Contents lists available at ScienceDirect



Nurse Education in Practice

journal homepage: www.elsevier.com/locate/nepr

Midwifery Education in Practice

# Fear, an unpleasant experience among undergraduate midwifery students: A qualitative study



# Golnoosh Ahmadi<sup>a</sup>, Mohsen Shahriari<sup>b,\*</sup>, Shahnaz Kohan<sup>c</sup>, Mahmood Keyvanara<sup>d</sup>

<sup>a</sup> Student Research Committee, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran

<sup>b</sup> Nursing and Midwifery Care Research Center, Adult Health Nursing Department, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran

<sup>c</sup> Nursing and Midwifery Care Research Center, Faculty of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran

<sup>d</sup> Social Determinants of Health Research Center, Isfahan University of Medical Sciences, Isfahan, Iran

### ARTICLE INFO

Keywords: Student Midwifery education Midwifery Fear

# ABSTRACT

Fear is a normal emotion that can evoke an appropriate response when facing threat. However, sometimes the consequences of fear can lead to responses that are maladaptive. Fear can have negative effects on learning. Research has focused on the experience of fear and its consequences among midwifery students during their undergraduate program. A qualitative analysis was conducted of interviews with ten midwifery students in different years of an undergraduate program. The data was analyzed through a content analysis approach. Two main categories and five subcategories emerged. The first category, areas of fear in midwifery students, consisted of the following subcategories: fear of doing harm, fear of encountering their first childbirth, and fear of penalties. The second category, consequences of fear, consisted of the following subcategories: general physical and psychological consequences and interference in adopting the professional role. In this study, fear not only raised the students' stress levels thereby, leading to physical and psychological issues but also hindered their adoption of their professional role. These findings will potentially inform support and retention strategies within midwifery undergraduate programs in the future.

*Background:* Maternity care in Iran is provided mainly within a medical model of care. The majority of women give birth in hospital, where care is provided by midwives who work under the direction and supervision of an obstetrician. Midwives within the medically dominated system lack autonomy and have very little opportunity to gain experience in providing continuity of care for women as midwife-led models of care are rare. This practice context means that midwifery students have very little opportunity to gain experience in autonomous midwifery practice.

Midwifery undergraduate program in Iran is for four years. Admission to the undergraduate program is implemented via a direct entry route. Nearly all of the midwifery students are school leavers with their first exposure to university and hospital systems. Most of the midwifery students have chosen this career without sufficient understanding about midwifery and the work that it involves (Arfaee et al., 2008). The midwifery undergraduate program comprises theoretical and clinical elements. After the first semester, students enter clinical settings under the supervision of their clinical instructors.

# 1. Introduction

According to the Oxford English Dictionary, fear is described as "an unpleasant emotion caused by the threat of danger, pain, or harm" (OED, 2007). Lazarus and Folkman (1984) defined stress as a particular relationship between the person and environment that is appraised by the person as taxing or exceeding their resources and endangering their wellbeing. They postulated that the cognitive appraisal of a stressor determines whether the stressor is interpreted as a challenge, threat, or harm/loss (Lazarus and Folkman, 1984). From the previous remarks, it

could be concluded that if a stressor is interpreted as a threat, it could cause fear.

Fear in the workplace is defined as a feeling that a person carries when he/she is threatened by possible repercussions as a result of speaking up about work-related concerns. These feelings of threat may come from four sources: actual experience, stories about others' experiences, assumptions and interpretations of others' behavior, and negative, culturally based stereotypes about those with supervisory powers (Ryan and Oestreich, 1998).

The feeling of fear is considered useful for dealing with threatening

\* Corresponding author. E-mail addresses: golnooshahmadi@nm.mui.ac.ir (G. Ahmadi), shahriari@nm.mui.ac.ir (M. Shahriari), kohan@nm.mui.ac.ir (S. Kohan), keyvanara@mng.mui.ac.ir (M. Keyvanara).

https://doi.org/10.1016/j.nepr.2017.12.004

Received 16 December 2016; Received in revised form 27 November 2017; Accepted 10 December 2017 1471-5953/ @ 2017 Elsevier Ltd. All rights reserved.

conditions and leads to defensive behaviors. Some degree of fear can trigger positive and adaptive behaviors, such as behavioral responses in a safe manner and task implementation within an appropriate time.

