

Determination of midwifery students' anxiety levels on the first day of home visit practice*

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Abstract: The study was carried out as a descriptive research to determine the anxiety levels of midwifery students on the first day of Home Visit Practice. The study group consists of second grade students of Faculty of Health Sciences Midwifery Department, and the sample covers the whole study group. The data of 118 students included in the research were evaluated using SPSS 14.0 software. The students' state anxiety mean score is 40.37 ± 4.28 , and trait anxiety mean score is 46.89 ± 4.36 prior to home visit on the first day of the program. Trait anxiety mean score of the students that reside in districts (48.42 ± 4.12) is significantly higher than those living in provinces (45.95 ± 4.27) ($p < 0.05$). State anxiety mean score of students that deemed themselves competent (43.50 ± 3.59) in terms of knowledge prior to visits were found to be significantly higher than those that felt partly competent (39.74 ± 4.23) and incompetent (39.66 ± 3.67); and state anxiety mean score of the students that felt competent (40.77 ± 4.22) in terms of skills was significantly higher than those that felt incompetent (38.00 ± 3.92) ($p < 0.05$). Consequently, the students were found to have a moderate level of anxiety, which should be minimized through elimination of the underlying factors.

Keywords: Anxiety, home visit, student

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I. Introduction

Midwifery is a practice-based discipline. As in the case of other practice-based disciplines, theory and practice are the complementary parts of midwifery education [1, 2]. Through their practicing experiences, students take the opportunity to improve their critical thinking, communication and management skills in addition to the opportunity for putting their theoretical knowledge into practice [1, 3, 4].

Home visits hold particular importance especially for monitoring pregnancies and getting acquainted with pregnant women along with their family in their own environment. As a part of this program, students meet with pregnant women on the first day of their internship, receive their consent for home visits, if the consent is received they take note of their gestational history and make physical examination. This is the first field experience of students that have clinical experience. As in first clinical experiences [1, 5, 6, 7, 8] first field experiences during home visits may cause anxiety, induced by difficulties in using theoretical knowledge, adaptation issues, lack of experience, the fear of making mistake and being unaccustomed to the field.

Anxiety can be defined as the feeling of being concerned about an intangible danger, and it manifests itself in two forms, namely state anxiety and trait anxiety. State anxiety emerges when a hazardous and undesired situation occurs; whereas trait anxiety may occur even in the absence of a tangible or substantial reason [5, 9]. Extraordinary situations, difficulties in decision-making, internal and external conflicts may be the underlying reasons for undergoing anxiety-related issues [10].

Anxiety may result in failure through impairing the reasoning and abstract thinking capabilities of students. It may also be effective on the self-development and learning periods by hindering creativity and productivity [11]. Even though, a moderate (mild) level of anxiety is required for learning, high levels of anxiety constitute a major impediment during the process of learning [12]. Maintaining anxiety at a certain level enables easy adaptation to new experiences. Accordingly, determination of anxiety levels of students during their first field experiences is highly important.

Related studies on the same subject were carried out for clinical applications in Turkey [1, 5, 11, 13, 14, 15, 16] however no study was encountered on determination of anxiety level of students during field applications/home visits. In this context, determination of midwifery students' anxiety levels on the first day of home visit practices was aimed in the present research.

II. Materials and Methods

2.1. Study Design and Sample

The study group of this descriptive research consists of 118 students that received the Prenatal Period I course for the first time in the Faculty of Health Sciences, Midwifery Department of a state university in Central Anatolia region as of the fall semesters of 2012-2013 (55 students), and 2013-2014 (63 students) academic years. Sample selection from the study group was omitted and all students were included in the research.

Prenatal Period I course was chosen for being the first course involving home visits. In the department, midwifery education is provided at the level of bachelor degree for a four years (8 semesters) period. During the first year (second semester) students are provided with basic skills education and included in clinical applications. In the second year (third semester) they receive healthcare trainings and practices for healthy gestation with Prenatal Period I course. Accordingly, the practicing stage of the research was performed with second grade students in the fall semester (third semester).

2.2. Data Collection Tools

Personal Information Form and State-Trait Anxiety Inventory (STAI) were used for collection of research data.

Personal Information Form

This form consists of socio-demographic attributes of students (age, parents' educational status, high school graduation, etc.) in addition to 9 questions about their opinions on their knowledge-skill based competences prior to home visits.

