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# Evaluation of labor and birth education by midwifery educators: A qualitative study from Turkey

## Abstract

*Background:* Midwifery students' education regarding labor and birth is crucial because it directly affects the quality of care provided to women in labor.

*Aims:* Exploring educators' experiences of delivering labor and birth education to midwifery students and evaluating the circumstances that affect the quality of labor and birth education

*Methods:* This was a qualitative study. Semi-structured interviews were conducted with 16 educators teaching midwifery in 16 midwifery departments at universities in Turkey. Inductive thematic analysis was conducted. All transcripts were evaluated by two researchers, and codes were created. The codes formed the subthemes in terms of similarities and differences; themes were created based on combining subthemes.

*Findings:* Three themes were identified. The first— “impacts of global changes on labor and birth education”—shows how labor and birth is affected by changing policies, philosophies, individuals, and cultures. The second theme— “opportunities/obstacles in labor and birth education”—shows how sources of information, as well as individual and systemic factors, create opportunities or obstacles for the quality of labor and birth education. The final theme— “recommendations for quality labor and birth education”—presents participants' suggestions for the effective integration of courses, use of sources of information, and updating of curriculum.

*Discussion:* Changing policies, philosophies, individuals, and cultures affect labor and birth education. Individual and systemic factors and information sources create opportunities or barriers for the quality of labor and birth education.

*Conclusion:* A positive childbirth experience is a basic human right for both women and newborns. This can be made possible by professionals who have received quality labor and birth education. Thus, investment in midwifery education is an important cost-effective approach to improving health outcomes.

**Keywords:** labor and birth education, midwifery teaching, midwifery education, qualitative study

## INTRODUCTION

Changing roles within the childbirth team at hospitals, especially in plans developed globally to reduce maternal and infant mortality and morbidity, have led to increased medicalization even for low-risk births and caused an increase in the rate of caesarean sections

(Betran et al., 2016; Sandall et al., 2018). The increasing concern for medicalization of childbirth that threatens public health (e.g., increased cesarean rates and obstetric interventions) and changing individual demands and national and international healthcare policies have highlighted the importance of quality and sustainable labor and birth education (Carr and Riesco, 2007; Betran et al., 2016; Gonçalves et al., 2018). Although there is limited research on how the quality of labor and birth education translates into perinatal outcomes, health professionals who have received quality training have been found to make a positive difference (Renfrew et al., 2014; Luyben et al., 2018). Although international standardization is important to improve the quality of the curricula, the content will inevitably be shaped in line with the needs, policies, and targeted health outcomes of individual countries (International Confederation of Midwives ICM, 2019). Research shows that countries have some common problems, such as the inability of educators to adapt to updated curricula in terms of content or time, insufficient number and quality of academic and clinical educators, lack of infrastructure, and inter-professional conflict and competition (Barger et al., 2019; Moller et al., 2022). The World Health Organization (WHO, 2016) emphasized that low-quality education and inadequate clinical practice constitute barriers to reaching desirable outcomes; therefore, the WHO started a 15-year action plan to improve the quality of education offered to midwives, who play a primary role in minimizing risk at birth. Further, midwifery models in which the mother is at the center of childbirth, preserving natural processes of childbirth and focusing on increasing the mother's well-being, are being promoted. Moreover, some key areas have been identified, such as clearly defining the roles of professionals in the childbirth team and expanding the roles of midwives in both childbirth and other maternal health services (Barger et al., 2019). Innovative curricula have been designed in recent years, integrating personalized care and digital culture, for training midwives to provide the best possible care to women and their families (Hall & Way, 2018; Hundley et al., 2018). Recently, Turkey has ranked first among Organisation for Economic Co-operation and Development (OECD) members in caesarean section rates (OECD, 2019). Healthcare policies have been established to improve physiological birth, maternity hospitals' amenities have been improved, adjustments have been made to enable professionals in the childbirth team to fulfill their roles during labor and birth, and action plans have been developed. However, integrating these developments into curriculums remains a challenge (Barger et al., 2019).

Since 1997, midwifery students in Turkey have been enrolling in four-year, full-time, direct-entry midwifery programs after high school based on a national examination. The

midwifery education program is for all universities across the country (a total of 61 midwifery departments); it is conducted by the Council of Higher Education (YÖK), based on the guidelines of international organizations like the WHO and ICM, as well as the European Union's 80/155/EEC, designed in line with council directives. To graduate, students are expected to acquire the midwifery skills listed in these directives. Because of the lack of the number of midwifery scholars required for clinical education, clinician midwives are assigned as preceptors who participate in the clinical education, supervision, and evaluation processes of midwifery students. The limited clinical training areas and the fact that students from other departments (e.g., medical students in university hospitals and nursing students in other hospitals) receive clinical training in these areas are among the challenges for midwifery students for gaining skills. The midwifery students' labor and birth training is crucial because it directly affects the quality of care provided to women in labor. We aimed to bridge the gap in this area by exploring educators' experiences of delivering labor and birth education to midwifery students and evaluating the circumstances that affect the quality of labor and birth education in Turkey.

## **METHODS**

### **Design and Participants**

This was a qualitative study. Purposive sampling was used to recruit educators who taught midwifery classes at midwifery departments at universities in Turkey. Sixty-one universities in Turkey offer midwifery education through 4-year undergraduate programs, and a labor and birth course is offered in the third year. In Turkey, through the YÖK Program Atlas (2020) system, the contact addresses of midwifery educators are registered; their email addresses can be accessed from this system. Further, every midwifery educator has a publicly available institutional email address on the university website. In our research, using both systems, emails were sent to educators who give birth lessons in the midwifery departments of universities in seven regions of Turkey to achieve data diversity. A sample pool was created with the educators who accepted our request, and interviews were conducted until data saturation was reached. Sixteen educators belonging to 16 universities from seven regions of Turkey voluntarily agreed to participate in the research. Educators who were not interviewed were informed. (Streubert and Carpenter, 2014; Yıldırım and Simsek, 2011).