Conversely, the consequences of fear can lead to maladaptive behaviors and responses (Whitley, 1992). Intense fear may lead to posttraumatic stress disorder, in which autonomous nervous answers and repeated memories of the traumatic event are frequently manifested (Gonzalez and Martinez, 2014). A long-term exposure to fearful experiences may lead to stress and anxiety (Bastable, 2008; Dahlen and Caplice, 2014), which can have serious consequences for their health (Cavanagh and Snape, 1997). Work-related fearful situations may eventually affect not only an individual's physical and mental health but also the productivity levels (Thongsukmag, 2003). In the field of education, fear is a major cause of high levels of anxiety and has negative effects on readiness for learning and ability to function in all areas of learning (Bastable, 2008).

Midwifery students face numerous challenges (Brunstad et al., 2016) and experience a high level of stress in the process of learning their roles (Carveth et al., 1996; Khadivzadeh and Erfanian, 2012). For example, Pryjmachuk and Richards found that out of 102 midwifery students, up to 40% reported high levels of stress (Pryjmachuk and Richards, 2008). Similarly, according to studies conducted in Iran, midwifery students experience more stress compared to that of the other medical sciences students (Esphandiari, 2002; Moridi et al., 2011). Different factors, including the feeling of fear can lead to stress among midwifery students (Dahlen and Caplice, 2014).

Suárez believes that fears cannot be relieved completely in the workplace, although it is possible to help people to deal with their fears (Suárez, 1993). An understanding of the conditions that make the students fearful is considered the first step toward providing more student support. The aim of this study is to explore the experience of fear and its consequences among undergraduate midwifery students.

#### 1.1. Literature review

Few studies are available that explore the feeling of fear and its consequences among students. Higginson (2006) investigated the fears and concerns of first year nursing students in a study using a grounded theory approach. His findings focused on the students' concerns of death, worries about the practical procedures, worries about examinations, financial worries, and concerns about role as well as social conflicts (Higginson, 2006).

When exploring the opinions, feelings and views of student midwives in Ireland as they progressed through their education program, Begley found that for most student midwives the hierarchal system present in most clinical environments was not beneficial for their education. The students' view was that a hierarchical system was in operation in the majority of maternity hospitals, and the majority described a lack of caring shown to them by most of their 'seniors' in the hierarchy (Begley, 2002).

A qualitative study on student midwives' perceptions of what was traumatic for them, showed that they inhabit a vulnerable position in traumatic situations. This study revealed a paradigmatic clash between giving care within institutional procedure frameworks imposed on their practice in a busy obstetric unit, and the individualized woman-led approach they were expecting. The researchers suggested that a culture of support and/or debriefing after adverse events may help students articulate their needs and develop resilience (Davies and Coldridge, 2015).

A study was conducted with midwives who participated in workshops on normal delivery in Australia and New Zealand. They were asked to write down their main areas of fear on a piece of paper. Data analysis led to the development of eight main categories: the fear of newborn death, making mistakes that cause any harm, obstetrics emergencies, maternal death, being watched, causing negative experiences in childbirth, dealing with unknowns, and losing passion and confidence around normal births (Dahlen and Caplice, 2014).

These previous studies in Australia and Ireland, as described, suggest that when students experience fears it is detrimental to their learning. Currently, there are no studies examining this phenomenon within the context of midwifery education in Iran. The objective of this study was to examine and explore the experiences of fear among midwifery students.

### 2. Methods

# 2.1. Design

Qualitative research is a form of social inquiry that focuses on the way people make sense of their experiences and the world in which they live. This type of research is used to explore the people's behavior, feelings, and experiences and what lies at the core of their lives. Descriptive approaches deal with narratives and give accounts of feelings and actions (Holloway and Galvin, 2016). To access contextualized, in-depth descriptions of midwifery students' experiences of fear, we chose a descriptive qualitative approach.

