

Attitudes of Married Women Towards Induced Abortion in Manisa

Manisa'daki Evli Kadınların İsteyerek Düşüğe Karşı Tutumları

© Dilek Özmen¹, © Aynur Çakmakçı Çetinkaya¹, © Seval Cambaz Ulaş², © Nursen Bolsoy²

¹Manisa Celal Bayar University Health Sciences Faculty, Department of Public Health Nursing, Manisa, Turkey

²Manisa Celal Bayar University Health Sciences Faculty, Department of Midwifery, Manisa, Turkey

ABSTRACT

Introduction: This study was aimed at revealing attitudes of married women towards induced abortion.

Methods: This study was descriptive and the study population included 64.382 married women aged 15-49 years in the city of Manisa. Three hundred and eighty-three women were selected from 11 “family health care centers” by proportional stratified sampling. The data were collected using “Socio-demographic Information Form”, “Attitude Inventory of Induced Abortion” and “Knowledge of Induced Abortion Form”.

Results: The participants had the highest rates of agreement with the items “induced abortion is a sin” and “induced abortion is a murder”. Multivariate analyses showed that women at an older age, women with higher education, women having a nuclear family, women with fewer living children, women with a previous induced abortion, women using a modern family planning method, women defining themselves as nullifidians or who did not fulfil religious rituals, and women having higher scores for knowledge of induced abortion had a more positive attitude towards induced abortion.

Conclusion: The results of the study showed that the attitudes of women towards induced abortion were affected by religion, but that they had the enough flexibility to have a positive attitude when a medical or social necessity arose.

Keywords: Abortion, medical abortion, women

ÖZ

Amaç: Bu araştırma evli kadınların isteyerek düşük konusundaki tutumlarının incelenmesi amacıyla planlanmıştır.

Yöntemler: Araştırma tanımlayıcı tiptedir ve araştırmanın evrenini Manisa kent merkezindeki 15-49 yaş evli 64,382 kadın oluşturmaktadır. Manisa kent merkezinde hizmet veren 11 adet aile sağlığı merkezinden orantılı tabakalama yöntemi ile 383 evli kadına ulaşılmıştır. Araştırmanın verileri “Sosyo-demografik Bilgi Formu”, “İsteyerek Düşüğe Yönelik Tutum Envanteri” ve “İsteyerek Düşüğe Yönelik Bilgi Formu” ile toplanmıştır.

Bulgular: Araştırmada kadınların isteyerek düşüğe yönelik tutum ifadelerinden en yüksek katılımı; “isteyerek düşük yaptırmak günahdır” “isteyerek düşük bir cinayettir” ifadelerine göstermişlerdir. Yapılan çok değişkenli analizlerde; yaşı büyük, daha uzun süreli eğitim almış, çekirdek aile yapısına sahip, yaşayan çocuk sayısı az olan, daha önce isteyerek düşük yapan, modern aile planlaması yöntemi kullanan, kendini inançsız ya da dini inançları yerine getirmeyen biri olarak tanımlayan ve isteyerek düşük konusunda bilgi puanı yüksek olan kadınların isteyerek düşüğe yönelik tutumlarının daha olumlu olduğu görülmüştür.

Sonuç: Araştırma sonucunda kadınların isteyerek düşüğe yönelik tutumlarının dinden etkilendiği, fakat tıbbi ve toplumsal bir gereklilik ortaya çıktığında ise isteyerek düşüğe olumlu bakabilecek esnekliğe sahip oldukları düşünülmektedir

Anahtar Kelimeler: Düşük, medikal düşük, kadın

Introduction

Induced abortion is an important problem associated with reproductive health in all countries, especially in developing countries. According to the World Health Organization, 210 million women become pregnant each year and 42 million of these pregnancies are terminated with abortion (1). Induced abortion is an indicator of the fact that family planning needs cannot be fulfilled in developing countries (2). Turkey Demographic and

Health Survey (2013) revealed that 5% of married women had induced abortion (3). That is, the rate of unfulfilled family planning needs is 5% in Turkey. Induced abortion is one of the most important and debatable issues related to reproductive health. Regulations made under the influence of religious and social values usually cause familial, religious and social pressure on women (4). Using family planning methods and having induced abortion are regulated by laws around the world. While



Address for Correspondence/Yazışma Adresi: Seval Cambaz Ulaş MD, Manisa Celal Bayar University Health Sciences Faculty, Department of Midwifery, Manisa, Turkey

Phone: +90 506 220 12 02 **E-mail:** seval.cambaz@hotmail.com **ORCID ID:** orcid.org/0000-0002-1580-850X

Cite this article as/Atıf: Özmen D, Çakmakçı Çetinkaya A, Cambaz Ulaş S, Bolsoy N. Attitudes of Married Women Towards Induced Abortion in Manisa, Turkey. İstanbul Med J 2019; 20(4): 330-7.

