**Comparing the attitude of undergraduate midwifery students   
regarding the legal and human rights aspects of abortion**

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**Abstract:**

This study was carried out to compare the attitude of first and final year undergraduate midwifery students about the legal and human rights aspects of abortion. In this cross sectional study, all 82 midwifery students in their first and last year studying were included in the study. Data collection tools was The Abortion Attitude Survey questionnaires. Data analysis was carried out by SPSS. The mean score of attitude towards abortion in the first year and last year students were 56.66 ± 9.5 vs 64.37 ± 6.28, (p=0.0001). Also two groups had significant difference in cases such as "Abortion should be a method of birth control" (p = 0.008), "Abortions should be inexpensive and widely available" (p = 0.03), "Abortion is indicated if a female become pregnant following rape" (p = 0.03), "abortion should be done if pregnancy is a threat to marital life" (p = 0.0001), "abortion should be performed in unwanted pregnancies interacting with job and educational goals" (p = 0.008), and "Abortion is indicated if a woman is married and does not want any more children" (p = 0.018). By acquiring a general overview of the status of students' attitude regarding legal and human rights aspects of abortion, we can provide proper suggestions considering religious, cultural and legal backgrounds and plan proper interventions based on the attitude of the students in matters related to abortion.

**Key words:** Attitude, Midwifery students, Abortion, legal, human rights

**Introduction**

Today, abortion is referred to as a health problem of women, major subject of public health, quality of health care and the issue of women's fertility rights and sexuality and different aspects of it such as medical, cultural, religious, social, political and especially legal and human rights aspects are considered (1-3). Spontaneous abortion means losing or spontaneous exit of the products of conception before gestational week 20 and induced abortion means ending the pregnancy either by medial methods or surgery before it the fetus can survive outside the uterus, which is divided into therapeutic and elective abortion (6-4).

WHO reported that annually about 210 million pregnancy happen in the world, from which 2/3 or 130 million pregnancy continues and gave birth and 1/3 ends as spontaneous or induced abortion, of which about 43.8 million cases are related to induced abortion. The considerable point is that almost half of the induced abortions (about 20 million) are carried illegally and in unhealthy and unsafe conditions that most of them (about 98%) are related to developing countries (7-10).

Legal status and laws of abortion are varied in different countries. In some countries there is complete freedom for legal abortion and in some countries there are more limited abortion laws. According to the united nations in 2011, there is a permission for abortion in many countries in order to save mother's life (97% of countries), i.e., if continuing pregnancy threatens mother's life abortion is permitted. In this report, other legal reasons for abortion include preservation of physical (67%) or mental health ( 63%), rape or incest (almost in half of all countries 49%), fetal defects (47%), socio-economic reasons (in about 1/3 of the countries, 34%) and voluntary abortion (based on woman's request) in 29% of the countries (11).

In Iran, there is no precise statistics about the number of these abortions, mortality rate and physical, mental, socio-economic effects caused by it. However, based on the existing assumptions, abortion rates are high and this is performed illegally and unsafely in illegal centers, which lack minimal medical standards (12, 13).

The attitude of medical science students is also important in women's practice for illegal and unsafe abortions, because termination of pregnancy is a practice which is influenced by the medical science students' own attitudes, beliefs and views while providing relevant services. In other words, they cannot separate their own attitude from their activity or services they provide, so it can be said that medical science students that are in direct contact with women seeking for abortion services could have an important role in decision making and performing abortion by them and for this reason medical science students who are in contact with women, may decide to guide or to participate in performing unsafe and illegal abortion on their clients, considering their attitude, beliefs and prospect in cases where abortion is not legally permitted (14, 15).

But there is some research about the attitudes, beliefs and personal prospects of the medical sciences students regarding controversial issues of abortion. In addition, in studies that investigated the attitude of the students towards induced abortion, the results indicate diverse attitudes of students in different countries, which could be due to differences in personal beliefs, laws and educational experiences. Also it depends on cultural, professional and religious beliefs as well as health systems regulations in different countries, so it is reasonable that the practice of abortion be different in each country and for this reason it the findings of these kind of studied could not be generalized (15, 16). You want to add that this is what makes this particular study relevant for the context of Iran?