### **Data Collection**

Those who agreed to participate in the study were interviewed using the Google Meet platform between October 2020 and December 2020, with audio and video recordings. The interviews

were conducted by the first author (GGI), who was a midwifery educator, using a semi-structured interview. The interviews collected sociodemographic characteristics and asked questions such as ‘What are your experiences in labor and birth education?’, ‘What are the opportunities and obstacles facing quality labor and birth education?’ and ‘What are your recommendations to improve practices in this area?’ The data were transcribed within one week after the interviews, and each transcript was numbered to protect the anonymity of the participant. The average duration of the interviews was  $31.51 \pm 13.3$  (16.23–63.52) min.

### **Data Analysis**

Data from in-depth interviews were transcribed verbatim and analyzed by inductive thematic analysis. Thematic analysis is a qualitative descriptive approach and is used to identify, analyze, and report themes from categories (Vaismoradi, Turunen, and Bondas, 2013). In the present study, voice recordings of the interviews were transcribed verbatim on the day the interviews were conducted.

The inductive analysis was made as follows: first, comparisons of words, phrases, and sentences were made and meaningful units displaying patterns were detected. Second, by utilizing open coding, concepts were determined, and subthemes were created and defined. Third, subthemes were examined to determine whether there were relationships between them by means of tables and diagrams to reveal conceptual patterns. Fourth, the researchers discussed their findings. Finally, they agreed on abstractions of meaningful units and subthemes into themes. Conclusions drawn by the researchers by using main concepts and themes are based on preceptor midwives’ descriptions (Hsieh and Shannon, 2005; Elo and Kyngas, 2008).

### **Ethical Considerations**

The study was carried out in accordance with the Code of Ethics of the World Medical Association (Declaration of Helsinki). Ethical approval was obtained from the ethical committee of the lead author’s university (University of Mersin Ethics Committee-30/09/2020-20-668). The purpose of the study, the data collection technique, video recording, and security were explained to the participants both verbally and in writing. Verbal consent was obtained from the volunteers who accepted the study at the beginning of the video interview.

### **Trustworthiness**

The trustworthiness of the qualitative data was based on credibility, dependability, confirmability, and transferability (Houghton et al., 2015). For the credibility of the data, the transcription of the audio recordings was made within 1 week of the interviews. To enhance dependability, two authors performed the coding separately, and when their codes differed, they

sought the suggestion of a third author in creating the codes, categories, and themes. To achieve confirmability of the data, transcriptions and findings were reviewed and endorsed by a third-party researcher who was experienced in qualitative research. To enhance the transferability of the results, statements of the participants were given in appropriate quantity and quality.

## **FINDINGS**

The mean age of the midwifery educators was  $44 \pm 5.77$  (37–58) years, and all had a doctorate degree in midwifery or obstetric nursing. The mean length of midwifery educator career was  $12.87 \pm 7.81$  (3–28) years. The average clinical experience of the educators in the maternity unit was  $3.56 \pm 4.73$  (0–15) years.

Three themes were developed: 1) impacts of global changes on labor and birth education, 2) opportunities/obstacles in labor and birth education and 3) recommendations for quality labor and birth education.

### **1. Impacts of global changes on labor and birth education**

The main theme ‘impacts of global changes on labor and birth education’ comprises three sub-themes: changing policies and philosophies, changing cultures, and changing individuals.

#### **1.1.Changing policies and philosophies**

Educators stated that global or national policies influenced labor and birth education, leading to changes in the philosophy of practice. However, it took time for the changing philosophies to be adopted by educators and practice sites and to be translated into labor and birth education.

*‘For the last 20 years, Turkey has been pursuing a pro-natalist policy. This has had a profound impact on labor and birth education and changed it’. (Participant 4)*

*‘The world is changing, so are the practices of childbirth, but if we base our education on a philosophy of respect for the woman, baby and birth, practices might continue to change, but there would always be respect at its core’. (Participant 15)*

*‘The philosophy of the educator around birth matters when it comes to teaching philosophy. Can educators internalize philosophies around birth? It is almost impossible to teach philosophy without internalizing it. Can an educator who advocates caesarean section convince a student of the naturalness of birth’? (Participant 16)*

#### **1.2.Changing cultures**

Educators stated that the perceptions and attitudes of both teachers and students towards birth were primarily affected by their cultural background, and this affected individuals’ teaching and learning processes.

167 *'Students' standards of judgement and culture affect the extent to which they benefit from*  
168 *the labor and birth education we provide, because if they fail to go beyond these factors,*  
169 *they shut themselves off and do not receive the education. I try to understand the perception*  
170 *of birth in students' cultures. I emphasize the importance of culture-based care rather than*  
171 *standard care. It is important for them to gain flexibility'. (Participant 12)*

### 172 **1.3.Changing individuals**

173 Educators stated that the styles of individual learning and skill acquisition has changed across  
174 generations. This meant that there was a need for training that would strengthen not only  
175 obstetrical knowledge and skills but also social and intellectual attributes.

