



RESEARCH ARTICLE



Knowledge and attitude towards abortion among women in Afghanistan

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Background: Abortion as the termination of pregnancy prior to 20 weeks of gestation or a fetus born weighing less than 500g. The purpose of this study is to assess the knowledge and attitude of women on abortion in Herat city of Afghanistan. This cross-sectional study also serves to fill up the gap of the scarcity of data on abortion.

Methods: This cross-sectional study was conducted among women aged over 18 years old from over the 15 districts of Herat city of Afghanistan during 25th March 2021 to 1st June 2021. A total of 419 women participated in this study.

Results: 30.3% of them were aged between 18-24 years old. 24.1% of the participants aged between 25-34 years old. 78.8% of the participants were married and 35.8% of the participants were Pashtuns. 41.5% of them heard about safe abortion methods. Only 23.4% of the participants had a good knowledge score on abortion. Good knowledge on abortion among participants were significantly associated with their ethnicity, educational level, father's knowledge level, mother's knowledge level, and economic status.

Conclusion: A comprehensive campaign on safe abortion covering all the ethical, religious, constitutional, and scientific domains should be considered by the ministry of Public Health. It is recommended that the ministry of education of Afghanistan consider organizing trainings on safe abortion for high school male and female students.

Introduction

The World Health Organization (WHO) defines abortion as the termination of pregnancy prior to 20

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weeks of gestation or a fetus born weighing less than 500g. However, the definition varies greatly and is affected by state laws (1).

According to WHO, abortion is broadly classified as safe and unsafe, while unsafe abortion being further classified as less safe and least safe (2). Abortion is safe when it is carried out by skilled personnel and using a method that is recommended by the WHO and is appropriate for the duration of the pregnancy. Unsafe abortion on the other hand is carried out by an individual lacking the necessary skills and/or in an environment that does not conform to the minimal medical standards.

Abortion is a widespread global issue that elicits different reactions underpinned by religion, culture, laws of the land, and psychosocial factors. Women's knowledge and attitude on abortion influence their access to reproductive health services. Studies have shown that women's knowledge of abortion is a predictor of whether they may seek to procure a safe abortion (3).

There is a lot of disparity in policies and laws about induced abortion. In developing countries like Afghanistan, Sierra Leone, Lao, Nigeria, and Myanmar, the abortion laws allow the induced abortions only at the time of emergency or life-threatening conditions. This is in contrast to developed countries like the USA, Italy, Canada, etc where a woman can have a legal abortion for a variety of reasons including her medical or mental health, rape, fetal impairments, or financial hardship (4).

A variety of factors influence a woman's decision-making process to perform an abortion. Individual factors include; marital status, being a victim of rape or incest, education level, and financial independence. At an interpersonal level, these factors include support from parents and support from one's partner. Religion, social norms, stigma, and autonomy within the society are the societal determinants of the decision-making process. At the organizational level; abortion laws, the health care system, sexuality education influences the abortion decision-making process (5).

Approximately 73.3 million abortions occurred annually between 2015 and 2019 all over the world and one-third of these cases were carried out in the least safe or dangerous conditions. About 7 million women in developing countries are admitted to hospitals due to unsafe abortion, some of which end in death (6). Although safe abortion is a very essential part of reproductive health care, its access is influenced by women's knowledge on abortion, their awareness of the law, accessibility of safe abortion services, and sociocultural pressures (7).

Abortion stigma is a major drawback for women seeking safe abortion services and the clinicians offering the services. Healthcare professionals offering abortion services are also stigmatized by colleagues and this becomes an obstacle to speaking openly about their work and full participation within their professional circles. Stigma can be classified into three at the individual level: perceived stigma, experienced stigma, and internalized stigma. Perceived stigma refers to ideas that others may have if one's abortion experience is made public. Experienced stigma is the actual acts of discrimination and harassment by others whereas internalized stigma is the materialization of perceived and experienced stigma in feelings of guilt, shame, anxiety, and other negative feelings (8).

Post-abortion care services have been considered to play an important role in decreasing morbidity and mortality from unsafe abortion as well as implementing contraceptive methods to avoid unwanted pregnancies in the future. Many countries still lack quality post-abortion care services and this is attributed to the fact that these countries have strict abortion laws, stigma among the women who perform abortions, negative attitude of healthcare providers towards induced abortion, and lack of sufficient health care services (9).