Considering the importance of medical science students' attitude regarding legal and human right aspects of abortion to help clients for decision making regarding abortion, this study was carried out to compare the attitude of first and final year undergraduate midwifery students in School of Nursing and Midwifery, Mashhad, Iran about the legal and human rights aspects of abortion in 2017. A line to say WHY first and final years only; also, by the time students are in their final years, how many years of study have they had?

**Methods**

This is a cross sectional study approved by the Local Ethics Committee, Mashhad University of Medical Sciences, Mashhad, Iran (code: 922236). The population of the study consisted of all of the first (how many in first year?) and last year (how many in the final year?) midwifery students, in School of Nursing and Midwifery, who entered into the study by census.

In order to collect data, first the researcher (initials please) provided necessary explanations to all qualified students regarding the aim, application and method of the research. The participants signed informed consent form and were informed that they could withdraw from the study at any time the study. Then, the questionnaire of personal and social identities and also the questionnaire of measuring attitude were completed by the students by self-report method. Data collection tools included a demographic as well as Dietrich Abortion Attitude Survey questionnaire that includes of 17 items of attitude measuring about abortion based on 5-point Likert scale ranked from completely agree to completely disagree, with scores of 1 to 5. Validity and reliability of Persian version of Dietrich Abortion Attitude Survey questionnaire was approved by Kalantari et al (2012) (17). Data were analyzed by SPSS version 16. To describe the characteristics of the participants, descriptive statistics (mean and standard deviation and frequency distribution) were used. Chi-square test was used to compare students' attitude. In all tests, the confidence coefficient was 95% and the significance level was 0.05.

**Results**

Average age of the participants in the study was 20.62± 2.23 and their age range was 18 to 27 years. 67.9% of the students were single and 32.1% were married. Most of the students were native (67.9%) and 97.5% were Shia Muslim. 90.1% of the students reported that their income is enough. Any student dropped out?

Measurement of attitude towards abortion showed that the two groups of first and final-year students had significant difference in attitudes such as "Abortion should be a method of birth control " (p = 0.008), " Abortions should be inexpensive and widely available " (p = 0.03) , " An abortion is indicated if a female become pregnant following rape " (p = 0.03), "abortion should be done if the pregnancy is a threat to marital life" (p = 0.0001), "abortion should be performed in unwanted pregnancies interacting with job and educational goals "(p = 0.008)," An abortion is indicated if a woman is married and does not want any more children. "(p = 0.018).

Mean score of attitude towards abortion in the first year students of midwifery was 56.66 ± 9.5 and among the last year was 64.37 ± 6.28, which were significantly different between two groups (p=0.0001). Frequency distribution of the attitude of midwifery students towards abortion is shown in table 1.

Frequency distribution of the attitude of the midwifery students towards abortion

