

This is the peer reviewed version of the following article: Nieuwenhuijze M, Thompson S, Gudmundsdottir E, Gottfreðsdóttir H. Midwifery students' perspectives on how role models contribute to becoming a midwife: A qualitative study. Women and Birth 2020;33(5):433-439, which has been published in final form at <http://dx.doi.org/10.1016/j.wombi.2019.08.009>.

Midwifery students' perspectives on how role models contribute to becoming a midwife: A qualitative study

Marianne J. Nieuwenhuijze^a, Suzanne M. Thompson^a, Embla Yr Gudmundsdottir^{b,c},
Helga Gottfreðsdóttir^{b,c}

^a Research Centre of Midwifery Science Maastricht, Zuyd University, The Netherlands

^b Department of Midwifery, Faculty of Nursing, University of Iceland, Reykjavík, Iceland

^c Women's Clinic, Landspítali University Hospital, 101 Reykjavík, Iceland

Abstract

Background: The dynamics of maternal and newborn care challenge midwifery education programs to keep up-to-date. To prepare for their professional role in a changing world, role models are important agents for student learning.

Objective: To explore the ways in which Dutch and Icelandic midwifery students identify role models in contemporary midwifery education.

Methods: We conducted a descriptive, qualitative study between August 2017 and October 2018. In the Netherlands, 27 students participated in four focus groups and a further eight in individual interviews. In Iceland, five students participated in one focus group and a further four in individual interviews. All students had clinical experience in primary care and hospital. Data were analyzed using inductive content analysis.

Results: During their education, midwifery students identify people with attitudes and behaviors they appreciate. Students assimilate these attitudes and behaviors into a role model that represents their 'ideal midwife', who they can aspire to during their education. Positive role models portrayed woman-centered care, while students identified that negative role models displayed behaviors not fitting with good care. Students emphasized that they learnt not only by doing, they found storytelling and observing important aspects of role modelling. Students acknowledged the impact of positive midwifery role models on their trust in physiological childbirth and future style of practice.

Conclusion: Role models contribute to the development of students' skills, attitudes, behaviors, identity as midwife and trust in physiological childbirth. More explicit and critical attention to how and what students learn from role models can enrich the education program.

Keywords: Midwifery, Education, Role model, Childbirth, Qualitative research

Statement of significance*Problem or issue*

Greater understanding of the meaning of role models is relevant for improvement of learning strategies in midwifery education. Explicit and critical attention to how and what students learn from role models can improve the education program.

What is already known

Role models are important agents in preparing students for their professional role.

What this paper adds

Midwifery students conceptualize a role model from various examples who represents their 'ideal midwife' and guides their education. Positive role models promote woman-centered care and have a significant impact on students trust in physiological childbirth. Students emphasized that they learnt not only by doing, they found storytelling and observing important aspects of role modelling.

1. Introduction

Worldwide, the dynamics of maternity care challenge midwifery education programs to keep up-to-date, ensuring that they educate midwifery students who are able to play their part in present and future midwifery. Preparing students for a context in which they often have to balance promoting physiological childbirth and 'being with woman' with modern requirements of interprofessional and technological settings.

In an earlier exploration of the Icelandic and Dutch challenges in training contemporary midwives, key leaders of midwifery education in these countries mentioned the importance of role models as a means to prepare students for their professional role in a changing world.¹ Role models can show students how to combine ancient and modern competencies, exemplifying the midwifery identity as a guardian of physiological childbirth, and the modern professional in a dynamic, interprofessional environment.

Role models are individuals that others identify with, who possess desirable qualities and exemplify attitudes and behaviors that are considered worth imitating.² Observation and modelling are important means of learning new behaviors.³ In education, role models are recognized as important pedagogical agents, who function as an example, providing inspiration for the novice's own future professional performance.^{4,5} They are considered an influential part of informal learning,^{2,20} and there are some suggestions for formal use.⁵⁻⁷ Role models can be faculty members, preceptors or any professional students come across during their education.⁸⁻¹⁰ They distinguish from mentors or preceptors who have a formalized relationship with designated roles and responsibilities.¹¹ They influence students in developing professional identities, values, attitudes and behaviors, because of the desirable professional image they embody.^{2,4,6,10,12}