Received/Geliş Tarihi: 11.09.2018
Accepted/Kabul Tarihi: 16.04.2019

induced abortion is legal in some countries, it is only permitted for medical, psychological and social reasons in other countries (5). With the adoption of the law in 1983, induced abortion was taken under state control and the number of induced abortions has considerably decreased in Turkey (6). Since induced abortion is performed under safe conditions after the law came into force, the maternal mortality rate due to induced abortion has decreased from 50% to 2% (7). Although many people are in favour of the idea that induced abortion is necessary in some occasions, religious and political approaches contradict individual tendencies, and moral and religious debates over induced abortion even overshadow health-related aspects of the issue (2). It is really difficult for women to decide to have induced abortion and their decisions are influenced by their religious beliefs, personal values and attitudes of the society towards abortion. Induced abortion is an issue still debatable and upon which there is not an agreement in Turkey, where 99% of the population is Muslim. Although there have been numerous studies about attitudes towards induced abortion in the world (8-17), there is not a comprehensive study on the issue in Turkey.

The aim of this study was to reveal attitudes of the married women towards induced abortion and the variables likely to affect their attitudes.

Methods

Sample

This study had a descriptive design and the study population included 64.382 married women aged 15-49 years in the city of Manisa, Turkey. Based on a prevalence of 50% in the smallest sample, the size of which is unknown (5% of standard deviation and 95% of confidence interval), the study sample was calculated as 383. When the sample group was determined, the stratification of the family health care center (FHCC) regions as high, medium, and low socio-economic level was taken as the basis (based on the Manisa Provincial Health Directorate data). The numbers of the FHCCs were written on papers and 11 FHCCs were selected from each stratum via draw. Proportional stratified sampling was used and 383 women were contacted. Data were collected face-to-face from women who gave informed consent. Approval was obtained from Ethical Committee of Celal Bayar University Faculty of Medicine and the Health Directorate of Manisa (decision no: 5.1, date: 04.01.2012).

Three data collection tools were developed by the researchers in the light of the relevant literature: "Socio-demographic Information Form" composed of 15 questions, "Attitude Inventory of Induced Abortion" including 14 items and "Knowledge of Induced Abortion Form" including 12 questions. They were piloted on 10 women to test their understandability and practicality. Data collected during piloting the tools were excluded from the analysis. It took 10-15 minutes for the participants to complete all the tools.

Socio-demographic Information Form

It includes questions regarding age, education, income and perceived income, family type, place where participants lived the longest, perceived piety, number of pregnancies, number of living children, previous induced abortion, use of family planning methods, receiving

information about induced abortion, education and employment status of spouses and induced abortion status of relatives.

Attitude Inventory of Induced Abortion

It was developed by researchers to determine attitudes towards induced abortion. First, the researchers prepared a list of 30 items in the light of the literature. The list was sent to five experts specialized in the issue and they were requested to evaluate the items in terms of understandability, appropriateness and discriminativeness. In accordance with suggestions and recommendations of the experts, the items were revised and the number of the items was decreased to 14. Thus, the content validity of the inventory was achieved. Of the 14 items, six (1-6 items) were positive and eight (7-14 items) were negative statements. It is a Likert scale and the items were evaluated on a five-point scale: five points for "strongly agree", four points for "agree", three points for "neither agree nor disagree", two points for "disagree" and one point for "strongly disagree". Negative statements were scored in reverse order. The Cronbach alpha value of the inventory was 0.78. The questions of the inventory were prepared by the researchers based on the literature. Only reliability analysis (Cronbach alpha value and expert opinions) was performed in the study. Since the inventory was not designed as a scale, the validity analyzes were not performed.