176 *'The new generation has poor fine motor skills. When we try to teach episiotomy repair, we*  
177 *discover that students have never sewed and thus lack hand skill. That's why they take a*  
178 *handicraft class before taking the midwifery class'. (Participant 10)*

179 *'Even social courses affect labor and birth education. The acquisition of psychomotor skills*  
180 *alone is not enough to provide quality midwifery care; students' perception of birth,*  
181 *communication skills, empathy skills, keenness to help, socialization skills... the new*  
182 *generation needs these more than ever...' (Participant 4)*

## 183 **2. Opportunities/ barriers in labor and birth education**

184 In these themes we report three sub-themes to discuss informational, systemic and individual  
185 barriers in relation to labor and birth education.

### 186 **2.1. Informational opportunities/barriers**

187 A number of the participants felt that they provided up-to-date knowledge that was  
188 acknowledged by others:

189 *'I believe that the theoretical transfer of labor and birth education in Turkey is very good.*  
190 *It is constantly updated with evidence; students graduate with up-to-date knowledge and*  
191 *skills. For instance, we learn from our students working abroad, that hospital*  
192 *administrators their express satisfaction about up-to-date information and practices*  
193 *possessed by midwives from Turkey'. (Participant 11)*

194 Some considered that as information resources have become more varied and accessible, this  
195 had enabled students' easy access to different resources in their native language, promoting  
196 opportunities for learning and practice.

197 *'Today's students are very lucky. The number of resources in our own language has*  
198 *increased, and with increased technological opportunities, access to information has*  
199 *become very fast and easy. Even in clinical settings, students can quickly access information*

200 *and find the opportunity to apply it, so that they do not miss out on learning opportunities’.*  
201 *(Participant 10)*

202 However, from a negative perspective, a few considered that the lack of knowledge in the  
203 literature on ‘how to deliver labor and birth education’ was a challenge:

204 *‘I have never researched how to deliver labor and birth education, now I realize it because*  
205 *you have asked me, but I think there is very little information around it, because I have*  
206 *never come across it’.* (Participant 14)

207 *‘Every year, when I plan the course, I search ‘How to deliver labor and birth education?’*  
208 *and I find nothing. I keep doing as I know, right or wrong’.* (Participant 16)

209 Concerns were also expressed about some of the information (including visuals) being shared  
210 on social media platforms, leads to undesirable effects in labor and birth education.

211 *‘Students are influenced a lot by social media. Although we provide them with the best*  
212 *evidence, they are also exposed to plenty of images and content about birth on social media,*  
213 *and I realize that they try to apply what they have seen rather than relying on evidence.*  
214 *However, unfortunately, they have no idea and awareness of its accuracy’.* (Participant 7)

## 215 **2.2. Systemic opportunities/ barriers**

216 As opportunities or barriers for quality labor and birth education;

217 Educators mentioned the number of students, infrastructural opportunities, opportunities in  
218 schools and practice sites.

219 *‘Availability of positive childbirth environments in recently opened hospitals enabled us to*  
220 *reach the goals of the course, because we have become able to get students to apply what*  
221 *we teach and acquire skills. However, unfortunately, such opportunity is not available in*  
222 *all provinces yet’* (Participant 2)

223 *‘Increased number of students per teacher has unfortunately damaged the quality of our*  
224 *education... Simulation laboratories are insufficient. Students learn directly on the patient’.*  
225 *(Participant 15)*

226 In addition, educators mentioned school-hospital cooperation and legal regulations as  
227 opportunities or obstacles for quality labor and birth education.

228  
229 *‘We give students an ideal education, but in placements, they find themselves in a whole*  
230 *different world. They retain what they see in placement rather than what they learn in*  
231 *theoretical education’.* (Participant 10)



232 *'There are criteria for standardization in labor and birth education, but it is not*  
233 *accompanied by legal regulation. Midwives/doctors do not want the student to assist with*  
234 *birth because they are rightfully afraid of malpractice lawsuits.'* (Participant 6)

### 235 **2.3. Individual opportunities/ barriers**

236 Individually, many different opportunities or barriers were mentioned.

237 The personal characteristics of the educator, their lack of experience and skills in midwifery  
238 and teaching midwifery;

239 *'The instructor needs to be patient, interested, enjoy teaching midwifery and not give up.'*  
240 *(Participant 1).*

241 *'The instructor definitely needs to have experience and skills in birth. Birth cannot be taught*  
242 *by educators who just quote what the book says'.* (Participant 2)

243 *'Educators know about birth but cannot teach it. Because the experience and education of*  
244 *birth is very special. It takes experience to be able to convey emotion and intuition'.*  
245 *(Participant 4)*

246 Clinical instructors not being good role models;

247 *'The greatest obstacle to labor and birth education is midwives in the clinic not being able*  
248 *to perform their independent roles in birth and the student not seeing the role model in the*  
249 *birth room'.* (Participant 10)

250 The individual characteristics of the student and their perceptions and attitudes towards birth;

251 *'Do the student's personal ethics and professional ethics overlap? This affects the*  
252 *perception of birth'.* (Participant 6)

253 *'The student's personality, perception, affection, being active and curious positively affect*  
254 *the achievement of the goals'.* (Participant 6)

255 *'Students are told about the mechanism of birth and taken to a hospital after mechanical*  
256 *simulations on a model in the laboratory. Are such students mentally and emotionally*  
257 *ready? If they are not ready, they are traumatized from the very beginning. How aware are*  
258 *the educators of this? Have they ever thought of preventing this? Do they know the effects?*  
259 *What are they doing'?* (Participant 10)

### 260 **3. Recommendations for quality labor and birth education**

261 The main theme 'recommendations for quality labor and birth education' comprises three sub-  
262 themes: enhancing multi-faceted individual outcomes, ensuring integration and using support  
263 resources.

