



Original Article

Turkish Midwifery Students' Fear of Delivery Process

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ABSTRACT

Introduction: Fear affects a person's decision-making process and causes a midwife to make a wrong decision about normal vaginal delivery and cesarean delivery, so research was carried out in order to determine the fields related to delivering process in which students experience the most fear and feel sufficient.**Methods:** A descriptive/cross-sectional study was performed between September and October 2017. The sample consisted of 732 students selected with the convenience maximum variation sampling method from six universities studying in the third and fourth years of a midwifery program. The study measured data collected with a questionnaire entitled "Midwives' Fear of Delivery Process". The data were analyzed in with the SPSS for Windows using percentage and mean values and Spearman correlation test.**Results:** In general, students are more afraid of practices with which they say they have more experience such as vaginal palpation (3.30 (0.884), $r_s=0.131$, $P<0.001$), and they are less afraid of practices (interventional) with which they have less experience such as breech delivery (1.70 (0.915), $r_s=0.048$, $P=0.197$) or no experience at all and of cases in which they can get hurt. The students feel most sufficient when performing prenatal and postnatal practices.**Conclusion:** The results of our study parallel the conclusion in the literature that students are afraid of the fields that they have practiced most. Before clinical practice, instructors can determine students' fears and deficiencies in relation to procedures and areas of practice and can develop approaches for alleviating their fears and weaknesses.**Citation:** Keser Ozcan N, Boyacıoğlu N, Guduçu N, Goncu Serhatlıoğlu S, Yıldırım E, Koc M, Bingöl B. Turkish midwifery students' fear of delivery process. J Caring Sci 2019; 8 (3): 121-27. doi:10.15171/jcs.2019.018

Introduction

According to the World Health Organization (WHO) midwife is provides care of women during pregnancy, labor, and the postpartum period and care of the newborn. It includes measures aimed at preventing health problems in pregnancy, the detection of abnormal conditions, the procurement of medical assistance when necessary, and the execution of emergency measures in the absence of medical help.¹ The International Confederation of Midwives (ICM) defines a midwife as a reliable and responsible professional who provides care to women during pregnancy, delivery, and the postnatal period; provides required counseling to women; performs deliveries; provides care to newborns; and works in cooperation with women throughout their lifetimes.² It is clear from these two definitions that conducting delivery is among the competencies midwives should have. In almost all developed countries, midwives manage prenatal, delivery, and postnatal periods, determine risks, have the authority to address these risks, monitor normal pregnancies, and perform normal deliveries; in addition, they are able to perform healthy newborn examinations and follow-ups and direct cases to a doctor if any risk is diagnosed in mother or baby in the early period.³

Considering the increase in the number of cesarean delivery in Turkey, the ministry of health, advocate a new

policy to decrease the number of cesarean delivery; however, the importance of midwifery to reach this goal is not emphasized.⁴ Literature on the topic has found that midwives experience difficulty performing the duties stated in their job descriptions.⁵ In Turkey, where midwives have been gradually made nonfunctional and where areas in which midwives can apply their skills in conducting a delivery are occupied by doctors, midwives' fear of delivery process has come to the attention of medical community.

Fear is characterized by physiological changes (such as anxiety, an increase in heart rate, and sweating) and behavioral changes (such as avoiding a threatening object or situation) during an unexpected or subjectively negative experience.⁶ According to Orhan and Ozyer,⁷ people experience approximately 25 kinds of fear related to work. These fears are separated into five groups: fear of work/stress, fear of criticism/failure, fear of the unknown, fear of death and danger, and fear of not attaining a level of professional success. Yorton found that these fears discourage creativity in the workplace, decreases innovation, destroys relationships among personnel, and prevents employees from satisfying their work, come at a tremendous cost.⁸ Fear can also negatively affect decision making, and making correct decisions is of vital importance in health services.⁹ Midwives may have to make decisions through the pregnancy that can affect the

lives of mother and baby during the delivery period. A midwife with the fear of conducting a delivery may make incorrect decisions because of this fear or may direct a patient to have a cesarean section instead of a vaginal delivery. According to the result of one study, midwives' beliefs related to delivery affect the delivery process and the interventions they suggest, such as cesarean sections. The fact that the fear of midwives during delivery negatively affects the delivery process and pregnant women.⁹ A study by Dahlen and Caplice organized the reasons for midwives' fears of conducting a delivery into five categories: (1) fear of hurting a baby; (2) inability to manage the delivery process; (3) fear of hurting the mother; (4) fear of getting hurt; and (5) personal fears.¹⁰