The highest and the lowest scores to be obtained from the inventory were 70 and 14 points, respectively. High scores indicate a positive attitude towards induced abortion and low scores indicate a negative attitude.

Knowledge of Induced Abortion Form

It was developed by the researchers to evaluate the knowledge of the participants on induced abortion. The questions are about the definition of induced abortion, legal aspects, problems likely to arise after the procedure and consent of the spouse for the procedure. It includes 12 items and the scores are based on the number of correct answers. Each correct answer is scored as 1, and the lowest and the highest scores to be obtained are 0 and 12, respectively.

To evaluate perceived piety, a question that was taken from the study "religion, secularism and the veil in daily life survey" by KONDA was used (18).

Statistical Analysis

Obtained data were analyzed by SPSS 16.0. Data were expressed as mean, standart deviation, numbers and percentages. Chi-square test, independent Samples t-test, Mann-Whitney U test, variance analysis, correlation and multiple linear regression analysis were used where appropriate.

Results

The mean age of the participants was 31.28 ± 7.91 years. Of all participants, 53.3% were primary school graduates and dropouts of primary school and illiterate; 80.4% were unemployed; 40.9% were married to graduates, primary school graduates and dropouts of primary school and illiterate; 76.0% had a nuclear family; 76.2% had a perceived income equal to their expenses and 57.1% lived the longest

in Manisa. Seventy percent of women defined themselves as religious persons. Fifty point two percent of women were informed about induced abortion and the mean score for their knowledge of induced abortion was 6.97 ± 2.01 (minimum: 0, maximum: 11.00, median: 7.00). Eighty-two point two percent of the women were using a modern family planning method. Evaluation of reproductive status of women showed that the mean number of pregnancies was 2.13, the mean number of living children was 1.59 and 16.5% of women had at least one induced abortion (Table 1).

There was a higher degree of agreement with the idea that “induced abortion is a sin” and that “induced abortion is a murder”. The degree of agreement with the ideas that “women can have induced abortion if

pregnancy is life-threatening for the mother”, “if a pregnant woman is mentally ill” and “if a baby with a disability is likely to be born” was also high. Women had a higher rate of agreement with the item “induced abortion is interference with a woman’s body”. In addition, the rate of agreement with the idea that “if a woman has induced abortion, it should be kept secret” was high. The rate of agreement with the items “induced abortion is shameful” and “induced abortion should be banned” was low (Table 2).

Older women, women with higher education, employed women, women with a nuclear family, women with a perceived income higher than their expenses, women who lived in a city the longest, women defining themselves as nullifidians or who did not fulfil religious rituals, women

Table 1. Descriptive characteristics of participants

Characteristics	n	%	
Age 31.28±7.91 minimum: 16, maximum: 49, median: 30	16-25 years	106	27.7
	26-35 years	165	43.1
	36-45 years	88	23.0
	46 years or older	24	6.3
Education	Graduates and dropouts of primary school, illiterate	204	53.3
	Secondary school graduates	77	20.1
	High school graduates	67	17.5
	University graduates	35	9.1
Employment status	Employed	75	19.6
	Unemployed	308	80.4
Spouses' education*	Graduates and dropouts of primary school and illiterate	150	40.9
	Secondary school graduates	70	19.8
	High school graduates	103	29.1
	University graduates	36	10.2
Family	Nuclear	291	76.0
	Extended	80	20.9
	Broken	12	4.2
Perceived income	Lower than expenses	66	17.2
	Equal to expenses	292	76.2
	Higher than expenses	25	6.5
Insurance*	Yes	369	96.9
	No	13	3.1
Place where participants lived longest*	Village	71	18.7
	Town	87	22.9
	City	217	57.1
Self-definitions of religiosity*	Someone with no religious conviction	2	0.5
	Someone who does not believe in religious obligations	1	0.3
	Believer who does not fulfil religious obligations	87	22.7
	Religious person who strives to fulfil religious obligations	269	70.2
Number of pregnancies	2.13±1.60 minimum: 0, maximum: 12, median: 2		
	Number of living children		
Number of induced abortions	1.59±1.24 minimum: 0, maximum: 6, median: 2		
	0	320	83.5
	1	53	13.9
	2	9	2.3
	3	1	0.3