#### 264 **3.1. Enhancing multi-faceted individual outcomes**

Educators mentioned several factors involved in improving the quality of labor and birth education including students' being mentally and emotionally prepared for assisting with birth, acquiring self-confidence, awareness, empathy, and a sense of professional belonging.

*'It is very important to teach empathy in labor and birth education. But empathy cannot be not taught theoretically. You need to exercise empathy yourself to teach it to students' (Participant 8)*

They also stated it was important for educators to receive periodical training around the quality labor and birth education and to increase their motivation to teach birth.

*'I think it is necessary to train the trainers first. This would also ensure standardization. There is need for a platform where midwifery educators would gather periodically and can share their materials and methods'. (Participant 10)*

They also emphasized that the students are educated by an idealist educator who has adopted professional ethical values and that being role model is the important.

*'It is important for students to be educated by an idealist instructor so that they can apply in practice what they have learned in labor and birth education. Loving your job, being idealistic, being committed and sense of belonging...' (Participant 2)*

*'There are challenges around acquiring the roles of the midwife in birth. Sense of belonging is developed by conveying it clearly in the class and integrating it into the student's individual roles, but of course it takes time. Educators being a role model is the most important facilitator of the process' (Participant 7)*

### **3.2. Ensuring integration**

Educators stated that the quality of labor and birth education could be improved by integrating different teaching techniques into labor and birth education. These could include role plays, animations, or material resources such as a cervical dilation ring:

*'Sometimes, if we are working with models, I scream like a simulator, I push, they enjoy it enormously, it's like role playing... they feel at ease, and thus they learn better'. (Participant 9)*

*'I have students prepare some of the materials. For example, I get them to make a cervical dilation ring from cardboard and they always carry it in their pockets... I allow them to choose the material according to their financial means...' (Participant 1)*

Some also referred to how the development of skills needed to be gradual over time, from the simple to the complex:

*'Midwifery should be taught gradually in the course of the entire education, not in one semester only, there should be goals for midwifery teaching at all levels going from simple*

to complex. For example, they should learn communication in the first year, supportive care and empathy in the second year, assisted birth in the third year, and integrating all these skills in the fourth year to be able to manage the birth process'. (Participant 4)

### 3.3. Using support resources

Educators stated that the support of their respective institution's administration, inter-agency cooperation and in-service training aiming to translate current information into practice are crucial in improving the quality of labor and birth education. One participant referred to how support from her institution in terms of clear processes, encouragement and opportunities for personal development would translate into 'better' quality education:

*'If the management provides support to clear the path, we move forward more easily and faster... The guidance and encouragement of the management increases our motivation. This includes supporting the personal development of the educator. Because my personal development would translate into better quality of labor and birth education'. (Participant 3)*

Another emphasized the importance of joint training events with students and professionals from the maternity units to help facilitate cooperation and collaborative practices:

*'We train the student, but to ensure integrity, it is equally very important that the childbirth team at the institution where the student goes for placement update their knowledge, that in-service trainings be conducted in cooperation to ensure mutual benefit, and that joint projects be conducted ... The student works with that team in placement, so we need to cooperate with them'. (Participant 9)*

Some of the participants also underlined the importance of regularly receiving feedback from students, internal and external stakeholders to improve the quality of labor and birth education.

*'The most important pillar that is often overlooked when evaluating labor and birth education is the student. Therefore, evaluation should include external stakeholders, lecturers responsible for the course, clinical guides and students...' (Participant 2)*

## DISCUSSION

This study found that changing policies, philosophies, individuals, and cultures affect labor and birth education and that information and sources of information as well as individual and systemic factors create opportunities or obstacles for the quality of labor and birth education. To improve the quality of labor and birth education, the participants in this study suggested that the individual achievements of students should be improved, and the curriculum should be updated effectively.

It is known that the perceptions of women, families and health professionals influence childbirth processes and caesarean section rates (Latifnejad-Roudsari et al., 2014; Sercekus et al., 2015; Long et al., 2018). The perceptions, experiences, and feelings of those working in the obstetric environment, including midwifery students, are an important factor in providing the psychosocial support needed by the woman who is at the center of the birth, and in perceiving the birth positively or negatively (Dooris and Rocca-Ihenacho, 2019). In this study, the participants underlined the importance of students preparing themselves mentally and emotionally for birth and gaining self-confidence, awareness, empathy, professional ethics, a sense of professional belonging and commitment in instilling positive childbirth perception into students. Several studies have emphasized that positive perceptions of birth are possible through the adoption of professional and birth-related philosophies and values (e.g., hypnobirthing, Lamaze, etc.) that preserve naturalness and physiology (Regan and Liaschenko, 2007; Homer et al., 2014; Renfrew et al., 2014; ten Hoope-Bender et al., 2014; Van Lerberghe et al., 2014; Betran et al. 2018). While the participants considered that changes in information and policies were integrated into the curriculum, this was insufficient to enact change. They argued how there needed to be associated changes in philosophies and beliefs for the new information to be meaningfully delivered, but as yet there is a lack of guidance as to how this can be achieved. The importance of designing labor and birth education with quality and updated curricula was underlined with a view to increasing positive childbirth experiences in the present and in the future (Renfrew et al., 2014). Basically, it is important for midwifery educators to structure the curriculum in line with updated knowledge and practices (West et al., 2016). In the new training modules, it is important to develop the leadership, empowerment, rhetoric, communication, advocacy, and critical thinking skills of midwifery students and to provide personalized care at birth (Zondag et al. 2022; Thompson et al., 2019). However, the lack of evidence around labor and birth education is the largest obstacle to this process. Therefore, the development of directives and guidelines for labor and birth education and the evaluation of their effectiveness through research would facilitate developing a positive perception of childbirth and improving the quality of labor and birth education.