Medical and nursing students report a number of important characteristics and behaviors in role models, including (1) clinical competences like excellent level of knowledge and skills, and a humanistic approach towards patients, (2) teaching skills that create a positive learning environment, and (3) personal qualities like integrity, enthusiasm, respectful interprofessional interaction and passion for their profession.^{6,9} Students value exposure to positive role models and see them as beneficial for learning.^{4,9} Exposure to negative role models appears to contribute to students' reflection on what type of health professional they aspire to become, but may have unwanted consequences, such as negativity towards work, value conflicts, or emulation of undesirable practice.^{7,9} Therefore, a conscious use of role models is advocated, whereby staff and clinicians are aware of their modelling role and make this explicit.^{6,9}

Most of the evidence about role models stems from medicine or nursing. Little is known about what students and educators (faculty and preceptors) in midwifery education see as significant examples of role models and modelling behavior. One of the few studies we identified in the midwifery domain is dated, and may not be relevant for the changing world of midwifery.¹⁰ Our study adds new insights on role modelling in the current context of midwifery.

This study is part of [name] a collaborative project in which we explore issues in midwifery education with research data collected in different countries.

2. Methods

We conducted a qualitative, descriptive study interviewing Dutch and Icelandic midwifery students to explore their perspective on the meaning of role models in contemporary midwifery education. This design enables a deeper exploration of a topic, when limited information is available.

2.1. Settings and participants

Iceland and the Netherlands have different pathways for midwifery education. These reflect the generic characteristics of midwifery education in high-income countries as either a direct-entry Bachelor of Science program (the Netherlands) or a postgraduate program after nursing (Iceland).¹ By choosing these countries, we aimed for variation in education pathways and scope of midwifery practice, while also retaining sufficient common ground as European high-income countries.

We recruited students from all Dutch and Icelandic midwifery programs by oral invitation, email and Facebook, offering an information letter explaining the study, confidentiality, anonymity in reporting and secure data management. Students were aware that they could withdraw at any moment during the process of data collection without consequences. They gave informed consent before participating in the study.

2.2. Data collection

Our research team included investigators from both countries, who were the site investigators for their country. We collected data using face-to-face focus groups and individual interviews. While the focus group allowed for a broader exploration of the topic, the individual interviews enabled us to look deeper and explore the more personal meaning of role models for students.¹³

A semi-structured questionnaire route was created (Table 1),¹⁴ based on studies about role models in health professionals' education. All participants were interviewed in their native language at midwifery institutions, in a room where privacy was guaranteed. Focus groups lasted between 60 and 90 min, individual interviews between 30 and 45 min. The discussions were audio-recorded and transcribed verbatim. Informal member checks were conducted at the close of each focus group. Data collection continued until saturation was reached.

Table 1
Question route for interviews

- What meaning do role models have for your education as a midwife?
- Please describe a person who has been a role model for you. What makes him/her a role model for you?
- Which characteristics does a positive role model have?
- What kind of behavior and attitude does a role model show?
- What makes a person a negative role model?
- What impact did these role models have on your education?

2.3. *Ethical considerations*

In the Netherlands, Zuyderland-Zuyd ethics committee approved the study (17-N-27). Ethical approval was not necessary for this type of study in Iceland, as the data collection was part of consulting students for quality improvement and was not invasive into the private sphere of the student. At the beginning of all interviews the interviewer emphasized that students could withdraw or reject answering specific questions without explanation or repercussions. All data were anonymized and safely stored in the university data system, only accessible with a password for the researchers.

2.4. *Data analysis*

Data collection and analysis were concurrent in each country, allowing for reflection and subsequent discussion on the viewpoints of the participants. We used inductive content analysis to analyze the data.¹³

After each interview and focus group, the primary investigator in that country, added reflective notes, which helped our thinking throughout the analysis process. The primary investigators from each country, met several times (face-to-face and online) during data analysis to discuss the reflections and findings. The first author analyzed the Dutch data. The interviews were re-read and re-listened to facilitate deeper engagement with the data. Codes were attached to small segments of the transcripts using NVivo 11. Emerging themes were identified and checked to determine relevance in relation to the data. Initial themes were refined and divided into subthemes by going back to the data to establish coherent patterns. The last author applied a similar process for analyzing the Icelandic data. Subsequently, the first and last author discussed the themes and subthemes identifying similarities and differences as well as exploring possible new themes that did not come up in the data from the other country. Quotes from both countries illustrate the themes and were given a code.