# 2.2. Setting and participants

The population of the study were undergraduate midwifery students from two universities in Tehran (Tehran University of Medical Sciences and Shahid Beheshti University of Medical Sciences), and one in Isfahan (Isfahan University of Medical Sciences). There were around 160 undergraduate midwifery students in the program in each university.

The students were informed by their lecturers that research to examine the experiences of midwifery students was being undertaken and they were invited to take part. The lecturers asked for telephone numbers of the students who agreed to participate in the study, and the first author contacted them to arrange a time for interview. Ten students from different years of the undergraduate program agreed to participate in the study.

#### 2.3. Data collection

The interviews were held in times and places convenient to the participants and were conducted in Persian with the first author. Each interview lasted 40-60 min. After the warm up questions, the students were asked to share their worries or fears they had experienced during their course. The main interview question was, 'What, if anything, has made you fearful or worried during the program?'

#### 2.4. Data analysis

The data were analyzed using a content analysis approach as follows:

- The oral interviews were transcribed.
- The transcriptions were read through several times to understand the material in its entirety.
- The text was divided into meaningful units, making them condensed.
- The condensed meaningful units were abstracted and labeled with codes.
- The codes were sorted into subthemes based on comparisons regarding their similarities and differences.
- Themes were formulated as the expression of the latent content of the text (Graneheim and Lundman, 2004).

All steps were conducted by the first author not using any software. The team members exchanged their ideas and comments throughout the analysis process.

#### 2.5. Trustworthiness of data

To enhance the credibility and validity of the data analysis, the researchers took measures including holding in-depth semi-structured interviews, and considering the maximum variation in terms of sampling and educational semester and the place of study. The transcripts were sent to the participants for feedback. No participants asked for their transcripts to be amended. Validity was further enhanced through the provision of an audit trail documenting all details and stages of the analysis process.

#### 2.6. Ethical considerations

The research council of the university approved the study's research proposal and the ethical protocol was approved by the ethics committee affiliated with the university (Reference number: 393698).

With the consideration of ethical research principles, the participants were informed of the study aim and method and the voluntary nature of participation in this study. They could withdraw from this study at any time without being penalized. Lastly, those who agreed to participate in this study gave written informed consent.

#### 3. Results

Ten students in different years of the undergraduate program, with an age range of 20–30 years, participated in the study (Table 1).

Analysis of the data from individual interviews led to the development of two main categories and five subcategories (Table 2).

# 3.1. Areas of fear in midwifery students

According to our findings, the situations in which the participants experienced fear were categorized as follows: fear of doing harm, fear in encountering with their first childbirth' and fear of penalties.

## 3.2. Fear of doing harm

At the beginning of their clinical placements, a lack of expertise in conducting procedures was fearsome for participants. One of the causes of fear for several students was dropping the baby during the birth process:

"One fear that occupied my mind was that the baby might fall from my hands ... In those days [first year] I was not confident enough and was really scared with these types of concerns." (Sixth semester student)

#### 3.3. Fear in encountering their first childbirth

The first exposure of the students to the birth process was stressful and associated with the feeling of fear and anxiety in some participants:

"During the first observation of birth, I was horrified about the severe pain that the pregnant woman experienced ... it made me weepy." (Fifth semester student)

#### Table 1

University	Participants' details
Isfahan University Of Medical Sciences Shahid Beheshti University Of Medical Sciences Tehran University Of Medical	1 in semester four, 1 in semester seven, 2 in semester eight $(N = 4)$ 1 in semester three, 1 in semester five, 1 in semester seven $(N = 3)$ 2 in semester six, 1 in semester8 $(N = 3)$
Sciences	2  in semester six, 1 in semesters (N = 3)

#### Nurse Education in Practice 29 (2018) 110-115

#### Table 2

Categories and subcategories describing fears of the midwifery students and its consequences.

