

# Increasing self-efficacy in student midwives for physiological childbirth

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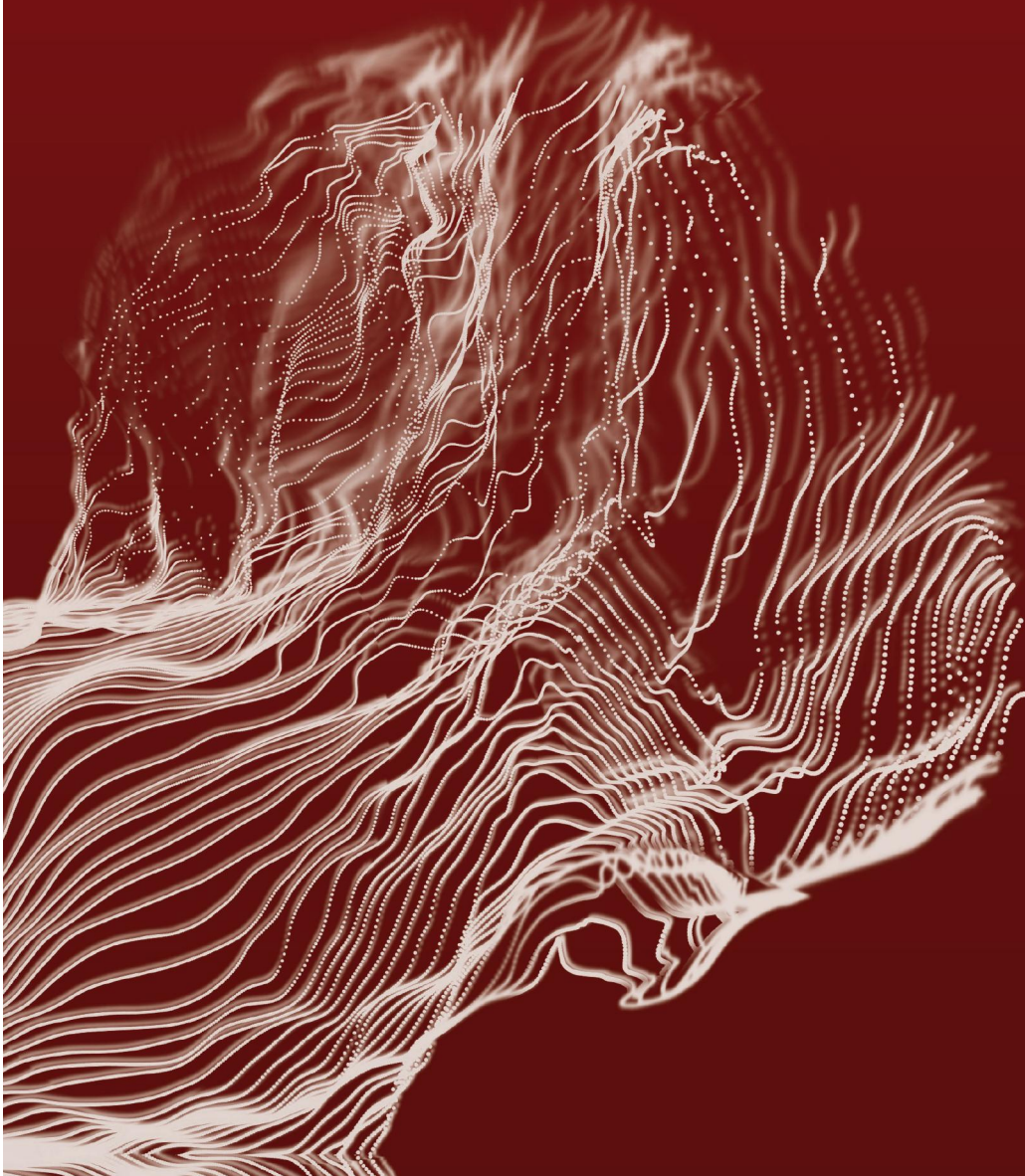
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# Valorisation



The findings of our research have important implications for midwifery education specifically, and for the education of health professions more broadly.

Our research provides new insights regarding midwives' capacity for their role as guardians and practitioners of physiological childbirth and, equally important, regarding the need for further education of student midwives for this role. Fulfilling this role is a vital contribution to the provision of maternity care that is effective, informed by evidence, and acceptable to women. To assume the role of promoters and protectors of physiological childbirth student-midwives need to strengthen their self-efficacy and agency. Coincidentally, the development of educational strategies that strengthen self-efficacy of other students intending careers in maternity care will result in better care for women. The delivery of high-quality, safe and effective maternity care is facilitated when all professionals collaborate<sup>1, 2</sup> as equal partners.

Our work has also produced new insights regarding effective ways to design educational programmes for those working in maternity health care. There is an increasing need to produce good quality, evidence-informed educational programmes that can accommodate the dynamic, changing nature of many of the health professions, including midwifery. Our work illustrates that in order to reflect the needs of a profession faced with constant change, input from, and dialogue with, stakeholders is a workable approach. Moreover, our process of developing educational content that is mindful of available human and material resources will be of interest to educators generally beyond health care.