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Items |  | Strongly  Agree  N(%) | Agree  N(%) | Neutral  N(%) | Disagree  N(%) | Strongly  Disagree  N(%) | p |
| 1. Abortion should be a method of birth control. | Junior | 1(2.3) | 3(6.8) | 9(20.5) | 19(43.2) | 12(27.3) | 0.008 |
| Senior | 0(0) | 2(5.9) | 0(0) | 11(32.4) | 21(61.8) |
| 2. An abortion should be done after the first three months of pregnancy. | Junior | 1(2.3) | 3(7) | 5(11.6) | 15(34.9) | 19(44..2) | 0.14 |
| Senior | 0(0) | 2(5.9) | 1(2.9) | 10(29.4) | 21(61.8) |
| 3. An abortion should be done for any reason. | Junior | 2(4.7) | 0(0) | 2(4.7) | 16(37.2) | 23(53.5) | 0.11 |
| Senior | 0(0) | 0(0) | 0(0) | 8(23.5) | 26(76.5) |
| 4. Governmental agencies should strictly regulate abortions. | Junior | 14(33.3) | 21(50) | 5(11.9) | 0(0) | 2(4.8) | 0.41 |
| Senior | 15(45.5) | 13(39.4) | 5(15.2) | 0(0) | 0(0) |
| 5. Abortions should be inexpensive and widely available. | Junior | 1(2.3) | 4(9.3) | 10(23.3) | 14(32.6) | 14(32.6) | 0.03 |
| Senior | 0(0) | 0(0) | 2(6.1) | 12(36.4) | 19(57.6) |
| 6. An abortion is indicated if a female’s own health is endangered by the pregnancy. | Junior | 18(41.9) | 18(41.9) | 6(14) | 0(0) | 1(2.3) | 0.34 |
| Senior | 9(26.5) | 20(58.8) | 4(11.8) | 1(2.9) | 0(0) |
| 7. An abortion is indicated if a female became pregnant from being raped | Junior | 6(14) | 9(20.9) | 22(51.2) | 4(9.3) | 2(4.7) | 0.03 |
| 10(29.4) | 8(23.5) | 6(17.6) | 5(14.7) | 5(14.7) |
| 8. An abortion is indicated when the fetus has a suspected physical or mental disability. | Senior | 10(23.3) | 19(44.2) | 12(27.9) | 1(2.3) | 1(2.3) | 0.15 |
| Junior | 10(29.4) | 11(32.4) | 6(17.6) | 6(17.6) | 1(2.9) |
| 9. An abortion is indicated if a female perceives she cannot afford to have the baby. | Senior | 1(2.3) | 2(4.7) | 9(20.9) | 20(46.5) | 11(25.6) | 0.15 |
| Junior | 0(0) | 0(0) | 4(11.8) | 13(38.2) | 17(50) |
| 10. An abortion is indicated if a woman is married and does not want any more children. | Senior | 0(0) | 2(4.7) | 8(18.6) | 16(37.2) | 17(39.5) | 0.01 |
| Junior | 0(0) | 1(2.9) | 0(0) | 9(26.5) | 24(70.6) |
| 11. An abortion is indicated if a female does not feel emotionally that she would be able to care for the baby. | Senior | 1(2.3) | 1(2.3) | 7916.3) | 16(37.2) | 18(41.9) | 0.052 |
| Junior | 0(0) | 0(0) | 1(2.90 | 8(23.5) | 25(73.5) |
| 12. An abortion is indicated if the female is an unmarried teenager. | Senior | 3(7) | 10(23.3) | 19(44.2) | 5(11.6) | 6(14) | 0.07 |
| 4(11.8) | 5(14.7) | 7(20.6) | 6(17.6) | 12(35.3) |
| 13. An abortion is indicated if the pregnancy is a threat to the couple’s relationship. | Junior | 5(11.6) | 4(9.3) | 13(30.2) | 12(27.9) | 9(20.9) | 0.000 |
| Senior | 0(0) | 0(0) | 2(5.9) | 12(35.3) | 20(58.8) |
| 14. The male responsible for the pregnancy should be included in the decision to terminate the pregnancy. | Junior | 10923.3) | 19(44.2) | 11(25.6) | 2(4.7) | 1(2.3) | 0.51 |
| Senior | 4(11.8) | 16(47.1) | 8(23.5) | 4(11.8) | 2(5.9 |
| 15. An abortion is indicated for an unplanned pregnancy that interferes with educational and career goals. | Junior | 1(2.3) | 3(7) | 12(27.9) | 18(41.9) | 9(20.9) | 0.001 |
| Senior | 0(0) | 0(0) | 0(0) | 15(44.1) | 19(55.9) |
| 16. I would be comfortable assisting with an abortion procedure. | Junior | 192.3) | 3(7) | 6(14) | 13(30.2) | 20(46.5) | 0.35 |
| Senior | 0(0) | 0(0) | 3(8.8) | 10(29.4) | 21(61.8) |
| 17. I believe that a female has the right to terminate a pregnancy. | Junior | 3(7) | 3(7) | 12(27.9) | 13(30.2) | 12(27.9) | 0.11 |
| Senior | 0(0) | 1(2.9) | 5(14.70 | 10(29.4) | 18(52.90 |