2.5. *Rigor and reflectivity*

We used several strategies to ensure methodological rigor.¹⁵ All investigators were experienced qualitative researchers and had expertise in the fields of midwifery and education in their own country and internationally. They were not education providers to the students' surveyed. Their different national backgrounds encouraged discussion. Field notes were kept from each interview (data triangulation). Use of individual interviews and focus groups contributed to a deeper understanding of the topic (methodological triangulation). Throughout the study, we reflected on the analytic process (investigator triangulation). Research team meetings were organized to discuss the scientific and organizational aspects of the study (peer debriefing). The forward and backwards translation of the quotes was assisted by a native English speaker. The writing of this article was guided by the consolidated criteria for reporting qualitative research (COREQ).¹⁶

3. Findings

In the Netherlands, 35 students participated in the study. There were four focus groups with 27 students from all midwifery institutions in the Netherlands (Rotterdam (n = 8), Amsterdam (n = 5), Maastricht (n = 5), Groningen (n = 9)) plus eight individual interviews with students. All students were female and most were in the third (n = 6) or fourth year (n = 27) of education, one was a first year student and one a second year. All had experience in primary maternity care and hospital placements.

In Iceland, where only one institution exists, nine students participated, four first year students in the individual interviews and five second year students in a focus group. The students all had three to five months experience in primary maternity care and the university hospital.

In exploring students' views about role models and role modelling, four themes emerged: 'opening up the scope of midwifery practice', 'creating an ideal role model', 'learning by observing, listening and doing' and 'becoming a good midwife'. Each theme included several subthemes.

3.1. *Opening up the scope of midwifery practice*

Students indicated that role models are important for their learning process. Role models are persons they look up to because of their professional accomplishments and who they would like to mirror. The meaning of role models included three aspects.

Primarily, they are persons who facilitate the students' learning process. Additionally, role models are important for students' exploration of their philosophy of good midwifery care and they model students' future development as a professional.

3.1.1. *Facilitating learning*

Seeing people with whom they can professionally identify do certain things, makes it easier for students to develop new skills, attitudes and try alternative approaches to midwifery care. They associated role models with opportunities to observe skills and procedures they find challenging, learn new approaches or manage new situations.

A role model already gives shape to something I am still learning. (NL-1)

What will follow me is the importance of quietness, which is what I admire in the case of my clinical mentor. (IS-4)

Our participants also identified certain characteristics in clinicians as role model educators. These role models see the best in students, offer support, encourage responsibility and allow enough space to explore skills and competences in their own way. Significantly, they encourage students by who they are: an inspiring motivator with a passion for midwifery. That one midwife who could let go and sit in the corner and say nothing. (NL-3)

3.1.2. Exploring the philosophy of midwifery care

Students often mentioned that having a similar philosophy of midwifery care is requisite to recognizing someone as a role model. They identified role models who can show them how their philosophy of good midwifery care can be applied to practice. Concurrently, sharing the same philosophy allows the student to relax and concentrate on learning how to do things without having to challenge why something is done.

What I am looking for in role models is to explore if my philosophy on midwifery really exists. And that I am not the only one with this philosophy. And that it's doable in practice. (NL-2)

3.1.3. Modelling the future

Role models encourage students to think beyond their daily activities and initiate views about new developments in midwifery, such as their contribution to the positioning of midwives in the healthcare system. Students value role models' opinions about these issues and tend to listen more carefully to their arguments, allowing students to transcend the here-and-now and to shape their own future professional lives.

A role model helps me to look beyond my graduation, the direction I want to go as a professional in the future. (NL-2) To be able to follow women throughout pregnancy, birth and post-partum in the program will support me in promoting continuity of care after graduation. This is really a fulfilling experience and should be implemented in the clinical context. (IS-3) For the students, role models are the inspiration for an ideal. While students sometimes doubt that this ideal is achievable, they consider it worthwhile to strive for this image of ideal practice. However, the students did not idolize role models, remaining critical while seeking examples of ideal midwifery practice.

3.2. Creating an ideal role model

Students said that early on in their education they discover that a role model is not necessarily embodied by one person. They described 'assembling' an ideal role model based on constituent parts of different professionals who they appreciate in practice. This ideal guides their emerging midwifery identity.

3.2.1. Positive role models

Students mentioned professional characteristics of role models that they saw as important for a 'good' midwife. These characteristics focus on care-giving to women and their partners: empathy, being available for and listening to women and their partners, calmness, patience, confidence and being able to be firm when necessary. Experience is valued, given that the person is also curious about new developments and keeps up-to-date with new insights. Being able to interact with other professionals and daring to question why they are doing things is another characteristic they appreciated.