Category	Subcategory
Areas of fear in midwifery students	Fear of causing harm Fear in encountering their first childbirth Fear of penalties
Consequences of fear	General physical and psychological consequences Interference in the adoption of the professional role

One of the fearsome scenes repeatedly described by the participants was the sight of the baby's head being born:

"The birth of the baby's head was terrifying. His hair was stained by blood ..." (Seventh semester student)

Another frightening event was witnessing the incision of the perineum when an episiotomy was performed:

"The midwife cut the perineum ... I was so scared ... I thought to myself that I would never conduct this procedure ... This was terrifying ... The scissor was tearing the tissue apart ... It was scary to tear apart someone's muscles ..." (Sixth semester student)

# 3.4. Fear of penalties

As they became aware of professional responsibilities and penalties of errors and negligence, sometimes the students were scared to practice in clinical settings:

"I am afraid of doing something wrong. For instance, if the oxytocin drips go too fast by mistake during induction of labor, the mother's uterus will be torn out and the fetus may die. What will happen to me then?" (Seventh semester student)

Furthermore, witnessing the midwives' lack of power to challenge the obstetricians' malpractice provoked the student' worries:

"It really upsets me when I see the midwives don't dare resist the doctors' unreasonable orders. Who is responsible for these kinds of orders?" (Eighth semester student)

The description of legal issues related to midwives' practice by instructors, while implying the midwives' lack of power, caused fears, worries and concerns:

"In the classroom ... students are reminded of their responsibilities ... They [instructors] say that midwives often are not supported in healthcare settings by healthcare authorities. It is said that when the medical commission for forensic medicine wants to find the person who is guilty for negligence, obstetricians are always more supported than midwives ... This makes me worried. This is one of my concerns ..." (Third semester student)

In some universities, midwifery students were required to attend sessions held by the medical commissions in the forensic medicine organization, which investigates patients' complaints against healthcare professionals.

Participation in such sessions highlighted the importance of being careful during practice and the provision of safe patient care for midwifery students. However, seeing the discriminatory behaviors of the medical commission's members against midwives made the students feel that obstetricians were supported more than midwives by the healthcare system. This situation makes them feel vulnerable and worried:

"I attended some sessions of the medical commission for forensic medicine organization. It was very clear that their [medical commission members] behaviors toward midwives were so different compared with obstetricians. They easily gave a verdict in favor of an obstetrician." (Seventh semester student)

#### 3.5. Consequences of fear

In addition to general responses and autonomic reactions to the feeling of fear (the subcategory of general physical and psychological consequences), the participants' experiences of fear negatively influenced their decision to stay in the undergraduate program or their future career intentions (the subcategory of interference in adoption of a professional role).

# 3.6. General physical and psychological consequences

The initial response to fear in clinical situations especially during the first encounter with birth was autonomic nervous system symptoms such as tachycardia and tremor:

"When my friend and I were watching the birth, our hearts began to throb with fear." (Forth semester student)

There were even some cases of fainting in response to the frightening situations in the delivery room. A student laughed while described such an experience:

"I did not dare get very close to the first birth that I observed ... Suddenly, I did not know what happened. I fainted and fell down." (Seventh semester student)

Sometimes the fear of committing mistakes in clinical settings, preoccupied the students' minds long before the beginning of the semester and caused them stress. In some of the participants, these fears disturbed their sleep:

"At the beginning of my course, I repeatedly, dreamed that the baby fell from my hands when I managed the birth ... I jumped from my sleep terrified." (Sixth semester student)

#### 3.7. Interference in adoption of their professional role

After their first observation of a birth, some of the students regretted choosing midwifery as their field of study and soon decided to leave.

"I can remember that my classmates decided to leave midwifery soon after watching their first birth. It was not only me who became sick. All my classmates stated that they would leave the midwifery course." (Sixth semester student)

Withdrawal from activities was the defensive approach used by the participants in the face of frightening stimuli, to protect themselves against perceived threats:

"When I am in the labor ward, I am always worried about committing an error. Therefore, I do not like to get involved in practice. I prefer others do it and keep my distance." (Seventh semester student)

The students' fear about the legal consequences of midwifery practice led to discouragement, resignation of clinical practice and even running away from the hospital:

"I tell myself, why I should do this job and take the responsibility ... I used to like working in the labor room, but I do not like it anymore due to the commitments and responsibilities." (Eighth semester student)

# 4. Discussion

The findings show that midwifery students experience a range of fears during their undergraduate program, which can be grouped as follows: fear of doing harm, fear of encountering their first childbirth, and fear of penalties. The consequences of these fears are general physical and psychological consequences and interference in adopting the professional role.