Recently, midwifery educators are making substantial efforts to use different methods to provide Generation Z learners with the necessary competencies to enable them to offer targeted childbirth care and support (Bharj et al., 2016). These are important triggers in the reconsideration of curricula and allow for changes in educational processes (Hundley et al., 2018; McDonald et al., 2018). In line with the wider research, we found that some educators were optimistic about these changes, whereas others were pessimistic about the increased use

of technology and its implications for perinatal care (Roundtable Discussion, 2018). In this study, the educators stated that they lacked access to technology-based labor and birth education laboratories, they made efforts to deliver targeted skills with different educational materials they designed themselves, and they added supporting courses for fine motor skills and personal development achievements to the curriculum. It is reported that today's students, who are considered as the internet generation, are more active and self-motivated with the use of technology in online learning environments and face-to-face environments (Evans and Forbes, 2012). It is emphasized that new generation of students e-book, web2.0, mobile computing, cloud computing etc. its use has an important place in meeting learning needs (Liebowitz, 2013). In addition, it is emphasized that z generation students need a mentor instead of learning through new experiences independently, and it is reported that vocational training given in small groups with mentor and cooperation will provide more benefits (Plochocki, 2019). Previous research found that technology-based laboratories provide nurse and midwife students with reproducible learning opportunities in an accessible and safe environment and enable students to graduate as competent and qualified practitioners (Fealy et al., 2019). However, in midwifery education where the number of students is high, all these equipment require a serious budget. Therefore, allocating a national/international budget for quality labor and birth education, especially in countries with high caesarean rates (OECD, 2019), could provide much-needed support in improving birth-related outcomes. The use of cost-effective innovative alternatives could also facilitate this.

In this study, some participants considered that the achievement of targeted competencies in labor and birth education is challenged due to the large number of students, the absence of regulations about the status of students in practice, the lack of sufficient equipment and skills for midwifery educators, limited self-development opportunities for educators and inadequate infrastructure in learning settings. In particular, the large number of students and lack of regulations regarding the status of the student limit potential benefits from labor and birth education. Malpractice lawsuits are becoming increasingly common in Turkey, and measures are being taken to prevent malpractices (Türkmen and Ekti Genç, 2017). For this reason, obstetricians are cautious about having students practice. The absence of a basis for student status also hinders midwifery educators and students in gaining personal experience and negatively affects their qualifications. Students receiving quality labor and birth education directly affect maternal–infant health after graduation, and this could only be possible through training provided by qualified educators (Renfrew et al., 2014).

Researchs has emphasized that for the teaching of quality perinatal care in midwifery, there should be a sufficient number of midwifery educators, and the educator should be knowledgeable about evidence, midwifery science and philosophy (Hundley et al., 2018; Thompson et al., 2019). The lack of qualified educators threatens the sustainability of the improvement in perinatal outcomes (Nyoni and Botma, 2018). However, many educators state that they have difficulties in achieving individual competencies and improving their qualifications (Barger et al., 2019). To remedy these deficiencies, it is emphasized that healthcare institutions, healthcare providers, policymakers and researchers should make concerted efforts in developing policy and management interventions related to midwifery (Shorey et al., 2021). In addition, this goal can be achieved by the presence of educators who train qualified birth team members in decision-making mechanisms (Hundley et al., 2018). Therefore, investment in midwifery educators would be one of the cost-effective approaches to improving the outcomes for the health of women and newborns. Another pillar that affects the quality of labor and birth education is the quality and support of clinical learning settings. In this study, it was emphasized that theoretical education provided in Turkey is of good quality, but the supportive factors of the clinical learning setting remain insufficient. Collaborative approaches of institutional leaders in school-hospital cooperation and interdisciplinary cooperation in learning settings are opportunities that could improve the quality of labor and birth education (Saxell et al., 2009; Bogren et al., 2021). Childbirth requires teamwork, therefore multidisciplinary interaction in education plays a role in raising awareness around childbirth management and prevents confusion of roles (Shaw-Battista et al., 2015). Clearly defined roles within the childbirth team in clinical learning settings, interactions in inter-professional perceptions and paradigms of childbirth and the application of midwifery models instead of medicalization positively affect labor and birth education (Barger et al., 2019). Therefore, investing in clinical learning environments in improving the quality and sustainability of labor and birth education is not only an educational priority, but also a necessity in meeting the increasing demands for birth services. It is also known that exchange programs developed to benefit from different clinical settings are important opportunities for students to graduate with required qualifications (Marshall, 2017). Institutions with limited opportunities could also cooperate with other universities and thus support their students to meet achievement goals. In addition, it can be suggested that midwifery educators benefit from exchange programs so that they can look at birth education from a different perspective and gain different experiences.

432

433 Suggestions for improving the quality of education include efforts for accreditation to ensure  
434 standardization in education (Nove et al., 2018), reorganization of the educational environment  
435 in a way that facilitates learning (Toosi et al., 2021), stronger collaboration with clinical settings  
436 and governmental systems to solve current challenges (Barger et. al., 2019). Suggestions  
437 derived from this research include efforts for increasing multi-faceted individual achievements  
438 of students, integration between disciplines, institutions and courses and correct use of the  
439 infrastructure and human resources. However, what is striking is that although respondents  
440 provided data with varying degrees on the problems and threats in labor and birth education,  
441 they provided very limited suggestions for solutions on barriers related to educators. It was also  
442 stated that there should be training for trainers on issues related to midwifery. Previous research  
443 emphasizes that educators should go through periodical training in order to improve the quality  
444 of education and update themselves on how to translate changing teaching techniques and  
445 knowledge into practice (West et al., 2016; Barger et al., 2019; Bogren et al., 2021; Toosi et al.,  
446 2021). Most universities in Turkey provide training updates for the development of educational  
447 skills. The authors of this study observed that educators experience obstacles in integrating their  
448 educational skills into midwifery knowledge and skill acquisition process but have limited  
449 awareness of this obstacle.