Well, listen to women . . . , being empowered. Working with the direction the woman wants to go. No interfering, when it is not necessary. Uh, being self-confident in such a way that I think: this is how I want to practice midwifery. (NL-4)

She was self-confident, spontaneous and warm with women, as well as very good in communicating with the obstetricians, daring to question and not accepting everything. (NL-5)

Well, I have tried to collect and combine what I perceive as positive in their [models] pursuit . . . I feel that there is one main thing of importance that is to build a relationship with the woman and her partner. (IS-1).

3.2.2. *Negative examples*

Students from both countries shared examples of professionals' behavior they did not value. Several students indicated that midwifery preceptors are not always aware that they are modelling their profession for the student. One student described how a midwife in a hospital setting left all the support of a woman in labor with the student and did not spend time with the woman herself. She felt that this midwife does not realize that she is modelling professional behavior and is " . . . *not showing the specific value midwives have in supporting the physiology of childbirth in a hospital setting*". (NL-6)

These negative examples make students acutely aware of the professional they do not aspire to be like.

I would also say that there are some midwives who are not qualified to work as midwives. They try to control your view and also the view of the women . . . I mean, they have this opinion and they do not inform the women or offer a discussion about any decision. (IS-1)

3.3. *Learning by observing, listening and doing*

Our participants clearly saw role models as significant facilitators of their learning process. Some students mentioned that they are actively looking for role models; others just come across someone who they value. All indicated that they think back to situations with positive role modelling often and try to apply to practice what they have seen.

When I see a role model do certain things, I memorize it better. Later on, in a similar situation, I think back and therefore I learn it better. I see the whole situation before me again. (NL-2)

Several students indicated that over time their focus changes in terms of what they need from role models. One student described how, as a first year student, she was impressed by everything and every preceptor, while now, as a third year student, "*You look at what fits for me and then you take little pieces from others that you think are valuable, particularly in the interaction with women but also in the personality of the midwife*". (NL-5)

3.3.1. *Learning new things and pushing boundaries*

The students liked professionals who allow them to experience things they, as students, feel insecure about because they do not exactly know how to do them. They mentioned examples such as vaginal examination in an upright position or discussing pain relief options. They remembered being taught these things in a theoretical context, but specific suggestions were easily lost if not followed up with practice-based assimilation.

And when you do a vaginal exam on a woman in vertical position for the first time – I am glad I came across that during my placement . . . (NL-7)

Last week I was working on the labor ward and there I was attending a woman having her third child in a spontaneous labor. She wanted to stay in the water but I was afraid and insecure . . . I mean I was insecure because I did not have the monitor, etc. The midwife was however very supportive and encouraged me (IS-3)

Role models also inspire students to push their professional boundaries, in particular in assuming new responsibilities where earlier, midwives would have referred to an obstetrician. For example, applying additional diagnostics for suspected gestational diabetes or using fetal monitoring for decreased fetal movements in primary care.

Much of the role modelling focused on interactions with women and around promoting physiological childbirth. Students also appreciate watching midwives or obstetricians manage pathology and witnessing the communication between professionals and with the woman and her partner in such situations.

Students value role models (midwives and obstetricians) who show confidence in the birth process and are not directed by fear. They described professionals who were alert, present and patient with the physiology of birth. This behavior was seen as highly important for students in developing their own professional identity. These role models also showed confidence in the student, allowing her to do things herself and not constantly directing her. In the hospital, supervised by the obstetrician, I experienced that low-risk is possible. Especially, the older ones who have seen everything. They stand with their arms crossed, just watching. (NL-8) Role modelling is not only inspired by the situations students are exposed to. Midwifery storytelling, about how midwives dealt with earlier cases models how students may perform or behave in certain circumstances. Students love to hear these stories.

I would like to hear more stories of midwives experiences in the clinic. That they would discuss more with students what they have done in specific situations. (IS-4)

Students also mentioned their midwifery lecturers as role models. Students are helped by lecturers that model attitudes that demand a critical view on midwifery, in particular with regard to evidence-based. However, some students sometimes missed links with current practice, as lecturers are viewed as supervisory and do not always share their former experiences with students.