Afghanistan is one of the countries with the highest mortality rates in South Asia. The law of Afghanistan does not allow induced abortion until or unless it is performed to save the life of women. Also, due to social, economic, and geographical conditions, women have lesser access to post-abortion care. In Afghanistan, the Ministry of Public Health (MoPH) has

designated MVA (Manual Vacuum Aspiration) treatment for incomplete abortion as a vital component of basic emergency obstetric and infant care but data about the implementation of post-abortion care is very scarce (10).

The purpose of this study is to assess the knowledge and attitude of women on abortion in Herat city of Afghanistan.

This cross-sectional study also serves to fill up the gap of the scarcity of data on abortion.

Materials and Methods

This cross-sectional study was conducted among women between 18 to 80 years old on the 15 districts of Herat city of Afghanistan during 25th March 2021 to 1st June 2021. Data was collected from 419 participants.

Participants of this study consisted women over 18 years old from Herat province of Afghanistan. Only participants who were willing to continue to answer all the questions were included in study result. Non-volunteers and healthcare workers were excluded from this study.

In order to assess girls and women knowledge and attitude on abortion among general population of Herat province, we developed a questionnaire containing 30 items in three sections in Dari language. Dari language is one of the national languages and is one of the most used language among population of Herat province (11).

A group of 3 female medical students was trained for two hours in one session on how to ask the items of the questionnaire so that they can interact with participants and demonstrate the study goal and take a consent letter from them. Data was collected from 15 district of Herat city utilizing the Convenience sampling method.

The first section of the questionnaire included the 10 items to get the socio-demographic information of the participants. The items were: Age, Marital status, Ethnicity, Educational level, Husband educational level, Father's educational level, Mother's

educational level, Economic status, Occupation, and presence of chronic disease.

The second section contained 8 items to get information related to the knowledge of the participant on abortion. The third section contained 12 items to get information related to the attitude of the participants on abortion. The participants' knowledge score ranged from 0 to 8. A knowledge score of 4 or less was considered as poor knowledge on abortion, and a knowledge score of more than 4 to 8 was considered as good knowledge on abortion.

The participants' attitude score ranged from 0 to 9. An attitude score of 0 to 4 was considered as poor attitude, and an attitude score of 5 or higher was considered as good attitude score.

The collected data was entered into IBM SPSS version 24.0 software for windows. Categorical variables are presented in numbers (N) and percentages (%). The Chi-square test was used to observe the difference between categorical variables. A-value was considered as 0.05.

Ethical approval was obtained from the AMSA Medical Research Center Ethical Committee on 10th March 2021.

Result

Four hundred nineteen female participants were enrolled in this study. 30.3% of them were aged between 18-24 years old. 24.1% of the participants aged between 25-34 years old. 11.2% of the participants aged over 54 years old. 78.8% of the participants were married and 6.7% of them were widow. 35.8% of the participants were Pashtuns and 38.7% of them were Tajiks. 54.0% of the participants were illiterate and 22.7% of them were university student or graduated from university. While 38.9% of the participants' husbands were illiterate. 60.4% of the participants' fathers were illiterate. 79.2% of the participants' mothers were illiterate. 78.8% of the participants had a middle-income economic status. 75.7% of the participants' occupation was housework. 6.7% of the participants had a chronic disease. **(Table 1)**

Of all the participants, 41.5% of them heard about safe abortion methods. 20.8% of the participants' primary source of information was the health organizations or health service providers they refer to. 38.7% of the participants replied that the safe abortion services are provided in governmental hospitals only. 25.8% of the participants said that they

don't know if the safe abortion can prevent future pregnancy problems. 42.7% of the participants did not know if Afghanistan has any regulation on abortion. Only 23.4% of the participants had a good knowledge on abortion. **(Table 2)**

Table 1: Characteristics of participants (Herat-2021)