### **Relevance to maternity care**

Health care in the Netherlands currently consumes 13% of Gross Domestic Product (GDP) and the cost of health care will continue to increase in the 21st century.<sup>3</sup> Providing health care that is of a high quality and economically sustainable is a challenge for governments, policy-makers and insurers. Improvement in maternal and perinatal health over the 20th century are, in part, a result of the use of medical interventions<sup>4</sup>, although we now know that the over-use of medical intervention in childbirth - 'too much, too soon'<sup>5</sup> - causes iatrogenic harm to women and babies and increases the economic burden of maternity care.<sup>6</sup>

The future of quality maternity care lies in another approach to care, in which women receive the 'right care at the right time'. De Jonge et al<sup>7</sup> argue that a system in which precise maternity care, tailored to the needs of individuals, rather than a 'one size fits all' approach would benefit women, many of whom express preferences for care that avoids the unnecessary use of medical intervention.<sup>8</sup> Value-based maternity

care requires a systemic shift in health care provision with the tailoring of care to the individual need by enacting maternity care that is centred on the needs of the individual and that uses resources optimally and equitably. This would ensure care provision that is preventive and supportive, that strengthens a woman's capacity for physiological childbirth, and prepares a woman and her partner for their role as parents, while allowing for acute obstetric care for those who need it. This approach results in optimal outcomes - the best possible outcome with a minimum of unnecessary medical intervention<sup>9</sup> and an equitable and sustainable solution to the issues of increasing need and decreasing resources for health care.

Significant issues remain in maternity care. While the integrated approach to maternity care can improve collaboration, it also involves care processes that are protocolized.<sup>10</sup> The protocolization of maternity care is likely to lead to what Scamell and Alaszewski<sup>11</sup> describe as the 'ever narrowing window of normality', with a possibility of increased intervention that may not be necessary. In a time in which there is an escalating shortage of beds in Dutch labour wards<sup>12</sup> and focus on maternity care in the media - including a non-evidence based proposition that increasing the rates surgical birth may spare women from later life trauma<sup>13</sup> - de Jonge et al's argument for the optimal, equitable and evidence-based use of resources resonates strongly.

The work contained in this thesis contributes towards the systemic shift called for by Jonge et al.<sup>7</sup> It does this by providing innovative and evidence-based educational strategies that support midwives to identify optimal care processes and to promote optimal outcomes. Education that focuses on strengthening personal agency is innovative in character, as it shifts midwifery competency for physiological childbirth beyond the realm of 'knowing' to being able to promote physiological childbirth as part of effective, evidence- and, value-based maternity care for women and babies. Promotion of this approach to care means advancing, moving forward, publicising, and increasing public awareness of the value of physiological birth.

While our work focused on student midwives, we would argue that it is applicable to the education of each of the actors in the maternity care domain. Midwives, obstetric nurses and obstetricians who understand and know how to support healthy childbirth physiology, and who are able collaborate with each other effectively, will produce professionals who are able to provide appropriate, sustainable, acceptable maternity care that is neither 'too much too soon' or 'too little too late'.<sup>5</sup> Rather these professional will deliver judiciously applied, evidence-based, sustainable maternity care that is mindful of avoiding the over- or under treatment of women and their babies.<sup>4, 14, 16</sup>

## Relevance for higher education

In 2018, the Dutch government spent 6.5 billion euros on higher vocational education. Like health care, these costs are predicted to increase, due in part to extra numbers of students expected to follow some kind of higher vocational education into the next decennia, combined with the rising costs of staff salaries.<sup>17</sup> Sustainability of higher education is an issue of societal relevance,<sup>18</sup> as, increasingly, higher education will be expected to do more with less. Universities will need to prioritise programmes of study that meet the needs of the workforce in order to continue to be financially viable.<sup>18</sup>

In educating health care professionals it is of utmost importance that educational programmes create professionals who meet the demands placed on the health professions. While health care is dynamic, health professions education often fails to keep up with curricula which are often outdated and static.<sup>19</sup> There is increasing traction for a movement that moves the education of health professionals beyond the traditional and problem-based curricula, towards system-based training that encourages learning in locally responsive and globally connected teams.<sup>20</sup> At the same time, health professions institutes should broaden their focus from isolated places of knowledge to becoming partners within professional networks and consortia, able to access and apply new knowledge and innovations in teaching and learning.<sup>19</sup> In short, the university becomes a part of the professional community and must seek new strategies to respond to the needs of that professional community.

Rapid Prototyping<sup>21</sup> (RP) - the methodology we used to inform and guide this the development of the ESSENTIAL programme presented in chapter 6, offers an approach to the design of health professions education that meets the needs of the changing contexts<sup>22, 23</sup> of health care. RP can reduce the sometimes lengthy, linear design processes often used in educational settings, cutting development time and costs. Moreover, RP works together with stakeholders, establishing their needs and working with their input and feedback to create solutions that can be applied to the dynamic health care setting. Working with health care professionals and students and collating their input to design educational programmes is a means of realising educational design and development that is evidence-informed, responsive to need and fit for purpose.

