care systems with better outcomes and lower costs than that in the United States, including the system in the Netherlands. One of the conclusions was that maternity care in these four countries is well integrated in the care chain, unlike maternity care in the US. It is a timely reminder that, when making the necessary improvements in integrated maternity care, it is also important to recognize and value the processes that do work well. This is a precarious balance. Especially, if we decide to make the switch to bundled payments. Experience gained in other countries has shown that in the battle for scarce resources, priority is given to medical interventions, whether they are necessary or not.(13) So while it becomes imperative that an epidural should be available to every woman – and rightly so – there is often no time for the continuous support that might have prevented the need for an epidural in the first place.

When designing a bundled payment of care system, midwifery care and watchful attendance will therefore have to be financed separately as important care interventions.

Of course, it is important that all maternity care providers coordinate the care that they provide. Research shows that the midwife is the only care provider who has contact with all other groups of care providers in maternity care.(39) Just as the general practitioner is the continuous factor in medical care throughout the entire life cycle, the midwife fulfils that role in maternity care and the youth healthcare nurse and doctor fulfil the same role in caring for children. A smooth transition from general practitioner to midwife and then to youth healthcare is therefore essential. In addition, for the benefit of all women, it is important for midwives to collaborate effectively with maternity care assistants and, where necessary, with obstetricians, paediatricians, obstetrics nurses and other care and welfare workers.

Across the globe, risk selection is an important element of effective collaboration in maternity care. Risk selection ensures that women and babies receive the type and amount of care they need, not too much and not too little, and from the care provider who can best provide that care.(40) The Dutch Obstetric Indication List (VIL) is used to discuss with women whether to receive primary or secondary care. This indication list is based on a restrictive scope of practice of the primary-care midwife who provides care to women with a low risk of complications. The result is an unacceptably high number of referrals from primary to secondary care, both during pregnancy and during labour. In case of so-called 'mid-risk' factors, such as the wish to receive pain medication, women are referred to secondary care where hospital midwives often take over the care. These midwives attend the births of almost 80% of all women in hospital and in 40% of these cases no obstetrician is involved, while obstetricians are mainly involved in the care of women with severe medical complications.(41) The Obstetrics Indication List offers midwives in primary care clarity on tasks and responsibilities that hospital midwives do not have. It is therefore a positive development that the College of Perinatal Care is developing new collaboration agreements which should aim to delineate responsibilities clearly between autonomous care providers, each with their own expertise. These agreements should lead to a situation in which primary-care midwives and hospital midwives once again form a single professional group providing continuity of care both to women at low risk of complications and those with mid-risk factors.

Of course, agreements on cooperation must also lead to safe care. Traditionally, the focus has been on improving safety using the Safety-I approach.(42) This is based on the assumption that there is a linear relationship between care that has not been delivered according to the standard and health outcomes. However, healthcare, including maternity care, has become so complex that it is not

possible to understand and control all of its components precisely. Nor do healthcare providers always adhere to a guideline or a protocol. And that is a good thing. Healthcare systems function effectively because care providers continually adapt to developments such as unforeseen circumstances or the wishes of women in their care. In the Safety-II approach, lessons are learned, therefore, not only from mistakes but also from what goes well.(42) The emphasis in that case is not on the actions of care providers as the *cause* of problems but rather as *the solution*. In this Safety-II approach, I see an opportunity to bridge the gap between two different visions of maternity care: the social model in which pregnancy and birth are seen as normal life events that generally go well, and the medical model in which the health risks of pregnancy and birth are leading the provision of care.

The pregnant woman/mother and her partner as experts

Care providers are experts in their field. But women themselves are experts when it comes to their own bodies, their experiences and needs, and the upbringing of their children. It is therefore good to see a growing number of women joining an organization that represents their interests. In addition, it is necessary that we as care providers facilitate that women can benefit from each other's expertise. Especially, since many lack the support of family, neighbours and friends. *Centering Pregnancy* is a good example of this. This is a form of antenatal care given to a group of women, who get to know and support each other.(43) Dr Marlies Rijnders, my colleague at TNO, has imported this type of care to the Netherlands from the United States. Now there is also *Centering Parenting,* in which youth healthcare nurses play an important role.

We will also have to join forces to build sustainable structures to involve the key players in maternity care, women and their families, in all facets. For example, women from vulnerable situations have become part of our research project team in Groningen, to ensure that its 'Stronger Together' initiatives genuinely address women's needs. In Amsterdam, a number of projects have been set up and implemented in collaboration with representatives from client organizations. Together we have learned a great deal about the importance of client participation and about the challenges it poses in practice, for example with regard to financing and mutual expectations.

Towards midwifery care with women

Distinguished guests, I have explained how the focus in maternity care across the world is expanding from a narrow focus on women and babies with risk factors and complications to evidence-based midwifery care for all. The greatest challenges currently facing maternity care are to be found at the interface between medical care and public health. Women and their families need support to improve their lifestyle, to increase their resilience, to make choices, to tackle social problems, to deal with pregnancy and childbirth, and to form strong and healthy bonds between all family members.