Characteristic	Category	N	(%)
Age group	18-24 years	127	30.3
	25-34 years	101	24.1
	35-44 years	74	17.7
	45-54 years	70	16.7
	>54 years	47	11.2
Marital status	Single	61	14.5
	Married	330	78.8
	Widow	28	6.7
Ethnicity	Pashtun	150	35.8
	Tajik	162	38.7
	Other	107	25.5
Educational level	Illiterate	227	54.2
	Primary school	26	6.2
	Secondary school	32	7.6
	High school	39	9.3
	University	95	22.7
Husband's educational level	Illiterate	163	38.9
	Primary school	57	13.6
	Secondary school	44	10.5
	High school	52	12.4
	University	42	10.0
Father's educational level	Illiterate	253	60.4
	Primary school	50	11.9
	Secondary school	38	9.1
	High school	40	9.5
	University	38	9.1
Mother's educational level	Illiterate	332	79.2
	Primary school	27	6.4
	Secondary school	31	7.4
	High school	15	3.7
	University	14	3.3
Economic status	High income	11	2.6
	Medium income	330	78.8
	Low income	78	18.6
Occupation	Employed	32	7.6
	Looking for a Job	58	13.8
	Housework	317	75.7
	Other	12	2.9
Presence of chronic disease	Yes	28	6.7
	No	391	93.3
Total		419	100.0

Table 2: Participants knowledge on abortion (Herat-2021)

Variables	Category	N	(%)
Have you ever heard about safe abortion methods	Yes	174	41.5
	No	245	58.5
What is your source of Information on abortion	Health organizations/providers	87	20.8
	University	9	2.1
	Multimedia	10	2.4
	Family/Friends	77	18.4
	Others	10	2.4
	None	226	53.9
Where the safe abortion services are provided	Government hospital	162	38.7
	Personal clinics	45	10.7
	Doctors checkup rooms	22	5.3
	Home	41	9.8
	All of them	19	4.5
	I don't know	130	31.0
Can safe abortion prevent future pregnancy problems	Yes	108	25.8
	No	143	34.1
	Don't know	168	40.1
What is the best time for safe abortion	In the first trimester	237	56.6
	All the time during pregnancy	29	6.9
	I don't know	153	36.5
Is unsafe abortion a serious problem in the society	Yes	189	45.1
	No	70	16.7
	Don't know	160	38.2
Does Afghanistan have any regulation on abortion	Yes	57	13.6
	No	183	43.7
	Don't know	179	42.7
For what reasons abortion in Afghanistan is legal	Not legal at all	27	6.5
	Abortion is the result of rape	13	3.1
	Mother or baby's in danger	51	12.2
	For women with physical or mental disabilities	6	1.4
	Women who are not physically or mentally ready to have child	1	.2
	Families with bad economic status	10	2.4
I don't know	311	74.2	
Knowledge score	Good	98	23.4
	Poor	321	76.6
Total		419	100.0

91.4% of the participants said the abortion related topic should not be discussed in the family in front of everyone. 74.0% of the participants were not agree

that the safe abortion services should be legal and accessible for everyone. 95.0% of the participants said that abortion using pill is better than surgery. (Table 3)

Table 3: Participants attitude towards abortion (Herat-2021)

Variable	Category	N	(%)
It is not a sin willing to abort the child for and should be done if the mother's health is in danger	Agree	156	37.2
	Not agree	263	62.8
It can be discussed in the family in front of everyone	Agree	36	8.6
	Not agree	383	91.4
The safe abortion services should be legal and accessible for everyone	Agree	109	26.0
	Not agree	310	74.0
Selective abortion should be legal and accessible for everyone	Agree	139	33.2
	Not agree	280	66.8
If a women under 18 years old decide to abort her child, the decision should be respected and act upon it	Agree	77	18.4
	Not agree	342	81.6
If a women has unwanted pregnancy or pregnancy is the result of rape, the abortion request should be accepted and act upon it	Agree	171	40.8
	Not agree	248	59.2

Table 3 (continued)

Variable	Category	N	(%)
Abortion is the right of the parents, if they both want, pregnancy should be terminated	Agree	150	35.8
	Not agree	269	64.2
Safe abortion services should be legally accessible for everyone in health centers and hospitals	Agree	243	58.0
	Not agree	176	42.0
Pill abortion is better than surgery abortion to terminate pregnancy	Agree	398	95.0
	Not agree	21	5.0
Attitude	Good	129	30.8
	Poor	290	69.2
Total		419	100.0