Midwives may experience fear for other reasons as well. Hood et al., found that midwives were unprepared and unqualified to conduct professional and personal obstetric examinations and to participate in legal proceedings. Midwives describe their work environments as stressful since they may be sued and included in the legal process.¹¹

The fear of being subjected to legal actions is especially strong among employees in obstetric practices.¹² Fear affects a person's decision-making process and decreases the chance of selecting the best option in a complicated situation.^{13,14} Investigating the reasons for midwives' fear of conducting a delivery is an important step in reducing this fear and updating midwifery education. In the literature, no other study was found investigating the fears and competencies of midwifery students about their field of practice so it is the first research to be done in detail in this area. So, the study will present new concepts for conducting research on midwifery and delivery.

Determining which fields related to delivery process students the most fear will allow instructors to make theoretical and practical changes in the midwifery curriculum. This study was conducted to reveal the reasons for midwifery students' fear of conducting deliveries to make improvements that will reduce the causes of fear. The research questions directing this study are: 1- What are midwifery students most afraid of in relation to conducting a delivery? 2- Does an increase in the number of deliveries a midwifery student has conducted affect the fear of performing a delivery?

Materials and methods

This descriptive cross-sectional study was conducted between September 15 and October 15, 2017. The sample consisted of university students studying in the third and fourth years of a midwifery program. Data were collected from 732 midwifery students from six different universities, chosen with the convenience maximum variation sampling method. Most of the universities included in the study are located in the western cities of Turkey (with two in the north and one in the center).

Inclusion criteria were being a third- or fourth-year midwifery student. Exclusion criteria were not agreeing to participate in the study and not witnessing or assisting patients in active labor. Data were collected with

questionnaires given to third and fourth-year midwifery students by researchers in the midwifery department of universities. Students were included in the sample based on the convenience of course hours after the study had been approved by the ethics committee and the institutions. The questionnaire was prepared by the researchers in the framework of the literature and Cronbach alpha coefficient was 0.95. After explaining the aim and importance of the study to the students meeting the inclusion criteria, informed consent was obtained from each student, and the questionnaires were distributed.

Data were collected by using an informational questionnaire (4 questions) and the Midwives' Fear of Delivery Process questionnaire (77 questions) prepared by the researchers in the framework of the literature on this topic. Four questions on the socio-demographic characteristics of midwifery students (age, class, economic status, and academic performance). Midwives' fear of delivery process questionnaire consists of multiple parts. The first part asks 21 questions about risks that midwifery students witness in clinical practice and the procedures they perform. Students were asked if they had witnessed risky situations such as ablatio placenta, placenta previa, and macrosomic infant. These questions were answered with "yes" or "no." Students were asked to write the average number of delivery interventions (conducting a delivery, episiotomy, placenta extraction, etc.) they had actively performed in their clinical practice. The second part of the questionnaire asks five questions about from whom (healthcare professionals, media, etc.) they have heard adverse delivery stories. The third part consists of 33 questions about the reasons for students' fear of conducting a delivery. The reasons for students' fears are collected under six categories: hurting an infant (such as not being able to manage the delivery process and killing the infant), procedures related to vaginal palpation (such as not being able to evaluate deletion and dilatation), procedures related to episiotomy (such as not being able to perform episiotomy properly), interventional birth (such as not being able to perform an appropriate intervention when cord prolapse occurs), fear of hurting the mother (such as causing maternal death), and fear of getting hurt (such as injuring oneself during episiotomy). Students gave their answers on a Likert-type scale starting from "not afraid at all" (1 point) to "very afraid" (4 point). The fourth part of the questionnaire consists of 18 questions in four sections measuring midwives' competencies related to prenatal, delivery, postnatal, and neonatal care. These questions are answered with "insufficient," "undecided," and "sufficient."

Ethical permission was obtained from the Istanbul University Istanbul Medical Faculty Clinical Research Ethics Committee before the study began (Ethic code: 288651). In accordance with the Declaration of Helsinki, written and verbal information about the study and nature of the study was provided to the participants, and their written consents were obtained. The data obtained

from the study were evaluated by using descriptive, parametric, and non-parametric statistical analyses with the SPSS version 13 for Windows (SPSS Inc., Chicago, IL, USA) and by carrying out relationship analyses among the variables. During the data collection, together with percentage and mean values, a Spearman correlation test was used to evaluate the relationship between variables. Spearman correlation test was used because the questionnaire was prepared likert type.