State-Trait Anxiety Inventory

State-Trait Anxiety Inventory is a self-assessment questionnaire with brief self-evaluations developed by Spielberger et al. (1970). The inventory is in Likert type with four scales varying between "absolutely not" and "completely" [17]. The validity and reliability studies of the inventory were performed by Öner and Le Compte (1985) in Turkey. The inventory consists of two separate questionnaires involving 40 items. State Anxiety Inventory (SAI) requires individuals to depict how they feel in a given situation under given circumstances and to reply in consideration of their emotions regarding that specific situation. Trait Anxiety Inventory (TAI), on the other hand, generally requires individuals to depict how they feel. Two expressions are used in State-Trait Anxiety Inventory. Direct expressions indicate negative emotions, while reverse expressions indicate positive emotions. Items no 1,2,5,8,10,11,15,16,19 and 20 are the reverse expressions in SAI whereas items no 21,26,27,30,33,36 and 39 are the reverse expressions in TAI. Following the calculation of total weighted scores separately for direct and reverse worded items, total weighted score of reverse worded items is subtracted from those obtained for direct worded items. A predefined constant value is then added to this result. This predefined value is 50 for SAI and 35 for TAI. The resultant value is the individual's anxiety score. High scores indicate high anxiety levels and low scores indicate low anxiety levels. Alpha reliability was found to be between 0.83-0.87 for TAI and 0.94-0.96 for SAI [18].

2.3. Collection and Evaluation of Data

Research data was collected from students prior to home visits while they were at Family Health Centers. Before the application, participating students were provided with information related to the research and its objective. After receiving the informed consent of the students, they were told how to complete the data collection tools, and Personal Information Form and State-Trait Anxiety Inventory were applied accordingly. Research data were obtained by face to face interviews. It took 10-15 minutes of students to complete the forms. The obtained data were analyzed using SPSS 14.0 software package. During data analysis, number and percentage distribution was used in evaluation of descriptive attributes, t test was applied for independent variables that exhibit normal distribution, and mann-whitney u test and kruskal-wallis test were applied for independent variables that do not exhibit normal distribution. Statistical significance level was assumed as $p < 0.05$.

2.4. Ethical Considerations

Informed consents of the participating students were received and principle of confidentiality was complied. The research was carried out in accordance with the principles of Declaration of Helsinki. Also, permission for the application was received from the Midwifery Department.

III. Results

The age average of the participating students is 19.73 ± 0.90 , and 40.7% of the students are 20 years old. All of the students are single, 82.2% are graduates of state high schools and 48.3% reside in state dormitories.

As for parents' educational status, 61% of the mothers and 33.9% of the fathers are graduates of primary schools and 61.9% of the parents live in the provincial center (Table 1).

Table 1: Distribution of students based on their descriptive attributes (n=118)

Attributes	Number of Participants	%
Age (19.73±0.90)		
18	11	9.3
19	34	28.8
20	48	40.7
21 and higher	25	21.2
Marital Status		
Single	118	100.0
High School Graduation		
State school	97	82.2
Private school	21	17.8
Place of Residence		
With parents	20	16.9
State dormitory	57	48.3
Student house with friends	29	24.6
Private dormitory	12	10.2
Mother's Educational Status		
Illiterate	17	14.4
Primary school	72	61.0
Secondary school	13	11.0
High school	16	13.6
Father's Educational Status		
Primary school	40	33.9
Secondary school	23	19.4
High school	39	33.1
University	16	13.6
Parents' Place of Residence		
Province	73	61.9
District	45	38.1

When the students were asked whether they felt competent before home visits, 16.9% stated that they were competent and 70.3% stated that they were partly competent in terms of knowledge; and 85.6% stated that they were competent in terms of skills (Table 2).

Table 2: Distribution of students according to their knowledge-skill based competencies (n=118)

Opinions	Number of Participants	%
Competent in Terms of Knowledge		
Competent	20	16.9
Partly competent	83	70.3
Incompetent	15	12.8
Competent in Terms of Skills		
Competent	101	85.6
Incompetent	17	14.4

Students' state anxiety mean score was 40.37±4.28, and trait anxiety mean score was 46.89±4.36 prior to home visits (Table 3).

Table 3: Distribution of the students' anxiety mean scores (n=118)

Scales	Scale Min-Max	Received Min-Max	X±SS
State Anxiety	20-80	32-50	40.37±4.28
Trait Anxiety	20-80	36-61	46.89±4.36

In evaluation of anxiety mean scores of students based on some of their attributes; trait anxiety mean score of students that reside in districts (48.42±4.12) was found to be significantly higher than that of the students that reside in provincial centers (45.95±4.27) ($p<0.05$). State anxiety mean score of students that deemed themselves competent in terms of knowledge (43.50±3.59); and in terms of skills (40.77±4.22) were found to be significantly higher than those that deemed themselves partly competent (39.74±4.23) and incompetent (39.66±3.67) in terms of knowledge; and incompetent (38.00±3.92) in terms skills (Table 4).