Two thirds of the participants who were 18 to 24 years old, had poor knowledge on abortion (68.5%). Almost one third of the participants with a university education level had good knowledge on abortion (30.5%). Good knowledge on abortion among

participants were significantly associated with their ethnicity, educational level, father's knowledge level, mother's knowledge level, and economic status. **(Table 4)**

Table 4: Association of participants socio-demographic characteristics with their knowledge on abortion

Characteristic	Category	Knowledge		p-value
		Poor – N (%)	Good – N (%)	
Age group	18-24 years	87 (68.5)	40 (31.5)	.058
	25-34 years	79 (78.2)	22 (21.8)	
	35-44 years	56 (75.7)	18 (24.3)	
	45-54 years	60 (85.7)	10 (14.3)	
	>54 years	39 (83.0)	8 (17.0)	
Marital status	Single	47 (77.0)	14 (23)	.962
	Married	252 (76.4)	78 (23.6)	
	Widow	22 (78.6)	6 (21.4)	
Ethnicity	Pashtun	106 (70.7)	44 (29.3)	.041
	Tajik	134 (82.7)	28 (17.3)	
	Other	81 (75.7)	26 (24.3)	
Educational level	Illiterate	196 (86.3)	31 (13.7)	<.001
	Primary school	18 (69.2)	8 (30.8)	
	Secondary school	22 (68.8)	10 (31.3)	
	High school	19 (48.7)	20 (51.3)	
	University	66 (69.5)	29 (30.5)	
Husband's educational level	Illiterate	131 (80.4)	32 (19.6)	.089
	Primary school	47 (82.5)	10 (17.5)	
	Secondary school	33 (75.0)	11 (25.0)	
	High school	33 (63.5)	19 (36.5)	
	University	30 (71.4)	12 (28.6)	
Father's educational level	Illiterate	204 (80.6)	49 (19.4)	.007
	Primary school	33 (66.0)	17 (34.0)	
	Secondary school	23 (60.5)	15 (39.5)	
	High school	28 (70.0)	12 (30)	
	University	33 (86.8)	5 (13.2)	
Mother's educational level	Illiterate	265 (79.8)	67 (20.2)	.027
	Primary school	19 (70.4)	8 (29.6)	
	Secondary school	18 (58.1)	13 (41.9)	
	High school	9 (60.0)	6 (40.0)	
	University	10 (71.4)	4 (28.6)	
Economic status	High income	3 (27.3)	8 (72.7)	<.001
	Medium income	252 (76.4)	78 (23.6)	
	Low income	66 (84.6)	12 (15.4)	

Table 4 (continued)

Characteristic	Category	Knowledge		p-value
		Poor – N (%)	Good – N (%)	
Occupation	Employed	20 (62.5)	12 (37.5)	.165
	Looking for a Job	42 (72.4)	16 (27.6)	
	Housework	249 (78.5)	68 (21.5)	
	Other	10 (83.3)	2 (16.7)	
Total		321 (76.6)	98 (23.4)	

Almost half of the participants' attitude towards abortion who were between 18 to 24 years old, was found to be poor (43.3%). One-tenth of the participants' attitude toward abortion who were widow, was found to be poor (89.4%). Age group,

marital status, educational level, husband's educational level, father's educational level, mother's educational level, economic status, and occupation was found to be associated with the attitude of participants toward abortion. **(Table 5)**

Table 5: Association of participants socio-demographic characteristics with their attitude on abortion