450 Therefore, applied update trainings should be held periodically with all educators who deliver  
451 labor and birth education. Maintaining the sustainability of education after graduation is likely  
452 to positively affect not only labor and birth education, but also all contexts and systems related  
453 to childbirth.

#### 454 **Strengths and Limitations of the Research**

455 The most important feature of this study is that it is the first study to find out the views  
456 of educators about how labor and birth should be taught to midwifery students, who are an  
457 important member of the birth environment in Turkey. The fact that the participants consist of  
458 educators from different regions of Turkey, in different age groups, with different opportunities  
459 and education-training experience constitutes its other strength. The fact that the interviews in  
460 this study were conducted and recorded by a midwifery educator may have been a limitation in  
461 terms of data presentation. In addition, if the sample had included educators of different  
462 occupational groups involved in the childbirth team, the data could have been more varied. It  
463 is striking that the data obtained are systemic facilitators or barriers experienced by educators  
464 rather than opinions about evidence-based teaching focusing on the nature of birth. Evidence in  
465 the literature on how to teach childbirth, an experience that can be affected by many different

variables, is limited, which may have led to the fragmented and limited data obtained from the participants. Although it is a limitation, it contains the message that this is a finding in itself and that the literature should be supported by evidence for birth education.

## **CONCLUSION**

Realizing, disseminating and implementing sustainable political, financial and professional investments aiming at improving labor and birth education could provide a protective and cost-effective improvement for the health of women and their families. Our research results underline that labor and birth education should be based on philosophy and delivered with a holistic curriculum, individual and cultural effects should be considered, resources should be allocated for appropriate infrastructural support, knowledge and skills of educators should be updated, and institutions and policies should be reorganized. Changing generational characteristics in a changing world brings along new designs in vocational education. Improvements can be achieved at individual and organizational levels in line with our findings around students, educators and programmatic elements that may affect the quality of labor and birth education. In order to have more technology-based laboratories in education processes, to increase teaching accompanied by mentors, to maintain information up to date among midwifery educators, it is necessary to increase national and international sharing (online or face-to-face), and universities should allocate more resources to midwifery education. Therefore, it is suggested that the awareness of educators should be increased, evidence-based literature knowledge should be created, platforms should be created for knowledge and experience sharing and policy makers and universities should be involved in these platforms to increase resources.

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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## References

- Barger, M. K., Hackley, B., Bharj, K. K., Luyben, A., Thompson, J. B., 2019. Knowledge and use of the ICM global standards for midwifery education. *Midwifery* 79, 102534. <https://doi.org/10.1016/j.midw.2019.102534>
- Betran, A. P., Torloni, M. R., Zhang, J. J., Gülmezoglu, A. M., 2016. World Health Organization Working Group on Caesarean Section. WHO statement on caesarean section rates. *BJOG* 123 (5), 667–670. <https://doi.org/10.1111/1471-0528.13526>.
- Betrán, A.P., Temmerman, M., Kingdon, C., Mohiddin, A., Opiyo, Newton, T., Maria R., Zhang, J., Musana, O., Wanyonyi, S. Z., Gülmezoğlu, A.M., 2018. Interventions to reduce unnecessary caesarean sections in healthy women and babies. *The Lancet*, 392 (10155). pp. 1358-1368. ISSN 0140-6736
- Bharj, K. K., Luyben, A., Avery, M. D., Johnson, P. G., O'Connell, R., Barger, M. K., Bick, D., 2016. An agenda for midwifery education: Advancing the state of the world's midwifery. *Midwifery* 33, 3–6. <https://doi.org/10.1016/j.midw.2016.01.004>
- Bogren, M., Alesö, A., Teklemariam, M., Sjöblom, H., Hammarbäck, L., Erlandsson, K., 2021. Facilitators of and barriers to providing high-quality midwifery education in South-East Asia-An integrative review. *Women and Birth* S1871-5192(21)00109-8. <https://doi.org/10.1016/j.wombi.2021.06.006>
- Carr, M., Riesco, M. L., 2007. Rekindling of nurse-midwifery in Brazil: public policy and childbirth trends. *Journal of Midwifery & Women's Health* 52 (4), 406–411. <https://doi.org/10.1016/j.jmwh.2007.02.015>;
- Dooris, M., Rocca-Ihenacho, L. 2020. in *Squaring the Circle: Normal birth research, theory and practice in a technological age* ; ISBN: 9781780664408 ; Editors: Soo Downe, Sheena Byrom, Pinter & Martin Limited, England.
- Elo, S., Kyngäs, H., 2008. The qualitative content analysis process. *Journal of Advanced Nursing* 62 (1), 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Evans, R. R., Forbes, L., 2012. Mentoring the ‘net generation’: Faculty perspectives in health education. *College Student Journal* 46 (2), 397-402.
- Fealy, S., Jones, D., Hutton, A., Graham, K., McNeill, L., Sweet, L., Hazelton, M., 2019. The integration of immersive virtual reality in tertiary nursing and midwifery education: A scoping review. *Nurse Education Today* 79, 14–19. <https://doi.org/10.1016/j.nedt.2019.05.002>