# 4.1. Fear of doing harm

Our participants reported fear of committing errors that may lead to harming the patient. This fear has also been mentioned in previous studies with other medical sciences students (Sarikaya et al., 2006; Pugh et al., 2009). These findings highlight the importance of appropriate and adequate preparation of the students for entry into the clinical setting. As the participants of this study had no previous experience of clinical settings because of their direct entry to midwifery education, there might be a need for more support to make them feel oriented and confident. The need for extra support for undergraduate midwifery students in comparison with the students who were admitted to postgraduate programs, has also been mentioned in other studies (Seibold, 2005; McKenna and Rolls, 2007).

Different approaches, such as preclinical training in skill labs (Sarikaya et al., 2006), and mannequin-based simulators (Pugh et al., 2009), which have been suggested in the studies on medical students, might also be beneficial for midwifery students. Also, as clinical educators play an important role in midwifery students' development of competency (Licqurish and Seibold, 2008), their support should be ensured.

# 4.2. Fear of encountering their first childbirth

The high emotional and affective pressures imposed on students during their first encounter with the labor ward and birth, including that of the experience of stress, has been described in the literature (Licqurish and Seibold, 2008; Thunes and Sekse, 2015; Brunstad et al., 2016). However, some types of fear shown in this study, such as the fear of seeing the head emerging or fear of episiotomy, had not been mentioned previously.

These findings reveal the need for more emphasis on curricular components for familiarizing the midwifery students with the physiology of birth. These considerations become more important particularly for midwifery students in Iran. As articulated in (Arfaee et al., 2008) study, most Iranian midwifery students make their career choice without sufficient understanding of midwifery (Arfaee et al., 2008), so they need more help for transition to the profession.

Attending a physiologic and non-interventional birth for their first encounter might help student midwives become familiar with the actual role of a midwife and cause them less stress. Sadly, because of the medical model of care of birthing women in the hospitals of Iran, it is nearly impossible to access this opportunity.

#### 4.3. Fear of penalties

Caring for two persons at the same time (the pregnant woman and her fetus) puts the midwives at a great responsibility and a high risk of being accused of medical malpractice (Siabani et al., 2009; Beigi et al., 2015). Midwives are required to be fully accountable for giving care in labor, detecting abnormalities and referring such cases to doctors, although they have not enough authority to call obstetricians to attend patients' beds or challenge their malpractice. Some midwives' 'malpractices' arise from these situations in which they are not actually at fault (Beigi et al., 2015). Midwifery students in this study had a clear understanding of their professional responsibilities, but they also witnessed the lack of autonomy of midwives and how this restricted their ability to challenge poor practice. This left the students feeling vulnerable and threatened.

This finding is in congruence with Rogers' theory of protectionmotivation. According to this theory, although some degree of fear is required for increasing people's vigilance (Rogers, 1983), if people are not empowered to achieve the desired goal, they feel threat (Putwain et al., 2014).

Strategies and measures by policy makers and midwifery professional communities for empowering midwives would help to decrease some of the student midwives' worries and concerns. Teaching the students about legal issues should be undertaken by controlled application of fearful stimuli and putting more emphasis on the ways to prevent medical malpractice.

#### 4.4. General physical and psychological consequences

As expected from the consequences of fear that have been articulated in the literature (Whitley, 1992; Gonzalez and Martinez, 2014), the participants reported stress and anxiety that could affect their physical and mental health and their wellbeing. Although the use of some approaches might help to control the situations that trigger fearful situations, they cannot be relieved completely (Suárez, 1993). Thus, there is a need for providing psychological support and advocacy for the students to speak about their concerns, worries and fears.