. . . the lecturers, spirited academics who really challenge you occasionally. However, that gets us where we are now. It is not an easy program, if you are not giving it 110%, you will not make it. (NL-9)

I said to my midwife; well I've been reading about this and it says that this is a completely useless intervention it makes me feel good to be able to say that and be sure that this is based on evidence. (IS-5)

3.3.2. *Barriers*

Students identified certain barriers to learning from role models. They mentioned that they could not always gain further experience in the modelled behavior, as they are dependent on positive assessments from others during their clinical placements. Also, exposure to different professionals in a placement contributes to the overriding concern with what others expect of them, rather than singling out a professional who is a positive role model and mirroring what she/he is doing.

People always say, you pick up something from every midwife and that way you become the midwife you want to be. That is true, but to get a positive assessment you have to do what they expect of you. (NL-3)

Contradictory information is also a barrier. It confuses students and makes it harder to follow the desired behavior of a role model. Strict protocols limit possibilities to experiment with different approaches to care that they value in a role model.

Then it is hard to protect your own role. Where do I stand in this, how can I protect this [physiological childbirth] or not? And the midwife says: go ahead and use the birth stool, and the residents says: O, no! No! (NL-10)

Students are acutely aware that the precepting midwives are often overburdened and not always able to give them time, opportunities to practice, or be the role model the student seeks. The labor ward is very busy. The other day there was this first time mother who came in active labor and the midwife just said to her – well perhaps it is best for you to have an epidural . . . You know she wasn't going to even try to support her to give birth without an epidural. (IS-6)

Students felt that value could be found in being encouraged to observe, rather than do things, in order to learn. They also suggested using role models, both positive and negative, in reflections on their learning. In this way, students felt that they could better develop their own view on midwifery and being a good midwife.

3.4. *Becoming a good midwife*

Positive role models endure, providing reminders for the student of the sort of midwife she aspires to be, sometimes long after contact with the particular professional has ended. That is what I try – to take it [physiological approach] with me to every clinical placement, every time I quickly think of that one midwife, yes, no, yes! This is how you can do it as well. (NL-11)

3.4.1. *Bildung — achieving full potential as a midwife*

The term Bildung used in higher education is based on an original idea of Humboldt's Bildung, which translates as 'formation' but which is contextualized as learning that allows students to cultivate their full potential.²⁹

Students talked about role models who influence them in their style of practice. As one student said, these are " . . . *essential for becoming a good midwife, something you cannot learn in theory.*" (NL-12). They often mentioned midwives with a physiological approach to childbirth, and their impact on the student's development as a professional. This is linked to not only what these midwives do, but also the questions they ask and the stories they tell – these contribute to student reflection on their own motives and reasons. These midwives are patient and teach students patience.

I have a couple of midwives in mind of whom I think: they really safeguard physiology. For me, as a student, if my actions are becoming too pathological, she calls me back . . . – we'll wait and see a little longer. (NL-11)

Students expressed that experiences with role models shape how they will advocate for physiological childbirth or women's choice in their own practice; "*How much, in the end, I will stand up for physiological childbirth*" (NL-13). Practicing midwives are a big influence on how they perceive that physiological childbirth is central to midwifery.

Some students mentioned that they, as students, are also a role model. By gaining confidence in their skills and professionalism, they want to inspire others and share new ways of working. We were doing a hands-off birth. And the nurse had her hands like this [student positions her hands] . . . I thought I will show you, this is how you can do it as well. (NL-4)

3.4.2. *Developing a personal philosophy on midwifery care*

Students built their own professional ideal based on the models they see in practice and are more likely to believe and value arguments expressed by their role models. Most of their ideas of a good midwife and midwifery care revolve around being in touch with the woman, putting her at the center of care, connecting with her and her partner, and trusting in childbirth.

Not always immediately thinking about possible problems. They are in the back of your mind, I mean, you have to consider them, but not put them first. (NL-11)

In antenatal care, I have been following an excellent midwife and what is important is that she has worked on all levels of the childbirth process, antenatal care, labor care and post-partum. She has a holistic perspective . . . (IS-3).

4. Discussion

Based on interviews with 44 students from the Netherlands and Iceland, we found that early on in their education, midwifery students identify professionals in maternity care who demonstrate attitudes and behaviors they appreciate. Students assimilate these attitudes and behaviors into a desirable role model that is representative of the 'ideal midwife', who they can aspire to during their education. Positive role models portrayed woman-centered care, while negative models displayed behaviors students identified as not fitting with good care. Students emphasized that they learnt not only by doing, but that observation and storytelling were viewed as valuable aspects of learning from role models. Moreover, students acknowledged the significant impact of midwifery role models on their own trust in physiological childbirth and future style of practice.

