

Original Article

Are Future Midwives Afraid of Vaginal Deliveries?

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Abstract

Background: Knowing the birth fears of student midwives is very important for their own childbirth experience and to improve the birth experience of the women they care for.

Objective: This study investigated the childbirth fears of student midwives who will later become most important care providers for women during pregnancy and childbirth

Methodology: This is a cross-sectional study of 346 of 368 students (94% of the population) in the Department of Midwifery in XXX University, Turkey, enrolled in the 2019-2020 academic year. Data was collected using an Introductory Information Form prepared by the researchers and the Childbirth Fear Prior to Pregnancy (CFPP) scale.

Results: The participants' mean age was 20.45 ± 1.57 years. Their mean CFPP score was 34.89 ± 10.49 while 80.1% stated that they would prefer vaginal birth. The reasons given were it is healthier and more natural (72.3%) for the woman (79.2%) and her baby (78.9%), recovery is quicker (59.5%), and there is a stronger sense of motherhood (48.8%). Of the few students (2.6%) who stated that they would prefer a cesarean delivery, the reasons were fear of labor pain (22%), that it is easier than vaginal delivery (11%), or if the doctor recommended it (18.5%).

Conclusion: Overall, these midwifery students showed moderate fear of childbirth, with most stating that they would prefer vaginal birth themselves.

Key words: Midwifery, Students, Birth, Fear

Introduction

Fear of childbirth is a major problem caused by various biological and psychosocial factors, which leads to negative birth experiences and emotions in women (Alehagen et al., 2006; Vural & Aslan, 2019). Because the act of birth is an uncertain process (Ucar & Golbasi, 2016) women may experience fear that ranges from mild anxiety to severe birth fear (Spice et al., 2009). Research suggests that 80% of women experience some

concerns about childbirth (O'Connell et al., 2020; Ryding et al., 1998; Žigić Antić et al., 2018).

Varying rates of severe birth fear have been reported due to differences in cultural characteristics, week of pregnancy, and measurement method, although recent studies suggest an average of 14% (Aksoy, 2015; O'Connell et al., 2017). If severe, fear of childbirth can hinder delivery, leading to maternal and neonatal complications (Ucar & Golbasi, 2016). It can also affect women's birth preferences

(Spice et al., 2009). For example, women with high birth fears more often request cesarean deliveries to keep the delivery under control, even though there are no medical indications (Saisto et al., 2001; Ternström et al., 2016). As in other countries, increasing cesarean section rates in Turkey pose a serious problem. The cesarean section rate recommended by the World Health Organization is 15% whereas the rate in Turkey is 52% (Aksoy, 2015; TNSA, 2018).

Due to current media depictions, many young adults find the act of childbirth too upsetting to deal with whereas births that involve high-tech interventions are perceived as safe (Hauck et al., 2016; Morris & McInerney, 2010; Salomonsson et al., 2011; K. Stoll et al., 2016). Most studies of birth fear have focused on pregnant women and their partners (K. H. Stoll et al., 2014) whereas only a few studies have investigated the birth fear of college students, who are generally young adults (Cleaton, 2001; Hauck et al., 2016; Kadioğlu & Şahin, 2019; K. Stoll & Hall, 2013b).

Understanding the birth fears and preferences of expectant young women will lead to the development of prenatal education and maternity care practices to slow the increase in interventional births and caesareans (K. Stoll & Hall, 2013b). Given that midwives are important care providers of prenatal education and maternity care practices. This study investigates the childbirth fear levels of midwifery students and the underlying factors.

Methodology

Study design and participants: This was a cross-sectional study that examined the birth fears of midwifery students during the fall semester of the 2019-2020 academic year at the Department of Midwifery, Faculty of Health Sciences of XXX University, in Turkey. The research population was 368 students, of whom 346 (94%) agreed to participate. All were included without any sample selection.

Measures: The Introductory information form prepared by researchers. This included 14 questions based on the literature about the participants' socio-demographic characteristics, future birth preferences and reasons.

The Childbirth Fear Prior to Pregnancy CFPP scale developed by Stoll et al. (K. Stoll et al., 2016) was translated into Turkish and evaluated for validity and reliability by Uçar and Tashan (Uçar & Taşhan, 2018). The scale has 20 items measuring pre-pregnancy birth fears of young

women (10 items) and men (10 items). We used only the women's scale includes 10 items with responses ranging from 1 to 6 on a 6-point Likert scale, labelled as follows: 1 = "strongly disagree", 2 = "disagree", 3 = "partially disagree", 4 = "partially agree", 5 = "agree", 6 = "absolutely agree". CFPP scores can range from 10 to 60, with higher total scores indicating higher levels of birth fear.

There are most responsible for fear of childbirth in CFPP: labour pain, loss of control, inability to cope with childbirth, complications, and irreversible physical damage. Uçar and Taşhan (2018) reported a Cronbach's alpha value of 0.89 while the value in the present study was 0.91 for women and man scale (Uçar & Taşhan, 2018).