Results

Sociodemographic Characteristics of Midwifery Students

The average age of the students is 21.44 (1.62) (Min: 19, Max: 47). About 53.8% of 732 students are 3rd grade and 46.2% are 4th grade. Twenty nine percent of the students evaluate their economic status and 27% evaluate their academic performance as good.

Risks that midwifery students witness in clinical practice and procedures performed most frequently

Students stated that the risky conditions they most frequently

Witnessed during clinical practice were pregnancy with a chronic disease, preeclampsia/eclampsia, and multiple pregnancy, and they least witnessed during clinical practice were shoulder dystocia, uterus rupture and breech delivery. Students reported the most frequently performed procedures were vaginal palpation and placenta extraction and the least performed procedures were applying local anesthesia and episiotomy opening (Table 1).

Table 1. Distribution of risks that midwifery students witness in clinical practice and applications performed most frequently (n=732).

Risk	N	%
Ablatio placenta	229	31.3
Placenta previa	320	43.7
Macrosomic infant	451	61.6
Preeclampsia, eclampsia	591	80.7
Cephalopelvic disproportion	318	43.4
Cord prolapse	212	29.0
Uterus rupture	182	24.9
Uterus inversion	137	18.7
Multiple pregnancy	490	66.9
Malpresentation (brow, face, breech presentation, etc.)	332	45.4
Malposition (occiput posterior)	202	27.6
Breech delivery	182	24.9
Shoulder dystocia	167	22.8
Forceps/vacuum use	245	33.5
Chronic diseases of mother	17.3	82.7
Applications performed in the clinic most frequently ^ε	Mean	SD
Vaginal palpation (Min:10, Max:300)	32.17	13.76
Placenta extraction (Min:0, Max:120)	17.56	24.48
Conducting a delivery (Min:0, Max: 100)	10.36	16.11
Episiotomy repair (Min:0, Max:200)	5.34	12.66
Episiotomy incision (Min:0, Max:70)	2.47	7.56
Applying local anesthesia (Min:0, Max:70)	2.34	7.16

^εAverage number of applications throughout clinical practice

Hearing adverse delivery stories

Students reported that they most frequently heard adverse delivery stories from written and visual media; healthcare professionals were the next most common source in especially infant and maternal death. Students stated that they least heard adverse delivery stories from other sources (Table 2).

Table 2. Distribution of hearing adverse delivery stories and the source of these stories

	Health professionals N (%)	Family N (%)	Friends N (%)	Media N (%)	Other N (%)
Infant death	379 (51.8)	223 (30.5)	171 (23.4)	413 (56.4)	49 (6.7)
Maternal death	266 (36.3)	136 (18.6)	123 (16.8)	415 (56.7)	48 (6.6)
Hurting infant	230 (31.4)	156 (21.3)	158 (21.6)	407 (55.6)	46 (6.3)
Confusion of infants	175 (23.9)	87 (11.9)	71 (9.7)	476 (65.0)	39 (5.3)
Hurting mother	232 (31.7)	121 (16.5)	141 (19.3)	386 (52.7)	54 (7.4)

Reasons for fear of conducting a delivery

Our study found that students were most afraid of vaginal palpation and episiotomy among the clinical procedures they performed, and they were least afraid of getting hurt (Table 3).

We found that, in general, students are more afraid of practices with which they say they have more experience (practices related to episiotomy and vaginal palpation), and they are less afraid of practices (interventional) with which they have less experience or no experience at all and of cases in which they can get hurt. Moreover, we found that as the number of deliveries conducted by students increases, their fear of hurting an infant or mother increases, as does their fear of practices related to vaginal palpation and episiotomy, which are frequently performed clinical procedures. No significant relationship was found between conducting an interventional delivery, the condition of getting hurt, and the number of deliveries conducted (Table 3).

Moments when students feel sufficient

Our study found that students feel most sufficient in prenatal practices such as controlling the health of mother and baby with NST and performing the follow-up and examination of a pregnant woman during the 1st phase of birth (determining deletion and dilatation, being able to assess the delivery of the head) and postnatal practices such as being careful about not confusing infants with each other, putting bracelets on infants and ensuring the first meeting of mother and baby. They feel insufficient in practices during delivery such as performing and repairing episiotomy when required and conducting normal deliveries by themselves (Table 4).

Table 3. Midwifery students' fears of conducting a delivery and its relationship with the number of deliveries conducted.