- Gonçalves, R., Brigagão, J., Soares, G., 2018. Study circles in hospitals' obstetrics centers as a teaching-learning strategy in midwifery education. *Midwifery* 61, 42–44. <https://doi.org/10.1016/j.midw.2018.02.011>
- Hall, D. J., Way, D. S., 2018. A discussion paper: Do national maternity policy reviews take account of the education and training of the future midwifery workforce? An example from England. *Midwifery* 62, 278–280. <https://doi.org/10.1016/j.midw.2018.03.019>
- Homer, C. S., Friberg, I. K., Dias, M. A., ten Hoope-Bender, P., Sandall, J., Speciale, A. M., Bartlett, L. A., 2014. The projected effect of scaling up midwifery. *Lancet (London, England)* 384 (9948), 1146–1157. [https://doi.org/10.1016/S0140-6736\(14\)60790-X](https://doi.org/10.1016/S0140-6736(14)60790-X)
- Houghton, C., Murphy, K., Shaw, D., Casey, D., 2015. Qualitative case study data analysis: an example from practice. *Nurse Researcher* 22 (5), 8–12. <https://doi.org/10.7748/nr.22.5.8.e1307>
- Hundley, V., Cadée, F., Jokinen, M., 2018. Editorial midwifery special issue on education: A call to all the world's midwife educators!. *Midwifery* 64, 122–123. <https://doi.org/10.1016/j.midw.2018.06.013>
- International Confederation of Midwives., 2019. Essential Competencies for Midwifery Practice 2018 UPDATE. Retrieved from: [https://www.internationalmidwives.org/assets/files/general-files/2019/02/icm-competencies\\_english\\_final\\_jan-2019-update\\_final-web\\_v1.0.pdf](https://www.internationalmidwives.org/assets/files/general-files/2019/02/icm-competencies_english_final_jan-2019-update_final-web_v1.0.pdf)
- Latifnejad-Roudsari, R., Zakerihamidi, M., Merghati-Khoei, E., Kazemnejad, A., 2014. Cultural perceptions and preferences of Iranian women regarding cesarean delivery. *Iranian Journal of Nursing and Midwifery Research* 19 (7 Suppl 1), S28–S36.
- Liebowitz, J., 2013. A comparative study of emerging technologies for online courses. *Distance Learning*, 10 (3), 1- 11.
- Long, Q., Kingdon, C., Yang, F., Renecke, M. D., Jahanfar, S., Bohren, M. A., Betran, A. P., 2018. Prevalence of and reasons for women's, family members', and health professionals' preferences for cesarean section in China: A mixed-methods systematic review. *PLoS Medicine* 15 (10), e1002672. <https://doi.org/10.1371/journal.pmed.1002672>
- Luyben, A., Barger, M. K., Avery, M. D., Bick, D., 2018. What is next? Midwifery education building partnerships for tomorrow's maternal and neonatal health care. *Midwifery* 64, 132–135. <https://doi.org/10.1016/j.midw.2018.06.014>

Marshall, J. E., 2017. Experiences of student midwives learning and working abroad in Europe: The value of an Erasmus undergraduate midwifery education programme. *Midwifery* 44, 7–13. <https://doi.org/10.1016/j.midw.2016.10.013>

McDonald, E. W., Boulton, J. L., Davis, J. L., 2018. E-learning and nursing assessment skills and knowledge - An integrative review. *Nurse Education Today* 66, 166–174. <https://doi.org/10.1016/j.nedt.2018.03.011>

Moller, A.B., Welsh, J., Ayebare, E., Chipeta, E., Gross, M.M., Hounbo, G., et al., 2022. Are midwives ready to provide quality evidence-based care after pre-service training? Curricula assessment in four countries—Benin, Malawi, Tanzania, and Uganda. *PLOS Global Public Health* 2(9), e0000605. <https://doi.org/10.1371/journal.pgph.0000605>

Nove, A., Pairman, S., Bohle, L. F., Garg, S., Moyo, N. T., Michel-Schuldt, M., Hoffmann, A., Castro, G., 2018. The development of a global Midwifery Education Accreditation Programme. *Global Health Action* 11 (1), 1489604. <https://doi.org/10.1080/16549716.2018.1489604>

Nyoni, C. N., Botma, Y. 2018., Sustaining a newly implemented competence-based midwifery programme in Lesotho: Emerging issues. *Midwifery* 59, 115–117. <https://doi.org/10.1016/j.midw.2018.01.015>

Organisation for Economic Co-operation and Development., 2019. Caesarean section rates. In: *Health at a Glance 2019: OECD Indicators*. Retrieved from: [https://ec.europa.eu/health/sites/default/files/state/docs/2020\\_healthatglance\\_rep\\_en.pdf](https://ec.europa.eu/health/sites/default/files/state/docs/2020_healthatglance_rep_en.pdf)

Plochocki, J.H., 2019. Several ways generation z may shape the medical school landscape. *Journal of Medical Education and Curricular Development*, 6, 1–4.