This is in line with the Dutch government's Promising Start programme, which aims to give every child the best possible chance of a healthy and fulfilling future.(44) To support families in achieving this aim, caregivers need Kairos time 'to be present' and not simply 'to do things' and time to establish relationships with families. This allows them to respond to what each unique family needs. Protocols and guidelines provide a useful framework, but customization is necessary to take into account a person's social and medical situation, ethnic background, level of education, outlook on life and how all these factors are interrelated.

Through my academic chair in Midwifery Science, I want to examine how to provide midwifery care with a special focus on continuity of carer and watchful attendance. I want to do that together with women and their partners, researchers, policy makers and all professionals working in maternity care. The research questions will centre on what works and why, and on identifying the requirements that should apply to this care. For a woman, having the chance to get to know her care provider should not be a luxury and It should not be a privilege if a busy care worker has time for her. Instead, these should be indicators of the quality of care to which we hold each other accountable.

I want to conduct research into value-based maternity care: how does care meet the needs of women and how can available resources be used effectively? Essential research areas in achieving this goal include short-term and long-term consequences of care interventions, reducing unwarranted variations of care, the quality of risk selection, learning from what goes well, and the experiences and mental health of women. Care for women in vulnerable situations is a clear priority. In addition, I want us to focus on maternity care in non-Western countries. Another key question is how we ensure that care providers derive satisfaction from their profession, how they withstand severe work pressures and how we prepare students for these.

Within our Childbirth Network, we work on structural connections between practice, research and education in which we formulate research questions and make research results accessible to women, care providers and students. At national level, I want to work with others to ensure that client representatives are given a central place in maternity care, both in terms of organization and financial resources.

I have spoken about the importance of time for midwifery care for and *with* women. Perhaps you find yourself wondering whether much of what I have said should be self-evident. Is it not strange that these things have to be explained in an inaugural lecture? And my wholehearted answer is: I could not agree with you more.

Words of thanks

Here I stand: a newly appointed Professor of Midwifery Science. How could I ever name everyone who has helped me arrive at this point? My heartfelt gratitude goes out to every single person who has given me their personal and professional support, many of whom I am simply unable to mention due to the limited time available.

By establishing a full academic chair, the Executive Board of Vrije Universiteit Amsterdam and the Board of Governors of Amsterdam UMC have chosen to recognize Midwifery Science as a field of research in its own right. Thank you for the trust you have placed in me through this appointment.

Many thanks to all the women, care providers and everyone else who has taken part in our research. It is both encouraging and inspiring to see how we are formulating research questions and setting up studies in a growing spirit of collaboration.

Professor Soo Downe and Professor Hannah Dahlen, thank you so much for being here today, albeit virtually. It is a joy to work with both of you. And a privilege to learn from your sharp and beautiful minds. I love the fact that we manage to work incredibly hard and still have lots of fun.

Professor Corine Verhoeven and doctors Jens Henrichs, Esther Feijen, Lilian Peters and Daniëlle Janssen: I am grateful to have you as a permanent group of senior researchers who act as my sounding board and you take our research lines further, each in your own way. Our discussions never fail to keep me on my toes.

Many thanks to Wencke de Jager and Tamar Kruit: you are the bedrock of our department, the people who make sure that everything runs smoothly. To our postdocs, PhD students, lecturer researchers, students and support staff, past and present: thank you for making the department what it is today; a place where we not only work hard but also live well.

To the lecturers and other staff at the Midwifery Academy Amsterdam Groningen: our research and teaching are closely linked and it is a pleasure to work with you. Thank you for your huge commitment to education and to the academization of midwives. The increasing complexity of the work of a midwife calls for an academic education that matches the responsibilities of midwives. Without wishing to detract from the contribution of others, I would like to give a special mention to Marianne Prins. You are not only a colleague but also a dear friend. With your dedication to research and education in midwifery, you could easily have gone on to obtain a doctorate and stand here today as our professor.

My sincere thanks also go to my fellow management team members – Dr Wim Gorissen, Wilma Hendriks and Monique den Arend – for your ongoing support for our department and this professorship.

Professor Brug, dear Hans, Margreeth van der Meijden and Gea Vermeulen, thank you for your support in setting up our department. Hans and Gea, thank you for your perseverance in realising this chair and for your support for me personally. Professor Hutton, dear Eileen, thank you for paving the way for me as our department's first professor.