Fears	Mean (SD)	Number of deliveries conducted	
		r_s^{e}	p
Hurting an infant			
Causing permanent damage in infant such as shoulder dystocia	2.73 (0.96)	0.05	0.16
Not being able to perform neonatal resuscitation when required	1.56 (0.87)	0.08	0.02
Turning the infant back while applying external rotation to the infant	2.85 (0.95)	0.13	0.00*
Decapitating the infant while trying to save shoulders	2.52 (0.11)	0.15	0.00*
Dropping the infant to the floor during expulsion	2.42 (0.10)	0.13	0.00*
Causing fetal distress due to not managing delivery well	2.58 (0.91)	0.14	0.00*
Causing fetal distress by losing time during delivery	2.51 (0.91)	0.12	0.001*
Cord rupture	2.80 (0.99)	0.06	0.07
Applications related to vaginal palpation			
Not being able to evaluate deletion and dilatation	3.1 (0.81)	0.08	0.025*
Not being able to evaluate the delivery of the head	3.17 (0.79)	0.11	0.003*
Hurting the infant while performing vaginal palpation	3.30 (0.88)	0.13	0.000*
Opening the amnion membrane while performing vaginal palpation (Opening the pouch accidentally)	3.02 (0.87)	0.19	0.000*
Applications related to episiotomy			
Not being able to perform local anesthesia for episiotomy properly	2.97 (0.89)	0.09	0.00*
Not being able to open episiotomy properly	2.85 (0.90)	0.16	0.00*
Not being able to repair episiotomy properly	2.82 (0.93)	0.23	0.00*
Interventional birth			
Not being able to perform appropriate intervention when cord prolapse occurs	2.02 (0.90)	0.05	0.11
Not being able to perform appropriate intervention in the case of breech delivery	1.70 (0.91)	0.04	0.19
Not being able to perform appropriate intervention in the case of placenta retention	2.03 (0.85)	0.02	0.52
Not being able to perform appropriate intervention in the case of atonia	2.11 (0.87)	0.06	0.10
Not being able to perform appropriate intervention in the case of multiple pregnancy	2.08 (0.88)	0.02	0.58
Not being able to perform appropriate intervention in the case of disruptive birth	2.16 (0.90)	0.01	0.72
Not being able to perform appropriate intervention in the case of uterus inversion	2.20 (0.90)	0.02	0.43
Fear of hurting mother			
Causing maternal death	1.64 (0.10)	0.11	0.001*
Causing damage in uterus such as rupture, inversion	2.38 (0.94)	0.11	0.001*
Fear of getting hurt			
Getting a contagious disease	1.82 (0.97)	0.05	0.16
Self-injuring during episiotomy	1.76 (0.99)	0.04	0.20
Being sued	1.88 (0.95)	0.04	0.18
Feeling insufficient	1.86 (0.97)	0.04	0.22
Being accused of incompetency by colleagues	2.01 (0.10)	0.06	0.10
Being exposed to violence by the pregnant and her family	2.09 (0.95)	0.05	0.11
Fear of being called down/insulted by the pregnant and her family	2.14 (0.93)	0.06	0.06
Fear of being called down/insulted by administration	1.83 (0.95)	0.07	0.05

^espearman test was used, *statistically significant

Table 4. Average scores of moments when students feel sufficient

Prenatal period	Mean (SD)
Taking care and following up, diagnosing pregnancy during the prenatal period (preconceptional consultancy, screening tests, vaccines, nutrition, oral glucose tolerance test, etc.)	2.49 (0.61)
Diagnosing and referring high-risk pregnancies in the early period	2.21 (0.66)
Controlling the health of mother and baby with NST (being able to interpret NST)	2.75 (0.52)
Performing the follow-up and examination of a pregnant woman during the 1st phase of birth (Determining deletion and dilatation, being able to assess the delivery of the head)	2.49 (0.63)
During delivery	
Performing required care and follow-up during delivery	2.61 (0.60)
Applying local anesthesia for episiotomy when required	2.01 (0.78)
Performing and repairing episiotomy when required	1.97 (0.79)
Repairing episiotomy and other ruptures when required	1.88 (0.76)
Conducting normal deliveries by themselves	1.91 (0.79)
Extracting placenta by themselves	2.59 (0.67)
Making salvation by hand when required	2.03 (0.76)
Postnatal period	
Performing care and follow-up during the postnatal period (involunt follow-up, fundus massage, bleeding control, breastfeeding, skin-to-skin contact)	2.78 (0.49)
Recording the gender, length, head circumference and breast girth, weight of newborns	2.78 (0.51)
Determining and recording abnormalities, hereditary signs, characteristics of placenta and cord	2.41 (0.69)
Being careful about not confusing infants with each other, putting bracelets on infants	2.85 (0.44)
Cutting and bandaging the umbilical cord of infants properly, and taking required precautions	2.71 (0.54)
Vaccinating newborns (Vitamin K and Hepatitis B vaccination, and heel lancing)	2.65 (0.66)
Ensuring the first meeting of mother and baby (helping the first breastfeeding)	2.85 (0.43)