Characteristic	Category	Attitude		p-value
		Poor – N (%)	Good – N (%)	
Age group	18-24 years	55 (43.3)	72 (56.7)	<.001
	25-34 years	71 (70.3)	30 (29.7)	
	35-44 years	63 (85.1)	11 (14.9)	
	45-54 years	59 (84.3)	11 (15.7)	
	>54 years	42 (89.4)	5 (10.6)	
Marital status	Single	27 (44.3)	34 (55.7)	<.001
	Married	238 (72.1)	92 (27.9)	
	Widow	25 (89.3)	3 (10.7)	
Ethnicity	Pashtun	113 (75.3)	37 (24.7)	.080
	Tajik	103 (63.6)	59 (36.4)	
	Other	74 (69.2)	33 (30.8)	
Educational level	Illiterate	194 (85.5)	33 (14.5)	<.001
	Primary school	20 (76.9)	6 (23.1)	
	Secondary school	20 (62.5)	12 (37.5)	
	High school	20 (51.3)	19 (48.7)	
	University	36 (37.9)	59 (62.1)	
Husband's educational level	Illiterate	137 (84.0)	26 (16.0)	<.001
	Primary school	43 (75.4)	14 (24.6)	
	Secondary school	32 (72.7)	12 (27.3)	
	High school	26 (50.0)	26 (50.0)	
	University	25 (59.5)	17 (40.5)	
Father's educational level	Illiterate	208 (82.2)	45 (17.8)	<.001
	Primary school	29 (58.0)	21 (42.0)	
	Secondary school	20 (52.6)	18 (47.4)	
	High school	16 (40.0)	24 (60.0)	
	University	17 (44.7)	21 (55.3)	
Mother's educational level	Illiterate	251 (75.6)	81 (24.4)	<.001
	Primary school	11 (40.7)	16 (59.3)	
	Secondary school	12 (38.7)	19 (61.3)	
	High school	6 (40.0)	9 (60.0)	
	University	10 (71.4)	4 (28.6)	
Economic status	High income	7 (63.6)	4 (36.4)	<.001
	Medium income	211 (63.9)	119 (36.1)	
	Low income	72 (92.3)	6 (7.7)	
Occupation	Employed	18 (56.3)	14 (43.8)	<.001
	Looking for a Job	27 (46.6)	31 (53.4)	
	Housework	243 (76.7)	74 (23.3)	
	Other	2 (16.7)	10 (83.3)	
Total		290 (69.2)	129 (30.8)	

Discussion

This is one of the few studies carried out in Afghanistan that talks about women and abortion. To the best of our knowledge, this study is the first of its kind which looks at the knowledge, attitude and practice of women on abortion in Herat province in Afghanistan. Afghanistan is the one of the Islamic countries where abortion is illegal unless it's done to save the life of mother (10).

In our study we found that 23.4% of women have overall good knowledge about abortion and abortion laws whereas 73.7% of women did not have knowledge about the legal conditions under which abortion is allowed in Afghanistan. Studies conducted in various countries with almost the same demographic characteristics show different results. The studies in Iran about knowledge of women shows that 68% of women have knowledge about abortion laws, 49% of them know about crime and wergild for self-induced abortion and for illegal providers (12). The results vary when studies from non-Islamic LMICs (low-and-middle income countries) are considered. A study conducted in Bihar and Jharkhand in India shows that 41% of women know about the legality of abortion while few of them know about the abortion methods. In addition, the study conducted in Brazil shows that only 47% of people have correct knowledge about abortion (13). Similar studies conducted in Zambia, South Africa, Ethiopia and Mexico found that 16%, 32%, 45% and 48% respectively of women have the correct knowledge about legality of abortion laws in their country (3, 14-15).

In addition to this, the study conducted in developed countries like USA on women with low-income showed that only 25% know about the abortions laws whereas 67% of women have the correct knowledge of age limit for abortion (16).

This study evaluated the attitude of women towards abortion. According to the study, 62.8% of the women think that abortion is a sin even if there is danger to the mother's health and 74% of them think that it shouldn't be legal and accessible to everyone. Our results are supported by various studies conducted in the other Islamic countries. The study conducted in Saudi Arabia on 32 families about the attitudes on prenatal diagnosis and abortion found that 28 out of 32 families rejected the idea of abortion at first instance (17). In another study conducted in Palestinian

territories, most of the women considered abortion as Haram (religiously forbidden) (18). In another study about the perception of medical and health sciences students in Jordan, 53.1% of the students considered abortion a murder (19). The number was really high in the study conducted in Turkey where abortion laws are more liberal with no restriction on abortion without reason (20). It was found that 80.7% of the respondents believed that abortion is a sin and 74.9% of them felt that abortion, a kind of murder (21).