Statistical analyses: Statistical analyses were performed using SPSS version 22.0, specifically descriptive statistics and one-way ANOVA, Kruskal-Wallis test, post hoc Mann-Witney U test, post hoc Tukey HSD, and the independent samples test. Results were considered statistically significant if the p-value was less than 0.05.

Ethical Aspect of the Research: Permission was obtained from XXX University Health Sciences Faculty Midwifery Department. Participation was voluntary and students could withdraw at any time. The participants completed an informed consent form. There were no incentives for participation. The researcher explained the study's purpose and rationale to ensure that participants understood the nature of the research. All participants signed the consent form.

Results

Table 1 presents the demographic information and the students' views regarding childbirth. The mean age of the participants, who were all single, was 20 ± 1.57 . Regarding year of university study, 28.3% were first year, 25.4% were second year, 22.8% were third year, and 23.4% were fourth year. Regarding family background, 82.7% lived in a nuclear family while their mothers were mostly primary school graduates (47.1%).

Most participants (75.7%) stated that their income was enough to cover their expenses. Regarding their own birth, 83.5% had been born by vaginal delivery. Regarding giving birth in future themselves, 80.1% stated that they would prefer a normal delivery themselves. A majority (60.4%) said they wanted to have two children. Participants gave various reasons their birth preferences (Table 2). Those preferring a normal birth believe that it is healthier for the woman (79.2%), healthier for

the baby (78.9%), a natural method (72.3%), enables rapid recovery (59.5%), strengthens feelings of motherhood (48.8%) and makes it easier to care for the baby after the birth (33.5%). Some also mentioned fear of cesarean sections (10.7%). Reasons for preferring a cesarean delivery were fear of labour pain (22%). The mean CFPP score was 34.89 ± 10.49 (min: 10.00; max: 60.00). Regarding the relationship between CFPP scores and the participants' sociodemographic

characteristics, there were no statistically significant differences based on age, family type, family income status, and university year levels ($p > 0.05$). However, there were statistically significant differences in CFPP scores based on future preference for form of birth, desired number of children, and preference for cesarean delivery due to fear of childbirth ($p < 0.05$) (Table 3).

Table 1: Sociodemographic Characteristics of Midwifery Students

Characteristics		n:346	%
Age (years)	18-19	93	26.9
	20-21	185	53.5
	22 and over	68	19.6
University year level	First year	98	28.3
	Second year	88	25.4
	Third year	79	22.8
	Fourth year	81	23.5
	Extended family	49	14.2
Family type	Nuclear family	286	82.7
	Single parent family	11	3.1
	Illiterate	33	9.5
Mother's education status	Primary school	163	47.1
	Secondary school	84	24.3
	High school	53	15.3
	University	13	3.8
Father's education status	Illiterate	9	2.6
	Primary school	121	35.0
	Secondary school	91	26.3
	High school	87	25.1
Sufficiency of family income	University	38	11.0
	Insufficient income	54	15.6
	Sufficient income	262	75.7
Form of delivery by mother	More than sufficient income	30	8.7
	Vaginal delivery	289	83.5
Preferred form of delivery by student midwife	Cesarean delivery	57	16.5
	Vaginal delivery	277	80.1
Desired number of children by student midwife	Cesarean delivery	9	2.6
	Not sure	60	17.3
	One	53	15.3
	Two	209	60.4
	Three and above	84	24.3

Table 2. Student midwives' childbirth preference and their reasons

		n*	%
Preference for cesarean section due to fear of labour pain	Yes	76	22.0
	No	270	78.0
Reasons for preferring vaginal delivery	Healthier for the woman	274	79.2
	Healthier for the baby	273	78.9
	Natural method	250	72.3
	Rapid recovery after birth	206	59.5
	Strengthening feelings of motherhood	169	48.8
	Easy baby care after birth	116	33.5
	Fear of cesarean delivery	37	10.7
Reasons for preferring cesarean delivery	Fear of labour pain	76	22
	Following doctor's recommendation	64	18.5
	Thinking that it is easier than a normal birth	38	11
	Being able to fix the date of birth	12	3.5

* Participants stated multiple answers for open-ended questions

Table 3. Relationship Between the Sociodemographic Characteristics of Midwifery Students and CFPP Scores

Properties		CFPP Scale (Mean±SD)	Statistical test
Age	18-19	36.67±9.94	F=1.940 ^a p=0.145
	20-21	34.38±10.65	
	22 and over	33.80±10.57	
University year level	First year	37.55±10.63	F=1.863 ^a p=0.135
	Second year	35.28±10.08	
	Third year	31.95±10.75	
	Fourth year	34.67±12.55	
Family type	Extended family	32.65±11.30	X ² =2.917 ^b p=0.233
	Nuclear family	35.34±10.26	
	Single parent family	32.90±11.80	
Sufficiency of family income	Insufficient income	36.61±10.57	F=0.865 ^a p=0.422
	Sufficient income	34.57±10.29	
	More than sufficient income	34.50±11.96	
Preferred form of delivery by student midwife	Vaginal delivery	33.67±10.42	X ² =22.334 ^b p=0.000 a<b<c ^b
	Cesarean delivery	36.33±11.99	
	Not sure	40.28±08.82	
Desired number of children by student midwife	One	37.55±10.64	F=4.629 ^a p=0.010 c<b<a ^c
	Two	35.28±10.08	
	Three and above	32.24±10.91	
Preference for cesarean section due to fear of labour pain	Yes	38.09±09.79	t=3.05 ^e p=0.002
	No	33.98±10.51	