Discussion

Meeting with a patient and performing any procedure on the patient may cause anxiety and fear in students.¹⁵ The fact that clinical procedures are performed by midwives in high-stress environments, such as delivery rooms, or with high-risk pregnancies, and the fact that the patient population consists completely of women may affect the stress levels of midwifery students and their ability to make correct decisions during clinical practice.¹⁶ Making correct decisions is of vital importance in healthcare services. So, this study evaluated the fear of conducting a delivery among students in the third and fourth years of a midwifery program.

This study described the risks that midwifery students witness in clinical practice and the procedures they perform. Vaginal palpation and placenta extraction were determined to be the procedures students performed most frequently (Table 1). In parallel with our findings, the study conducted by Şahiner, Akan, and Çeviker determined that vaginal palpation and placenta extraction were among the procedures midwifery students most frequently performed at the end of the third year of midwifery training.¹⁷ Our study observed that, although midwifery students perform vaginal palpation frequently, they fear preventing the progress of the delivery which is evaluated by the vaginal palpation and fear damaging the birth objects (the infant or amniotic membrane) during the delivery process.

In the study conducted by Utkualp and Ogur with 103 students studying gynecology and obstetrics nursing, students stated that the clinical environment they were in as part of the class caused them stress, when they were asked professionally satisfied, 38.8% stated satisfied with supporting and observing the pregnant woman during the labor process and 27.2% stated satisfied with helping her with breastfeeding. These areas in which students say they are satisfied parallel the findings of our study since they do not include actively participating in the delivery process by performing procedures on the pregnant woman.¹⁸ In our study, students reported that the risky situations they most often witnessed during clinical practice were pregnancy with a chronic disease, preeclampsia/eclampsia, and multiple pregnancy. These risky procedures may cause fear if students feel unprepared to handle them. Bayar, Çadır, and Bayar stated in their study of nursing students that students were most afraid of experiencing negative situations as a result of performing an incorrect procedure during their internships. The same study found that students' fears of clinical practice were related to factors such as thinking they had insufficient theoretical knowledge of procedures and risky situations.¹⁹ The fear of insufficient knowledge in certain areas may be justified, as Zengin, Yıldız, and Akıncı determined that students' knowledge about chronic diseases was not sufficient.²⁰ This study results showed the sources from which midwifery students have heard adverse delivery stories. The use of technology in all areas has become common in

modernized societies, and delivery has also been affected by this trend.²¹ In our study, the students reported that they had heard adverse delivery stories mostly from written and visual media and then from healthcare professionals (Table 2). In another study, the authors said that negative cases announced to the general public in healthcare services may make midwives more conservative (unwilling to take risks) in practice. This situation makes us suspect that new negative cases may affect midwives' perceptions of fear and risk and thus may have an effect on practice.²²

This study revealed the reasons for midwifery students' fear of conducting a delivery. Clinical experience in a midwifery education program provides an opportunity for students to observe their role models, conduct procedures by themselves, behave according to the patient's clinical chart, make decisions and work as members of a team, and integrate the theoretical knowledge and practices they have learned at school into the real world.^{23,24} However, when clinical practice starts, most students feel concerned and afraid while carrying out procedures for the first time.^{16,25-28} It is noteworthy in our study that, contrary to the literature, students are more afraid of procedures in which they say they are more experienced (procedures related to episiotomy and vaginal palpation), and they are less afraid of procedures in which they are barely experienced or are not experienced at all (interventions such as uterine inversion) and of situations in which they can get hurt. We observed that, as the number of deliveries conducted by student's increases, students are more afraid of hurting a baby and mother and more afraid of frequently performed clinical procedures related to vaginal palpation and episiotomy. In the study conducted by Bayar, Çadır, and Bayar with nursing students, the researchers found that students were afraid of performing serum branule-catheterization and bloodletting applications, the most common procedures they performed during the majority of clinical practices¹⁹, and this finding supports our study. In contrast to our findings, a study on midwifery students' fear while performing invasive and non-invasive procedures in clinical practice found that students experienced a considerable amount of fear when measuring blood pressure and performing intramuscular injection for the first time.²⁷