Additionally, given that Turkey has a unique position owing to its blend of Islamic laws on abortion and secular laws from the Western society, it approves abortion on demand to the 10th week of gestation. However, therapeutic abortion can still be performed beyond 10 weeks of gestation to save the life of the mother and avoid serious complications of the fetus upon the decision of a committee of physicians. This is in contrast to the concept of the Turkish Presidency of Religious Affairs on abortion that perceives abortion on demand as a sin and not a right. This greatly affects the attitude of women and healthcare providers towards abortion in Turkey (22). Also the study conducted in Iran on midwives shows that 68.7% of them have extremely weak to moderate attitude towards the abortion (23). In contrast, the studies conducted in USA about the attitudes of abortion shows that 80% of women support that abortion should be legalized in all situations, which differs much from our results (24). Another study in the USA having a large sample size shows that only 4.1% of participants were against the legalization of abortion (25).

We also found that 59.2% of women think that abortion should not be done even if the pregnancy is the result of rape. There is a difference in the attitude related to this among various Islamic countries. A study conducted in Turkey shows that only 28.9% of women in study think that abortion is a sin if it is due to rape (21). A similar study in Palestine showed that 88.3% of women felt that it is justified if women undergo abortion due to rape (26).

58% of the respondents were of the opinion that safe abortion services should be made legally accessible to everyone in health centers whereas 42% were of contrary opinion. In another study carried out in Ethiopia, 56% of the women preferred that abortion on demand should be legalized while 41.9% preferred it not to be legalized, even though Ethiopia amended a

law that permits abortion under certain special circumstances. This points out a possibility that attitude and lack of knowledge is a hindrance for safe abortion use (27).

91.45% of the women perceived abortion as a subject that should not be discussed in front of everyone whereas 8.6% thought it should be discussed in front of everyone. This points towards the stigma associated with abortion. According to a study carried out in Uruguay, decriminalization of abortion contributed towards the reduction of abortion stigma (28).

A survey found that citizens of the Asian Islamic states and North Africa are less likely to approve abortion than those that have grown up in Western Europe and North America (29).

In the study, association of age and knowledge about abortion was found to be significant. We found percentage of people having good knowledge of abortion in 18-24, 25-34, 35-44, 45-54 and >54-year age groups are 31.5%, 21.8%, 24.3%, 14.3%, and 17.0% respectively. The results have been supported by various studies. Studies conducted in Iran also show no significant association of age and knowledge about abortion and its laws (12). However, a study conducted in Lagos among female students have also found no significant association between knowledge on abortion and age group (30). Also no association was found in the study conducted among the females in Nepal (31). However, there are studies that have found a significant association of knowledge and age in a study conducted in Ethiopia among the college students found a significant association of age and knowledge with age group of >25 have more knowledge about abortion (7).

In our study, there was a significant correlation between ethnicity and knowledge. We found that 29.3% of Pashtuns have good knowledge about the abortion whereas 17.3% of Tajiks have good knowledge about abortion. We haven't found any study which correlates ethnicity and knowledge of abortion.

We found a significant association between the education of the participant, her mother, her father and good knowledge on abortion. The more educated an individual, her father, and mother is, the more knowledge they have about abortion. A study conducted in Iran also shows that there is significant

correlation between education and knowledge about abortion and its laws (12). But the study conducted in Iran on midwives shows no significant correlation between Education levels and knowledge about abortion (23). In another study conducted in Mexico among youths also shows that there is significant correlation between the knowledge of abortion and levels of education (32).

Conclusion

A comprehensive campaign on safe abortion covering all the ethical, religious, constitutional, and scientific domains should be considered by the ministry of Public Health. It is recommended that the ministry of education of Afghanistan consider organizing trainings on safe abortion for high school male and female students.

Author contribution

All the authors made a substantial contribution to conception and design, data collection and data entry, data analysis and their interpretation, drafting the article and giving the final approval of the version to be published, and agreed to be accountable for all aspects of work.

Consent for publication

A detailed description of the study was explained during the initial contact with the participants prior to their participants. A written consent letter was obtained from all the participants involved in this study.

Conflict of interest

The authors declare no conflict of interest.

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