**Discussion:**

Based on the results of the this study, final year students had more positive attitude towards abortion, but generally few number of students completely agreed or agreed voluntary abortion. In the study of [Hagen](http://www.ncbi.nlm.nih.gov/pubmed?term=Hagen%20GH%5BAuthor%5D&cauthor=true&cauthor_uid=21946594) et al., (2012) performed in Norway with the aim of determining the attitude of first and last year students towards abortion and the level of satisfaction of the students from abortion trainings, the results indicated that fourth and fifth year students year students were more liberal (abortion on demand) than first year students (18). In the study of Wheeler et al. (2012), advanced medical students were more likely to support abortion provision in comparison with other groups, which is consistent with the results of the present study. Other results from the [Hagen](http://www.ncbi.nlm.nih.gov/pubmed?term=Hagen%20GH%5BAuthor%5D&cauthor=true&cauthor_uid=21946594) et al., (2012) indicated that 87.5% of students agree with abortion on demand (16,18) that is not consistent with the findings of the present study that could reflect differences in personal beliefs, laws, educational experiences of the students and also dependence of attitude towards abortion on cultural, professional, religious beliefs and health systems of different countries.

In the present research, most of the students completely agree or agree that "An abortion is indicated if a female’s own health is endangered by the pregnancy". In this regard, the results of the study of Olaitan (2011) showed that students support abortion when it is on health condition of either the mother or fetus (19).

The results of the study of Rodríguez-Calvo et al., (2013) regarding the intentions of the students to participate in VIP[[1]](#footnote-1) showed that their intention is influenced by mother's pregnancy conditions, so that in cases such as pregnancy because of rape, threatening mother's life, threatening mothers' health and serious illness or disability in fetus, high intention to participate had been reported (15) that is in line with the results of the present research.

Other results by Rodríguez-Calvo et al. (2012) showed that the majority of students stated that the father of unborn fetus should not intervene in women decision making for termination of pregnancy (15). Regarding this issue, the results of the present study showed that most students completely agreed or agreed that "The male responsible for the pregnancy should be included in the decision to terminate the pregnancy", while according to the Iranian laws, there is no need for husbands' satisfaction of women's decision to terminate pregnancy, so authorities of midwifery education shall make sure that midwifery students have understood their responsibilities regarding abortion, without considering their personal attitudes and it is suggested that suitable educations shall be provided in this field (16). It is shown that despite legality of elective abortion, medical science students refuse participation in abortion based on their ethics and religious beliefs and this can affect the access to VIP, so it is necessary to solve the contrast between the patient and values of health care providers. (15).

In the study of [Hagen](http://www.ncbi.nlm.nih.gov/pubmed?term=Hagen%20GH%5BAuthor%5D&cauthor=true&cauthor_uid=21946594) et al., (2012) also most of the students agreed that despite legality of elective abortion, they must have the right to avoid participation in abortion based on their ethical and religious beliefs (18). What did this study show?

In general, abortion is a topic that sometimes even discussions and exchanges of views around that disappoints medical science students from reaching a satisfactory and appropriate agreement, and making decisions in this regard is one of the major issues of medical ethics and the rate of participation of people in providing abortion services is affected by their views towards abortion.

According to therapeutic abortion law in Iran, therapeutic abortion is legal subject to authoritative diagnosis of three specialists as well as confirmation of the fetal or maternal diseases by the forensic medicine before the soul is blown (before four months) and with mothers' satisfaction. The cases in which abortion is not forbidden include illness of the fetus due to mental retardation or birth defect, which is associated with difficulty for mothers as well as any maternal illness that threatens the survival of mother. Those who do not obey this law, will be sentenced to the penalties prescribed in the Islamic penal code (20, 21). But since the attitudes of medical science students has an important role in access to abortion and also decision making regarding abortion (22, 15), it seems that except in the cases mentioned in the single article of the abortion law, the positive attitude of the medical science students could influence their practice towards the abortion in their clients. So with implementing appropriate educational programs could alter the students' attitude positively towards abortion. So that they will prevent from secret and underground abortions on one hand and providing the facilities for legal abortion to benefit from the relevant services on the other hand.

**Conclusion:**

Through gaining a general overview of the status of students' attitude regarding legal and human rights aspects of abortion, we can provide proper suggestions considering religious, cultural and legal backgrounds and plan proper interventions based on the attitude of the students in matters related to abortion in legal and human rights aspects. In addition, the results of this survey is a suitable guide for programmers and planners of research subject related areas to plan for modifying students' attitude considering the conditions in the cultural context of Iran. Limitations of the study?

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