#### 4.5. Interference in adopting the professional role

Retention of students in the education program and training a competent and committed health workforce is a major component of healthcare programs (Green and Baird, 2009; Cameron et al., 2011). Stress is thought to be a contributing factor in attrition of midwifery students (Green and Baird, 2009). This view is reflected in our study, in which the experience of fear in the students not only raised tensions leading to physical and psychological issues, but also hindered the acceptation of their professional role. When the students were faced with stressful situations resulting from fear, they became ambivalent toward the adoption of the professional role, thought about leaving the field of study, and avoided playing their role in the labor room as their future workplace. This threatens the development of competent and committed midwives.

Thus, it is important to reduce the exposure and triggers to situations that students find fearful. In addition, there is a need for ensuring that curricula content, teaching approaches, and communication strategies, are designed to enable students to deal with fear if they experience this during their studies.

# 4.6. Limitations

The study is based on interviews with ten participants from two cities in Iran. It would be interesting to explore the fears of midwifery students in other contexts and other systems of midwifery education. The interviewer served as trainer to some of the students in clinical practice, and this may have influenced their narratives. However, the students engaged and spoke freely and openly in the interview situation.

# 5. Conclusion

Our study on the experience of fear and its consequences in undergraduate midwifery students showed that they are exposed to a range of fear experiences during their education program. Such experiences lead students to feel distress, consider leaving the course, and reduce their self-confidence and trust. This may influence where they choose to work following graduation.

To keep midwifery students in the profession and preserve their wellbeing, educational institutions need to take a proactive stance in providing support to the students to control their fears. For this purpose, appropriate revision of the curriculum seems to be necessary to raise awareness in midwifery students of physiologic birth and the actual role of midwifery. Moreover, it would be helpful to put more emphasis on the preclinical preparation of students and provide psychological advocacy so they can speak about their concerns, worries, and fears.

Furthermore, educating the students about legal issues should be undertaken in a manner that does not make them stressed. Strengthening the midwifery profession in Iran to increase their ability to practice autonomously would be beneficial, as the workplace would be more attractive to graduating students if they could see the potential for legally safe professional activity.

#### **Conflicts of interest**

The authors are solely responsible for the content and writing of the paper: The authors report no conflicts of interest.

#### Acknowledgement

We wish to thank the students who participated in the study.

Isfahan University of Medical Sciences (393698), Isfahan, Iran, supported this study financially. The authors would like to thank the participants who without their collaboration, the production of this article would be impossible.