Also in contrast to our study, the interviews conducted by Copeland, Dahlen, and Homer of 12 midwives working at various metropolitan hospitals in Australia found that the midwives were not afraid of delivery but rather of the system and of being watched or examined.²⁹

Similarly, Dahlen and Caplice determined in their studies that the fifth most common fear reported by midwives was being watched and criticized; other factors that caused fear included a lack of support, possibility for lawsuits, judgment, cruelty, pressure and interrogation, and oversight from regulatory authorities. While midwives conducting deliveries at home were mostly afraid of being considered responsible when something

went wrong, student midwives reported that not knowing what to do caused them more anxiety.¹⁰ It is worth noting that, in these studies, healthcare personnel working as midwives were mostly afraid of issues such as being sued and subjected to legal actions.^{10,11,30,31}

Whereas in our study, students' fears were mostly related to the cases they witnessed or experienced most often in clinical practice rather than being sued. Moreover, students' fears were focused not on non-invasive operations but on invasive interventions contrary to the nature of delivery (invasive interventions contrary to natural delivery," with natural delivery meaning a birth free of medical interventions) We realized that situations that should be of more concern to midwives are not within the students' area of responsibility yet and thus not causes for fear. Moreover, students expressed little fear of invasive delivery procedures, and we concluded that they might consider these to be situations they should refer to a doctor and not in their area of responsibility. There may be two reasons for this viewpoint. The first is that freelance midwives are not very common in Turkey, and, in general, they monitor pregnant women in clinical environments and in the presence of a doctor. In those situations, legal responsibility is generally on the doctor. Another reason may be related to the medicalization of health education. Delivery has become a process in which medical tools and interventions are applied routinely.³¹ According to Liamputtong delivery has been medicalized in most modernized societies.³²

This study described moments when students feel sufficient. Ensuring that midwifery students, who will become healthcare professionals, are able to cope with daily life stresses and clinical problems is extremely important since it will directly affect the quality of health care for many people.³³ Our study found that students felt most sufficient in prenatal and postnatal procedures and felt insufficient in procedures during delivery. In a study conducted by Karaman and Okumuş on final-year midwifery students in 28 schools, students were asked to evaluate themselves according to the Turkish Ministry of Health's job descriptions for midwives and according to the competency areas of the International Midwives Confederation. Of the competency areas, the area in which students felt most sufficient was "having knowledge and skill to provide qualified and culture-based care to women in the postpartum period" (93.9% felt sufficient), and the area where students felt least sufficient was "being able to provide culture-based and qualified care to protect the health of a woman and newborn in home deliveries, conduct a clean and safe delivery and perform an intervention in case of emergency" (44.7% felt sufficient).³⁴ These findings support our study. In the findings related to job definitions from the Ministry of Health, the area where students felt most sufficient was "recording the gender, length, head circumference and breast girth and weight of infants born" (98% felt sufficient), and the area where they felt least sufficient was "evaluating risky conditions

during delivery and making a decision to refer them" (58.2% felt sufficient). These also support the findings of our study.

Conclusion

As a result of this study on midwifery students' fears of conducting a delivery, we found that the risky conditions students most often witnessed during clinical practice were pregnancy with a chronic disease, preeclampsia /eclampsia, and multiple pregnancies; that the procedures they most often performed were vaginal palpation and placenta extraction; that they heard adverse delivery stories mostly from written and visual media and then from healthcare personnel; and that students were more afraid of procedures in which they said they were more experienced (procedures related to episiotomy and vaginal palpation) than of procedures in which they were barely experienced or not experienced at all (interventional) and of situations in which they could get hurt. We also identified that students felt most sufficient in prenatal and postnatal procedures and insufficient in procedures during delivery.

In accordance with these results, we suggest that the healthcare professionals (midwives and nurses) who own the clinics where students gain experience undertake a supportive role in the relationship between patient and student and monitor the procedures students perform. We suggest that instructors should spend more time with students and serve as good role models. It is important for midwives/nurses and instructors in the clinic to cooperate and for instructors to provide an appropriate environment for students to share the difficulties they experience in clinical practice and to conduct meetings to solve the problems. Before clinical practice, instructors should determine students' fears and deficiencies in relation to procedures and practice areas and develop approaches to address these concerns

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Ethical issues

None to be declared.

Conflict of interest

The authors declare no conflict of interest in this study.

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