Our department is unique within the Dutch academic world. Thanks are therefore due to the many researchers from other disciplines whose support has enabled our department to flourish. In Groningen, they include Professor Marjolein Berger, who accommodates our researchers at the department of General Practice, as well as professors Menno Reijneveld, Sicco Scherjon and Jan Jaap Erwich. In Amsterdam we can rely on the support of departments within the Primary Care, Public Health and Methodology Division. With thanks, we draw on the knowledge of many professors and their researchers, including professors Martina Cornel, Christianne de Groot and Joris van der Post. I look forward to our continued collaboration on fascinating and rewarding projects in Amsterdam and Groningen, and with other researchers at home and abroad.

Many thanks to Professor Schellevis, dear Francois, for being the supervisor of our department for years and for still willing to be my mentor. I value your constructive criticism enormously. Professor van der Horst, dear Henriëtte: thank you for being our supervisor too and my guide and mentor within VU Amsterdam, until that role began to clash with your position as Division Chair.

Professor Lagro-Janssen, dear Toine. I see you as my mother in the world of science and as my shining example. Thank you for being my mentor to this day, someone who shows me the way in this weird and wonderful world we call science.

To my colleagues at midwifery practice Vondelpark – Constance Erwich, Caroline Grootes and formerly Joke Klinkert: thank you so much for your flexibility, which still allows me to combine my research with my work as a primary care midwife. As a title for this inaugural lecture, I could easily have taken the motto from our website: *many things that count cannot be counted*. I still learn from you all on a daily basis, not least how 'being there' is often more important than 'doing things' in this wonderful profession of ours.

And to my family: I am keenly aware that I have had more opportunities in life than any generation before me, especially as a woman. I would not be standing here if previous generations had not worked so very hard to make something of their own lives and to give their children a future. As our

Groningen researchers like to point out: the first Dutch midwife to become a professor has her roots in the north of the Netherlands!

Dear friends, brother Peter and sister-in-law Anita, nieces Loes and Monique. Thank you for being there in good times and in bad. I know you are proud to see me here. But what matters so much more is that to you it does not matter who I am or what I do. That unconditional friendship is very dear to me.

Dear Mum and Dad, Hoogeveen has always been a solid foundation from which I have been able to follow my career path, wherever it took me. You always welcome me with open arms and I can call on your help for anything. For parents, like midwives, perhaps the most important thing is that they are just there; this realization, particularly at times where I did not need you, let me fly so high. Thank you for everything!

Henny and Amanda, thank you for the part we are able to play in your lives. You will be forever in my heart.

Charles, my love: during our Master's degree in Public Health in Edinburgh we spent many a night in the computer room called 'Greenfield Suite' writing our assignments. So much has changed since then. But our passion for sound research and better healthcare remains the same. As does our love for each other. For you, it goes without saying that my work is just as important as yours. Whenever I ask, 'Would I be able to do this?' your standard answer is 'Why not?' And that is one of the reasons why I am standing here today. Thank you for your support and your faith in me.

Thank you very much for your attention.

I have spoken.

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Summary

Midwifery is supportive care for women and their families that enables them to be pregnant and to have a baby in a way that suits them. Worldwide there are calls for expanding the emphasis on risks and complications to midwifery care for all. 'Having time' is one of the most important elements of 'midwifery'; time for personalized care and time to establish a relationship with women. We called 'just being present' and meet the needs of a woman at any given time 'watchful attendance'; to provide this care it is necessary to have medical knowledge to assist women during a physiological pregnancy and birth and to carry out medical interventions if considered necessary.

The emphasis in maternity care is on 'doing things' and much less on providing support. In our society, there is an unrealistic great confidence in excluding risks by medical interventions. Therefore, technologies and medications are used on a wide scale, even if they are not effective or have side-effects, while preventive care is not being implemented. For example, it is difficult to introduce midwife-led continuity of care during pregnancy, labour and the postpartum period in close collaboration with other care providers in maternity care. Midwife-led continuity of care, however, leads to a reduction of preterm birth with a quarter, fewer medical interventions, more satisfaction among women and reduced costs. Research is necessary into how we can provide midwifery care with a particular emphasis on strengthening women's resilience and control through midwife-led continuity of care and through 'watchful attendance'. The main subjects in maternity care, women and their families, should have a structural place in developing care, education and research.

Curriculum vitae

Ank de Jonge is the first Dutch midwife who became a professor. She did her Master in Public Health in Edinbugh and her PhD at Radboud University in Nijmegen on the topic of birthing positions during the second stage of labour. She is head of the department of Midwifery Science at Amsterdam University Medical Center and Midwifery Academy Amsterdam Groningen. Additionally, she is adjunct professor at the School of Nursing and Midwifery of Western Sydney University, Australia and primary care midwife at midwifery practice Vondelpark in Amsterdam.

She is the first author of large cohort studies into the safety of primary midwifery care and homebirth, for which she received a VENI grant. Some of our research studies are: the IRIS study, the INCAS study and the SWING study.

Ank was a member of several Health Council Committees. She participates in the WHO Technical Working Group on Maternal and Perinatal Death Surveillance and Review, on behalf of the International Confederation of Midwives.