While background and educational context differs between Dutch and Icelandic students, we found no contradictory findings with regard to role models. All students saw role models as a means of picturing aspirational midwives providing high quality care to women and babies.

Similar to studies in midwifery¹⁰ and other disciplines, the students in our study underlined the importance of role models in their education. New is that the midwifery students also highlighted storytelling as part of role modelling. They appreciated midwives who talked about former cases and how they had managed those. Storytelling has been a part of midwifery education for centuries¹⁷ and archetypal stories have been passed on, based on the messages they contain.¹⁸ While storytelling seems a long way from evidence-based practice, stories offer important situational knowledge that, together with midwifery evidence, can be combined to deepen understanding. This makes storytelling a rich and valuable didactic method.

The students remarked that they liked observing their role models, in particular, interactions in challenging situations. In midwifery education, practice is seen as a stimulating and powerful way of learning.¹⁹ Our participants described how they learnt by observing, comparing and contrasting different role models. This active observation can enrich students with a broader range of professional behavior. Several studies on role models have advocated integrating role modelling into formal midwifery curricula as an essential learning strategy.^{7,9,20} This requires preceptors who are aware of their role modelling at the time it is occurring and intentionally state what they are modelling.^{4,5} It also includes enhancing students' reflective assessments of the behavior they observe in their preceptors.⁵ However, expectations of constant positive modelling of behavior may not be realistic.⁹ Reflective meetings, where this is purposely addressed, will be valuable for understanding what is desirable and to get a realistic understanding of what is possible, moving away from right/wrong dualism.⁵

Students connected their ideal role models with requisites for becoming a good midwife. The characteristics students identified as desirable for role models and good midwives overlap with the findings of a Dutch study among student midwives on the conceptualization of a 'good' midwife.²¹ This study is based on a theory of professionalism in midwifery.²² Our participants mentioned characteristics conditional for woman-centered care, such as empathy, patience, building a relationship with the woman, listening to the woman, involving the partner, firmness when necessary, and promoting physiological childbirth. Additionally, they indicate that a midwife is a professional, who is skilled and experienced, self-confident, critical, restrained with interventions, open to new developments, a skilled communicator with other professionals, and contributes to the positioning of midwifery. These characteristics fit into the eight themes of being a good midwife described by Halldorsdottir & Karlsdottir's theory of professionalism (2011)²² and elaborated by Feijen-de Jong et al.²¹ An aspect in one of the themes that our participants did not mention, was the aspect of the midwife nurturing herself to prevent burnout. This is an important aspect in the theme personal and professional development. It is possible that this lack of awareness may be attributed to the students still being novice. However, the demands of the professional context and stressful events make midwives vulnerable for burnout.²³ This is something that deserves specific attention in education.

In role modelling, the focus of the students was on mastering childbirth from a woman-centered and physiological perspective. Studies in other health disciplines showed that students highly rank patient-centered care.^{6,7} However, the emphasis on promoting physiology is midwifery specific and reflects the philosophy of midwifery care.²⁴ Findings from a systematic qualitative review, including 35 articles on what matters to women during childbirth,²⁵ illustrate that most women want a physiological childbirth, in combination with attentive and safe care. These findings justify the desire of the students in our study to seek role models who can demonstrate this approach to care. This is important, as interventions are widely increasing in maternity care²⁶ and the opportunity to observe 'hallmark' midwifery, such as non-intervention in birth, is significantly associated with student self-efficacy in assuming such behaviors themselves.²⁷ Students need to gain experience, which is not always accessible for them in busy wards. Implementing midwifery models of woman-centered care in hospitals will give students opportunities to actually see and practice woman-centered care.²⁸ As educators, we have to ascertain these physiological births more consciously, so students are aware of the learning opportunities when they are present.

4.1. Strength and limitations

Using data from two countries with different pathways to midwifery allowed us to achieve a deeper exploration of role models in midwifery education.

Our cross-sectional qualitative exploration of midwifery students' perspectives on role models does not permit establishing how students' views on role models changes over time, as some participants indicated in this study. Our study also lacks the perspectives of midwives (preceptors and educators) who can give a further understanding of modelling in education. These issues should be a focus of subsequent research.