Table 1 continued

Using family planning methods*	Modern	282	81.9
	Conventional	61	17.7
	None	1	0.4
Induced abortion status of relatives*	Yes	200	53.1
	No	177	46.9
Receiving information about induced abortion*	Yes	188	49.8
	No	191	50.2
Scores for knowledge of induced abortion	6.97±2.01 minimum: 0, maximum: 11, median: 7		
Total		383	100

*Twenty-four women whose spouse died or who got divorced did not answer the question about the education level of the spouse, eight women did not answer the question about the place where they lived the longest, one woman did not answer the question about health insurance, one woman did not answer the question about religiosity, 39 women did not answer the question about using family planning methods, six women did not answer the question about induced abortion status of their relatives and four women did not answer the question about receiving information about induced abortion

Table 2. Mean scores for items in attitude inventory of induced abortion

Items	Mean ± SD
1. If pregnancy poses a threat to a mother's life, induced abortion can be carried out	3.81±1.05
2. Induced abortion can be performed if a mother is mentally ill	3.50±1.13
3. Induced abortion is an interference with a woman's body	3.36±1.18
4. Induced abortion should be performed if a baby with a disability is likely to be born	3.18±1.24
5. Induced abortion can be performed to terminate unwanted pregnancies	2.73±1.22
6. Induced abortion can be performed if the baby cannot not be cared for	2.66±1.22
7. Induced abortion should be banned	3.40±1.23
8. Whatever the circumstances are, induced abortion should never be performed	3.32±1.23
9. Induced abortion is shameful	3.27±1.21
10. If a woman has induced abortion, it should be kept secret.	3.07±1.21
11. Induced abortion can only be performed in cases of rapes	2.96±1.24
12. Induced abortion is unnecessary; God takes care of everybody	2.84±1.26
13. Induced abortion is a murder	2.37±1.24
14. Induced abortion is a sin	2.25±1.18

SD: standard deviation

with a previous induced abortion, women with a relative having a history of induced abortion, women using a modern family planning method, women with a higher number of children and women having higher scores for knowledge of induced abortion received significantly higher scores on Attitude Inventory of Induced Abortion ($p=0.001$) (Table 3).

Multivariate analyses showed that women at an older age, women with higher education, women with a nuclear family, women with fewer living children, women with a previous induced abortion, women using a modern family planning method, women defining themselves as nullifidians or who did not fulfil religious rituals, and women having high scores for knowledge of induced abortion had a more positive attitude towards induced abortion. Thirty-four percent of the variance in the scores for attitudes towards induced abortion could be explained by the number of living children, family types, age, previous induced abortion, using family planning methods, education, scores for knowledge of induced abortion and self-definitions of religiosity. Other variables should be considered to explain the rest of the variance ($R^2=0.34$, $p<0.05$) (Table 4).

Discussion

This study conducted to reveal women's attitudes towards induced abortion showed that the attitudes of women were contradictory, i.e. a negative attitude caused by religious beliefs and a positive attitude caused by their needs. The religious elements in the items caused women to exhibit a negative attitude towards induced abortion; on the other hand, medical and social needs enabled a positive attitude towards induced abortion. Although three-fourths of the women considered themselves as religious, their religious beliefs did not turn out to have a negative impact on their attitudes towards induced abortion as expected.

The item which reflects a positive attitude towards induced abortion and with which the women had a higher degree of agreement was "if the pregnancy poses a threat to the mother's life, induced abortion can be carried out", and this higher agreement is consistent with the literature (8-11,13,19-21).