Table 4. Distribution of the students' anxiety mean scores based on some of their attributes (n=118)

Attributes-Test	n	State Anxiety X±SS	Trait Anxiety X±SS
Family's Place of Residence			
Province	73	40.76±4.36	45.95±4.27
District	45	39.73±4.11	48.42±4.12
t		1.278	3.083
p		0.204	0.003
Competency in Terms of Knowledge			
Competent	20	43.50±3.59	47.95±4.92
Partly competent	83	39.74±4.23	46.48±4.01
Incompetent	15	39.66±3.67	47.80±5.34
KW		13.834	1.384
p		0.001	0.501
Competency in Terms of Skills			
Competent	101	40.77±4.22	46.81±4.43
Incompetent	17	38.00±3.92	47.41±4.01
M-WU		519.500	730.500
p		0.009	0.325

p<0.005

IV. Discussion

Home visit practice is the first field experience that allows students to monitor gestation and evaluate pregnant women in their own environment. For such reasons, this practice holds particular importance in midwifery training. As in first clinical experiences [1, 5, 6, 7, 8] first field experiences during home visits may cause anxiety, induced by difficulties in using theoretical knowledge, adaptation issues, lack of experience, the fear of making mistake and being unaccustomed to the field. Prior to the practice, having confidence in skills and knowledge may help students in tackling the problems while putting knowledge into practice. In the research, 16.9% of the students found themselves competent and 70.3% found themselves partly competent in terms of knowledge; whereas 85.6% found themselves competent in terms of skills (Table 2). In a study, carried out with nursing and midwifery students, 62.7% of the students stated that the theoretical knowledge given before clinical practices was sufficient [1], and in another study involving nursing students, 48.4% stated that they had adequate knowledge for internship [5]. According to the research results, the level of acquired knowledge is lower than those reported in other studies; however, it indicates a good skill level, which is thought to be noteworthy.

In the research, the students' state anxiety mean score on the first day of home visits is 40.37±4.28, and their trait anxiety mean score is 46.89±4.36 (Table 3). Prior to the home visits, students' anxiety was at moderate levels. This finding agrees with that of many other researches. Tel et al. (2004) reported that, on the first day of clinical practices, 58.7% of the nursing students underwent state anxiety (41.50±5.13), and 94.7% (45.69±6.14) underwent trait anxiety at a moderate level. Hacıhasanoğlu et al. (2008) found the state anxiety mean score of nursing students prior to the first clinical practice as 44.38, and they found the trait anxiety mean score as 43.81. According to Bayar et al. (2009), nursing students' state anxiety mean score was 46.69±4.26, and trait anxiety mean score was 47.63±4.70 prior to the clinical practice. As opposed to the findings of this study, Erbil et al reported the state anxiety mean score as 57.62±8.46, and trait anxiety mean score as 28.54±8.08 for nursing students that experienced their first clinical practice. This was attributed to its being first clinical experience. Moderate levels of anxiety are reported to be an indication of the aid and support requirement of individuals [19]. Therefore, it is essential to recognize the anxiety that students undergo and to support them in this period.

In evaluation of the students' anxiety mean scores based on some of their attributes, trait anxiety mean scores of the students resident in districts (48.42±4.12) was found to be significantly higher than that of the students living in provinces (45.95±4.27) (p<0.05) (Table 4). Such anxiety of students is attributed to the field visits' being in the provincial center, after living in a district for a long period.

Prior to home visits, state anxiety mean scores of students that claimed to have adequate knowledge (43.50±3.59) was found to be significantly higher than those that stated to have partly adequate (39.74±4.23) and inadequate (39.66±3.67) knowledge; and state anxiety mean score of those claiming to have adequate skills (40.77±4.22) was also found to be significantly higher than those that stated to have inadequate skills (38.00±3.92) (Table 4). According to the results of a research, state anxiety mean score of midwifery students, who were of the opinion that they had adequate theoretical knowledge for attending a labor, was found to be statistically significantly high [20]. Studies indicating that there is no significant difference between the success of university students and their state anxiety levels [21, 22], and those stating that there is a positive correlation between anxiety and academic success [23] are also available. Moderate levels of anxiety may have a positive effect on learning for students with adequate knowledge and skill based competences. In Sharif and Masoumi's study (2005), the students stated that clinical environment was stressful and under such conditions they were

afraid of harming individuals, thus suffering from intense feelings such as the fear of making mistakes, and getting negative reactions, which in turn results with a lack of self-confidence, putting them in stressful situations. Such situations may have led to increased levels of anxiety depending on the increased awareness of students with adequate knowledge and skill based competences.

V. Conclusion

In the present research, the students were found to have moderate levels of anxiety, and elimination of the underlying factors for such anxiety holds great importance. Providing students with adequate levels of knowledge and skill based competences; and establishing a supportive educational environment that can keep the anxiety levels of students within reasonable limits and increase their motivation for learning, are recommended in line with the findings of the research.

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