As students, our participants might have been inclined to give socially desirable answers that match the philosophy of their educational program, even though confidentiality was emphasized. Students self-selected to participate in this study, and it is possible that more successful and apparently confident students volunteered. To learn more about the meaning and impact of role models, it is necessary to explore the views of less successful students.

The students said little about the use of technology, and their experiences with this. Although monitors and epidurals came up, the institutional routine to use them made it hard to balance it with their wish for promoting physiological childbirth. Positive role models seemed to help them gain confidence and find balance.

5. Conclusion

The students in this study indicated that role models play an important part in their education as a midwife. Role models contribute to the development of their skills, attitudes, behaviors and their identity as a midwife. For this, students create their own 'ideal' role model with attitudes and behaviors they value in a good midwife and to which they can aspire to during their education.

More explicit and critical attention to how and what students learn from role models can enrich the education program. This can support the development of students' philosophy of midwifery and their practice in real life.

Ethics in publication

We have followed the Committee of Publication Ethics (COPE) guidelines.

Ethics approval and consent to participate

The study was approved in February 2017 by the medical ethics committee Zuyderland-Zuyd (17-N-27). Informed consent was obtained from all participants.

Consent for publication

Consent for publication was obtained from all authors.

Conflict of interest

None declared.

Funding

None declared.

CRedit authorship contribution statement

Marianne J. Nieuwenhuijze: Conceptualization, Methodology, Investigation, Formal analysis, Writing - original draft, Supervision, Validation, Writing - review & editing. Suzanne M. Thompson: Conceptualization, Methodology, Investigation, Formal analysis, Writing - original draft, Supervision, Validation, Writing - review & editing. Embla Yr Gudmundsdottir: Conceptualization, Methodology, Investigation, Formal analysis, Writing - review & editing. Helga Gottfreðsdóttir: Conceptualization, Methodology, Investigation, Formal analysis, Writing - original draft, Supervision, Validation, Writing - review & editing.

Acknowledgements

We thank the midwifery students who were willing to participate in our study.

References

1. Gottfreðsdóttir H, Nieuwenhuijze MJ. Midwifery education: challenges for the future in a dynamic environment. *Midwifery* 2018;59:78–80.
2. Perry R. Role modeling excellence in clinical nursing practice. *Nurse Educ Pract* 2009;9(1):36–44. doi:http://dx.doi.org/10.1016/j.nepr.2008.05.001.
3. Bandura A. *Social learning theory*. Englewood Cliffs: Prentice Hall; 1977.
4. Cruess SR, Cruess RL, Steinart Y. Role modelling—making the most of a powerful teaching strategy. *Br Med J* 2008;336:718–21. doi:http://dx.doi.org/10.1136/bmj.39503.757847.BE.
5. Benbassat J. Role modeling in medical education: the importance of a reflective imitation. *Acad Med* 2014;89(4):550–4. doi:http://dx.doi.org/10.1097/ACM.0000000000000189.
6. Passi V, Johnson S, Peile E, Wright S, Hafferty F, Johnson N. Doctor role modelling in medical education: BEME guide no. 27. *Med Teach* 2013;35(9): e1422–36. doi:http://dx.doi.org/10.3109/0142159X.2013.806982.
7. Tagawa M. Effects of undergraduate medical students' individual attributes on perceptions of encounters with positive and negative role models. *BMC Med Educ* 2016;16:164. doi:http://dx.doi.org/10.1186/s12909-016-0686-1.
8. Baldwin A, Mills J, Birks M, Budden L. Reconciling professional identity: a grounded theory of nurse academics' role modelling for undergraduate students. *Nurse Educ Today* 2017;59:1–5. doi:http://dx.doi.org/10.1016/j.nedt.2017.08.010.
9. Jack K, Hamshire C, Chambers A. The influence of role models in undergraduate nurse education. *J Clin Nurs* 2017;26:4707–15. doi:http://dx.doi.org/10.1111/jocn.13822.
10. Bluff R, Holloway I. The efficacy of midwifery role models. *Midwifery* 2008;24 (3):301–9. doi:http://dx.doi.org/10.1016/j.midw.2005.02.008.
11. Omer TA, Suliman WA, Moola S. Roles and responsibilities of nurse preceptors: Perception of preceptors and preceptees. *Nurse Educ Pract* 2016;16(January (1)):54–9.
12. Burgess A, Oates K, Goulston K. Role modelling in medical education: the importance of teaching skills. *Clin Teach* 2016;13(2):134–7. doi:http://dx.doi.org/10.1111/tct.12397.
13. Moser A, Korstjens I. Series: practical guidance to qualitative research. Part 3: sampling, data collection and analysis. *Eur J Gen Pract* 2017;24(1):1–9. doi:http://dx.doi.org/10.1080/13814788.2017.137509.
14. Polit DF, Beck CT. *Nursing research: generating and assessing evidence for nursing practice*. 10th ed. Philadelphia: Wolters Kluwer Health; 2012. doi:http://dx.doi.org/10.1016/j.iccn.2015.01.005.
15. Korstjens I, Moser A. Series: practical guidance to qualitative research. Part 4: trustworthiness and publishing. *Eur J Gen Pract* 2017;24(1):120–4. doi:http://dx.doi.org/10.1080/13814788.2017.1375092.
16. vTong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care* 2007;19(6):349–57. doi:http://dx.doi.org/10.1093/intqhc/mzm042.
17. Schrader C. *Mother and child were saved: the memoirs (1693-1740) of the Frisian midwife*. Amsterdam: Rodopi; 1987.
18. Ólafsdóttir ÓA, Kirkham M. Narrative times: stories, childbirth and midwifery. In: McCourt M, editor. *Childbirth, midwifery and concepts of time*. Oxford UK: Berghahn Books; 2009.
19. Ulrich S. First birth stories of student midwives: keys to professional affective socialization. *J Midwifery Womens Health* 2004;49(5):390–7. doi:http://dx.doi.org/10.1016/j.jmwh.2004.04.013.
20. Passi V, Johnson N. The hidden process of positive doctor role modelling. *Med Teach* 2016;38(7):700–7. doi:http://dx.doi.org/10.3109/0142159X.2015.1087482.