We are confident that Rapid Prototyping design methodology, applied to midwifery education and to other health professions will provide an innovative approach to educational content development that is sustainable and cost-effective, and responsive to professional need.



## Target groups

The findings of this thesis are relevant for student midwives, for students of other medical and health care professions and health professions educators.

In their recent concept analysis,<sup>24</sup> Greenway et al. highlight a number of aspects of the complexity of the theory-practice gap that are relevant for a range of students preparing for health care careers. Aspects include the prevalence of routinized care practices and the difficulties encountered in challenging supervisors because of a need to ‘fit in’ with the dominant culture of the clinical setting. Education that strengthens self-efficacy and personal agency, as described here, will support learners in midwifery and other health professions to bridge the theory-practice gap in their own health care domain. Improving self-efficacy and agency will allow new professionals to challenge routinized care practices, identify optimal, evidence-based practices, and discuss and debate the merits of these. Educating health care professionals with the skills to do these things will contribute to healthcare that is optimal, equitable and sustainable for the future.

Universities often fail to anticipate the changing context of the health professions<sup>19</sup> and as health care changes, universities may struggle to keep up. There is often scarce time and resources for research into health professions education.<sup>20</sup> The work presented in this thesis offers health professions educators an evidence-based approach to educational design and development ensures a good ‘fit’ between university and the professional context and the effective partnering of educators and professionals in shaping the health care professional of the future.

## Activities

We focused on a number of activities in order to disseminate the findings generated by the projects presented in this thesis. These included the international, peer-reviewed publications that comprise this thesis.

We disseminated our findings at conferences and symposia, in the Netherlands and beyond, relating to midwifery, physiological childbirth and higher education. These are listed below.

### Poster Presentations

November 2019: CAPHRI PhD Day: ‘Creating Guardians of Physiologic Birth: The development of an educational initiative for student midwives in the Netherlands

### Oral Presentations

**February 2020:** Kennispoort Verloskunde, Utrecht, The Netherlands: 'Increasing self-efficacy in student midwives for physiological childbirth. The design and development of a midwifery education initiative, The ESSENTIAL programme'

**November 2019:** Nederlandse Vereniging Medische Onderwijs, Rotterdam, The Netherlands: 'Het gebruik van Rapid prototyping als ontwerpmethodologie van onderwijseenheid binnen het hbo-onderwijs'

**October 2019:** Festival of Idea's, Pembroke College, University of Cambridge, United Kingdom: 'Are babies pizzas to be 'delivered'?'

**June 2018:** Normal Labour and Birth Conference, Ann Arbor, MI, USA: 'Increasing self-efficacy in student midwives for physiological childbirth'

**October 2017:** Normal Labour and Birth Conference, Grange-over-Sands, United Kingdom: 'What do student midwives need to become confident, competent practitioners of physiological childbirth?'

**June 2017:** ICM Triennial Congress, Toronto, Canada: 'Validating the Optimality Index for use in the Netherlands'

**May 2016:** Inauguration symposium Professor Marianne Nieuwenhuijze, Maastricht, The Netherlands: 'De Optimality Index - Nederland: Een validatie onderzoek'

**January 2016:** Kennispoort Verloskunde, Utrecht, The Netherlands: 'Hoe zien Nederlandse verloskundigen hun rol als bewaker en bevorderaar van de fysiologische geboorte?'

**June 2015:** Normal Labour and Birth Conference, Grange-over-Sands, United Kingdom: 'Dutch midwives' views on their role as promoters of physiological childbirth'

## Publications

Thompson, SM; Kane Low, L; Budé, L; de Vries, R; Nieuwenhuijze, M. Evaluating the effect of an educational intervention on student midwife self-efficacy for their role as physiological childbirth advocates, submitted

Nieuwenhuijze, M.J.; Thompson, S.M., et al. Midwifery students' perspectives on how role models contribute to becoming a midwife: A qualitative study, *Women and Birth* 2019, S1871-5192(19)30210-0

Thompson, S.M.; Nieuwenhuijze, M.J.; Kane Low, L.; De Vries, R. Creating Guardians of Physiologic Birth: The development of an educational initiative for student midwives in the Netherlands, *Journal of Midwifery and Women's Health* 2019, 64(5):641-648

Thompson, S.M.; Nieuwenhuijze, M.J.; Kane Low, L.; De Vries, R. "A powerful midwifery vision": Dutch student midwives' educational needs as advocates of physiological childbirth, *Women and Birth* 2019, 32(6):e576-e583

Thompson, SM.; Nieuwenhuijze, M.J.; Budé, L.; De Vries, R.; Kane Low, L. Creating an Optimality Index – Netherlands: A Validation Study, *BMC Pregnancy and Childbirth* 2018, 18:100

Thompson, S.M.; Nieuwenhuijze, M.J.; Kane Low, L.; De Vries, R. Exploring Dutch Midwives Attitudes to Physiological Childbirth: A Qualitative Study, *Midwifery* 2016, 42:67-73



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