#### References

- Arfaee, K., Amirali Akbari, S., Alavi Majd, H., 2008. Attitude of midwifery students toward their career choice and its correlated factors in Tehran universities of medical sciences. Danesh Va Tandorosti 3, 14–19.
- Bastable, S.B., 2008. Nurse as Educator: Principles of Teaching and Learning for Nursing Practice. Jones and Bartlett, Sudbury, Mass.
- Begley, C.M., 2002. Great fleas have little fleas'. Irish student midwives' views of the hierarchy in midwifery. J. Adv. Nurs. 38, 310–317.
- Beigi, M., Asadi, L., Valiani, M., Mardani, F., 2015. Evaluating different types of malpractices in midwifery that were referred to the forensic medicine commission and the medical council between 2006 and 2011 in Isfahan province, 2013. Iran. J. Nurs. Midwifery Res. 20, 426–430.
- Brunstad, A., Giske, T., Hjälmhult, E., 2016. How midwifery students experience learning conditions in labor wards. J. Nurs. Educ. Pract. 6, 136.
- Cameron, J., Roxburgh, M., Taylor, J., Lauder, W., 2011. An integrative literature review of student retention in programmes of nursing and midwifery education: why do students stay? J. Clin. Nurs. 20, 1372–1382.
- Carveth, J.A., Gesse, T., Moss, N., 1996. Survival strategies for nurse-midwifery students. J. Nurse Midwifery 41, 50–54.
- Cavanagh, S.J., Snape, J., 1997. Educational sourcesof stress in midwifery students. Nurse Educ. Today 17, 128–134.
- Dahlen, H.G., Caplice, S., 2014. What do midwives fear? Women Birth 27, 266–270.
- Davies, S., Coldridge, L., 2015. 'No Man' s Land': an exploration of the traumatic experiences of student midwives in practice. Midwifery 31, 858–864.
- Esphandiari, G., 2002. Stressful factors and their relationship with the general health among students in Kordestan University of Medical Sciences in year 1999. The scientific Journal of Kurdestan University of medical Sciences 5, 17–22.
- Gonzalez, P., Martinez, K.G., 2014. The role of stress and fear on the development of psychopathology. Psychiatr. Clin. 37, 535.
- Graneheim, U.H., Lundman, B., 2004. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. Nurse Educ. Today 24, 105–112.
- Green, S., Baird, K., 2009. An exploratory, comparative study investigating attrition and retention of student midwives. Midwifery 25, 79–87.
- Higginson, R., 2006. Fears, worries and experiences of first-year pre-registration nursing students: a qualitative study. Nurse Res. 13, 32–49.
- Holloway, I., Galvin, K., 2016. Qualitative Research in Nursing and Healthcare. John Wiley & Sons.
- Khadivzadeh, T., Erfanian, F., 2012. The effects of simulated patients and simulated gynecologic models on student anxiety in providing IUD services. Simulat. Healthc. J. Soc. Med. Simulat. 7, 282–287.
- Lazarus, R., Folkman, S., 1984. Stress, Appraisal and Coping. Springer, New York. Licqurish, S., Seibold, C., 2008. Bachelor of Midwifery students' experiences of achieving
- competencies: the role of the midwife preceptor. Midwifery 24, 480–489. McKenna, L., Rolls, C., 2007. Bachelor of midwifery: reflections on the first 5 years from
- two victorian universities. Women Birth 20, 81–84.
  Moridi, G., Valiei, S., Khaledi, S., Fathi, M., Shafieian, M., Gharibi, F., 2011. Stressful factors of clinical education from nursing, midwifery and operation room technicians' students in Kurdestan University of Medical Sciences. The Iranian Journal of

Education in Medical Sciences 2011 (11), 675-685.

OED, 2007. Oxford English Dictionary Online. JSTOR.

- Pryjmachuk, S., Richards, D.A., 2008. Predicting stress in pre-registration midwifery students attending a university in Northern England. Midwifery 24, 108–122.
- Pugh, C.M., Obadina, E.T., Aidoo, K.A., 2009. Fear of causing harm: use of mannequinbased simulation to decrease student anxiety prior to interacting with female teaching associates. Teach. Learn. Med. 21, 116–120.
- Putwain, D., Remedios, R., Symes, W., 2014. The appraisal of fear appeals as threatening or challenging: frequency of use, academic self-efficacy and subjective value. Educ. Psychol. 1–21.
- Rogers, R.W., 1983. Cognitive and physiological processes in fear appeals and attitude change: a revised theory of protection motivation. Soc. Psychol. 153–176.
- Ryan, K.D., Oestreich, D.K., 1998. Driving Fear Out of the Workplace: Creating the Hightrust, High-performance Organization. Jossey-Bass.

- Sarikaya, O., Civaner, M., Kalaca, S., 2006. The anxieties of medical students related to clinical training. Int. J. Clin. Pract. 60, 1414–1418.
- Seibold, C., 2005. The experiences of a first cohort of Bachelor of Midwifery students, Victoria, Australia. Aust. Midwifery 18, 9–16.
- Siabani, S., HadiPour, A., Siabani, H., Rezaei, M., Daniali, S., 2009. The assessment of complaints against physicians in the forensic medicine organization in kermanshah (2001-2005). Behaviour 13, 74–83.

Suárez, J.G., 1993. Managing Fear in the Workplace. DTIC Document.

Thongsukmag, J., 2003. Fear in the Workplace: the Relationships Among Sex, Self-efficacy, and Coping Strategies.

- Thunes, S., Sekse, R.J.T., 2015. Midwifery students first encounter with the maternity ward. Nurse Educ. Pract. 15, 243–248.
- Whitley, G.G., 1992. Concept analysis of fear. Int. J. Nurs. Terminol. Classif. 3, 155-161.