21. Feijen-de Jong EI, Kool L, Peters LL, Jansen DEMC. Perceptions of nearly graduated fourth year midwifery students regarding a 'good midwife' in the Netherlands. *Midwifery* 2017;50:157–62. doi:<http://dx.doi.org/10.1016/j.midw.2017.04.008>.
22. Halldorsdottir S, Karlsdottir SI. The primacy of the good midwife in midwifery services: an evolving theory of professionalism in midwifery. *Scand J Caring Sci* 2011;25:806–17. doi:<http://dx.doi.org/10.1111/j.1471-6712.2011.00886.x>.
23. Pezaro S, Clyne W, Turner A, Fulton EA, Gerada C. 'Midwives overboard!' Inside their hearts are breaking, their makeup may be flaking but their smile still stays on. *Women Birth* 2016;29(3):e59–66. doi:<http://dx.doi.org/10.1016/j.wombi.2015.10.006>.
24. ICM. *ICM core document philosophy and model of midwifery care*. 2014. [Accessed January 27, 2019] <https://www.internationalmidwives.org/assets/files/definitions-files/2018/06/eng-philosophy-and-model-of-midwifery-care.pdf>.
25. Downe S, Finlayson K, Oladapo O, Bonet M, Gülmezoglu AM. What matters to women during childbirth: a systematic qualitative review. *PLoS One* 2018;13 (4)e0194906. doi:<http://dx.doi.org/10.1371/journal.pone.0194906>.
26. Euro-Peristat Project, European Perinatal Health Report. *Core indicators of the health and care of pregnant women and babies in Europe in 2015*. 2018. [Accessed 27 January 2019] <http://www.europeristat.com>.
27. Jordan R, Farley CL. The confidence to practice midwifery: preceptor influence on student self-efficacy. *J Midwifery Womens Health* 2008;53:413–20. doi:<http://dx.doi.org/10.1016/j.jmwh.2008.05.001>.
28. Lundgren I, Berg M, Nilsson C, Ólafsdóttir OA. Health professionals' perceptions of a midwifery model of woman-centred care implemented on a hospital labour ward. *Women Birth* 2019. doi:<http://dx.doi.org/10.1016/j.wombi.2019.01.004> pii: S1871-5192(18)30155-0.
29. Bohlin H. Bildung and moral self-cultivation in higher education: what does it mean and how can it be achieved? *Forum Public Policy* 2008;1–10. [Accessed 25 June 2019] <https://eric.ed.gov/?id=EJ1099530>.