Regan, M., Liaschenko, J., 2007. In the mind of the beholder: Hypothesized effect of intrapartum nurses' cognitive frames of childbirth cesarean section rates. *Qualitative Health Research* 17 (5), 612–624. <https://doi.org/10.1177/1049732307301610>

Renfrew, M. J., McFadden, A., Bastos, M. H., Campbell, J., Channon, A. A., Cheung, N. F., Silva, D. R., Downe, S., Kennedy, H. P., Malata, A., McCormick, F., Wick, L., Declercq, E., 2014. Midwifery and quality care: findings from a new evidence-informed framework for maternal and newborn care. *Lancet (London, England)* 384 (9948), 1129–1145. [https://doi.org/10.1016/S0140-6736\(14\)60789-3](https://doi.org/10.1016/S0140-6736(14)60789-3)

Roundtable Discussion., 2018. The future of midwifery education: a global perspective. *Midwifery* 65, 82. <https://doi.org/10.1016/j.midw.2018.05.011>

Sandall, J., Tribe, R. M., Avery, L., Break, G., Visser, G. H., Homer, C. S., Gibbons, D., Kelly, N. M., Kennedy, H. P., Kidanto, H., Taylor, P., Temmerman, M., 2018. Short-term and long-term effects of caesarean section on the health of women and children. *Lancet (London, England)* 392 (10155), 1349–1357. [https://doi.org/10.1016/S0140-6736\(18\)31930-5](https://doi.org/10.1016/S0140-6736(18)31930-5);

Saxell, L., Harris, S., Elarar, L., 2009. The Collaboration for Maternal and Newborn Health: interprofessional maternity care education for medical, midwifery, and nursing students. *Journal of Midwifery & Women's Health* 54 (4), 314–320. <https://doi.org/10.1016/j.jmwh.2009.03.017>

Serçekuş, P., Egelioglu Cetisli, N., İnci, F. H., 2015. Birth preferences by nulliparous women and their partners in Turkey. *Sexual & Reproductive Healthcare* 6 (3), 182–185. <https://doi.org/10.1016/j.srhc.2015.03.002>

Shaw-Battista, J., Belew, C., Anderson, D., van Schaik, S., 2015. Successes and challenges of interprofessional physiologic birth and obstetric emergency simulations in a nurse-midwifery education program. *Journal of Midwifery & Women's Health* 60 (6), 735–743. <https://doi.org/10.1111/jmwh.12393>

Shorey, S., Ng, E. D., Downe, S., 2021. Cultural competence and experiences of maternity health care providers on care for migrant women: A qualitative meta-synthesis. *Birth (Berkeley, Calif.)* 10.1111/birt.12581. Advance online publication. <https://doi.org/10.1111/birt.12581>

Streubert, H. J., Carpenter, D. R., 2011. Qualitative research in nursing. 5th ed. Lippincott Williams & Wilkins, China.

ten Hoope-Bender, P., de Bernis, L., Campbell, J., Downe, S., Fauveau, V., Fogstad, H., Homer, C. S., Kennedy, H. P., Matthews, Z., McFadden, A., Renfrew, M. J., Van Lerberghe, W., 2014. Improvement of maternal and newborn health through midwifery. *Lancet (London, England)* 384 (9949), 1226–1235. [https://doi.org/10.1016/S0140-6736\(14\)60930-2](https://doi.org/10.1016/S0140-6736(14)60930-2)

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

Toosi, M., Modarres, M., Amini, M., Geranmayeh, M., 2021. A survey of midwifery graduates' opinions about midwifery education in Iran: a cross-sectional study. *BMC Medical Education* 21(1), 340. <https://doi.org/10.1186/s12909-021-02764-y>

Türkmen H., Ekti Genç R., 2017. Midwifery and malpractice in the neonatal. *Journal of Anatolia Nursing and Health Sciences* 20, 154–159.

Vaismoradi, M., Turunen, H., Bondas, T., 2013. Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences* 15(3), 398–405. <https://doi.org/10.1111/nhs.12048>.

Van Lerberghe, W., Matthews, Z., Achadi, E., Ancona, C., Campbell, J., Channon, A., de Bernis, L., De Brouwere, V., Fauveau, V., Fogstad, H., Koblinsky, M., Liljestrand, J., Mechbal, A., Murray, S. F., Rathavay, T., Rehr, H., Richard, F., Hoope-Bender, P., Turkmani, S. 2014. Country experience with strengthening of health systems and deployment of midwives in countries with high maternal mortality. *Lancet* (London, England) 384 (9949), 1215–1225. [https://doi.org/10.1016/S0140-6736\(14\)60919-3](https://doi.org/10.1016/S0140-6736(14)60919-3)

West, F., Homer, C., Dawson, A., 2016. Building midwifery educator capacity in teaching in low and lower-middle income countries. A review of the literature. *Midwifery* 33, 12–23. <https://doi.org/10.1016/j.midw.2015.06.011>

World Health Organization., 2016. Strengthening quality midwifery education WHO meeting report 25-26 July 2016. World Health Organization, Geneva. Retrieved from: [http://www.who.int/maternal\\_child\\_adolescent/documents/strengthening-quality-midwifery-education/en/](http://www.who.int/maternal_child_adolescent/documents/strengthening-quality-midwifery-education/en/)

Yıldırım, A., Simsek, H., 2011. Qualitative research methods in social sciences. 8th Ed. Ankara: Seckin Publishing.

YÖK Program Atlas. 2020. All Universities with Midwifery Program. Access: <https://yokatlas.yok.gov.tr/lisans-bolum.php?b=10247>

YÖK Vocational Atlas. 2021. Higher Education Quota, Preference and Placement Statistics. Access: <https://yokatlas.yok.gov.tr/meslek-lisans.php?b=10247>; <https://istatistik.yok.gov.tr/>

Zondag, D.C., Van Haaren-Ten Haken., Offerhaur, P.M., Maas, V.Y.F., Nieuwenhuiize, M.J. 2022. Knowledge and skills used for clinical decision-making on childbirth interventions: A qualitative study among midwives in the Netherlands. *Eur J Midwifery*, 6, 56.