^aOne-way Anova, ^bKruskal Wallis Test, ^cPoet Hoc Mann-Witney U Testi,

^dPoet Hoc Tukey HSD, ^eIndependent Samples Test

Discussion

Research into the level and causes of women's birth fears during pregnancy and at birth has recently increased significantly (Bıyık & Aslan, 2020; Dencker et al., 2019; Hauck et al., 2016; Henriksen et al., 2020; O'Connell et al., 2020; Salomonsson et al., 2011; Ternström et al., 2016). The Childbirth Fear Prior to Pregnancy (CFPP) scale, developed by Stoll et al., measures the birth fears of young adult men and women (K. Stoll et al., 2016). In our study, which used a translated version of CFPP to examine the birth fears of female Turkish midwifery students, the mean score was 34 ± 10.49 . This is similar to CFPP score average levels in college students who young female and male in six countries, which ranged from 29.8 to 37 (K. Stoll et al., 2016). Likewise, Uçar and Taşhan found the total mean score of female students was 37 ± 9.3 (Uçar & Taşhan, 2018). Zigic Antic et al. reported that 25.9% of students from different study programs had clinical levels (very high fear score) of childbirth fear. They also found that students in health science had a lower fear of childbirth than students in other social science departments (Zigic Antic et al., 2018). These differences in mean CFPP scores can be expected given the different characteristics of the sample groups.

In Turkey, qualified midwives are authorized to perform normal deliveries at their own risk. However, to gain this competence, they must perform 40 normal deliveries during their university training as one of the graduation criteria (Higher Education Institution of Turkey, 2016). Thus, knowledge, experience, and many other factors gained during their education could affect their fear of birth as women. Receiving a university education about birth likely influences their future birth form preferences (Kadioğlu & Şahin, 2019; Kapısız et al., 2017; Mavi Aydoğdu et al., 2018). In our study, although the birth fears of first-year midwifery students (who had neither taken a childbirth course nor attended any delivery) were higher than those of students in higher year levels, this difference was not statistically significant ($p > 0.05$). Cleeton (2001) notes that students' fear of childbirth is associated with a lack of knowledge about childbirth. Therefore, informing college students about pregnancy and delivery practices will support positive delivery experiences by reducing their delivery concerns (Cleeton, 2001) Third-year students who were taking the delivery course during this study had the lowest birth fear levels,

which indicates that birth education can reduce student midwives' fears of birth.

In our study there were no statistically significant associations between the sociodemographic characteristics of Turkish midwifery students and their birth fear scores ($p > 0.05$), but students both preferring a vaginal delivery and wanting three or more children had lower birth fear scores ($p < 0.05$). Fear of childbirth is one of the reasons why women prefer cesarean over vaginal delivery. More specifically, young women who are afraid of labour pain prefer cesarean delivery in the future (Kadioğlu & Şahin, 2019; K. Stoll et al., 2014; K. H. Stoll et al., 2014; K. Stoll & Hall, 2013a, 2013b). Hauck et al. reported that 15.6% of Australian students prefer cesarean delivery even without obstetric complications while 26.1% had a high birth fear (Hauck et al., 2016). Stoll et al. found that 8.8% of female students preferred cesarean delivery (K. Stoll et al., 2014) while only 2.6% of the midwifery students in the present study prefer cesarean delivery, most commonly because of fear of labour pain. These students also had a higher birth fear than those preferring a vaginal delivery.

There appears to be a relationship between how young women were born themselves and their future birth delivery preferences. In the present study, most participants (83.5%) were born by vaginal delivery and 80.1% preferred vaginal delivery in the future. Similarly, Kadioğlu and Şahin (2019) found that university students born by vaginal delivery are more likely than those born by cesarean to prefer a normal delivery themselves (Kadioğlu & Şahin, 2019). Students who preferred a vaginal delivery mostly stated that this was because it is natural and healthier for both mother and baby.

Conclusion: Overall, the Turkish midwifery students that participated in this study had a moderate fear of childbirth, with most stating a preference for vaginal delivery in the future. More specifically, students who preferred a vaginal delivery and wanted to have three children had lower birth fears than others. In contrast, students who preferred a cesarean delivery had higher birth fears while the most frequent reason for preferring a cesarean delivery was fear of labour pain. The study thus provides insights into the delivery preferences and fears about childbirth of the next generation of mothers and midwives. These findings can contribute to developing effective strategies for educators and midwives to reduce the fear of childbirth. Further studies of wider

populations could help determine the factors affecting the birth fear of young females and males. Determining their level of birth fear and the factors affecting can guide researchers in creating strategies to reduce the fear of birth.

Acknowledgements: The authors received no specific funding for this work.

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