Table 3. Distribution of scores on attitude inventory of induced abortion according to descriptive characteristics			
Descriptive characteristics (n)	Total X ± SD	t/f/X²	p
Age groups*			
30 yrs and young (203)	41.25±8.78	t=-3.21	p=0.001
Older than 30 yrs (180)	44.13±8.76		
Education levels**			
Illiterate+literate (55) a	38.32±7.35	f=19.99	p=0.000, a<b<c
Primary school graduates (224) b	41.80±8.49		
High school graduates and those having higher education levels (104) c	46.71±8.97		
Employment status			
Unemployed (308)	41.57±8.58	t=-4.74	p=0.000
Employed (75)	46.85±8.86		
Family			
Nuclear (288)	43.90±8.70	t=5.15	p=0.000
Extended+broken (95)	38.66±8.23		
Perceived income			
Lower than expenses (66) a	40.68±8.66	X ² =3.88	p=0.143
Equal to expenses (292) b	42.94±8.89		
Higher than expenses (25) c	43.76±8.88		
Place where one lived the longest**			
Village/small town (71) a	41.46±9.24	f=5.10	p=0.002, a=b<c
Town (87) b	40.48±9.03		
City (217) c	43.86±8.41		
Self-definitions of religiosity***			
Not believing any religions + not fulfilling religious duties (91) a	48.20±8.49	X ² =51.24	p=0.000, a>b=c
Attempting to fulfil religious duties (269) b	41.09±8.28		
Having religious beliefs and fulfilling religious duties (23) c	38.13±7.61		
Having had induced abortion			
Yes (63)	47.36±8.52	t=4.78	p=0.000
No (320)	41.66±8.65		
Having relatives with a history of induced abortion			
Yes (200)	43.71±8.37	t=2.36	p=0.018
No (177)	41.57±9.17		
Using family planning methods**			
Using modern family planning methods (282)	43.32±8.58	t=4.61	p=0.000
Using conventional methods or not using any methods (62)	37.66±9.40		
Number of living children	1.70±1.20 minimum: 0, maximum: 6, median: 2	r=-0.200	p=0.000
Scores for knowledge of induced abortion	6.97±2.01 minimum: 0 maximum: 11 median: 7	r=0.331	p=0.000

*Pearson correlation coefficient for age and total scores for the inventory r=0.124 p=0.015; **Posthoc test Tukeys b test; ***Posthoc test Mann-Whitney U test; ****Pearson correlation value: r

Evidence from both this study and other studies emphasizes maternal health. In addition, the mothers were found to have a more positive attitude towards induced abortion in cases of unwanted pregnancy, babies with disabilities and maternal mental illnesses, which is consistent with results of the studies by Dimoula et al. (8), Betts (9), Hill (10), Becker et al. (11), Esmer (19), Balakrishnan et al. (20), Palermo (21) and Geary et al. (22).

The most unfavourable attitude towards induced abortion was reflected in the women's responses to the items "induced abortion is a sin" and "induced abortion is a murder, which is comparable with the results of the studies by Baykan et al. (5), Dimoula et al. (8), Norris et al. (12), Vieira (13), Saka et al. (23), Serap (24) and Erol et al. (25). However, it was striking that although the women considered induced abortion as a sin or a murder, they tended to have a positive attitude to the issue when it was necessary.

Table 4. Stepwise multiple regression analysis for explanation of scores on attitude inventory of induced abortion

Scores for attitudes towards induced abortion* (n=383), R ² =0.34	β	p
Constant	-	0.000
Age (number)	0.170	0.003
Family type (nuclear family: 0 / extended family: 1)	-0.156	0.002
Number of children alive (number)	-0.246	0.000
Having had induced abortion (yes: 0 / no: 1)	-0.229	0.000
Using family planning methods** (modern family planning methods: 0 / conventional family planning methods: 1)	-0.135	0.006
Self-definitions of religiosity (being religious: 0 / not being religious or not fulfilling religious duties: 1)	0.111	0.021
Scores for knowledge of induced abortion (number)	0.193	0.000
Education (high school or higher education: 0 / primary school: 1)	-0.121	0.028

*The final single factor model was based on the significant variables age, number of children alive, education, employment, family type, place where one lived the longest, perceived religiosity, having induced abortion before, having a relative with a history of induced abortion, using family planning methods and scores for knowledge of induced abortion

A higher rate of agreement with the items “induced abortion is shameful” and “induced abortion should be kept secret” underlines the stigmatization of induced abortion. Norris et al. (12) and Moore et al. (26) also mentioned a stigma over induced abortion.

Although half of the women reported that they had been offered information about induced abortion, the results obtained from the responses to Knowledge of Induced Abortion Form showed that they did not have sufficient knowledge and needed training for it. Dimoula et al. (8) also revealed that women had insufficient knowledge of induced abortion.

Women over the age of 30 had a more favourable attitude towards induced abortion than those aged 30 and younger. Although there has been change in marriage age, Turkey is still a country where people get married at young ages. These couples have enough children at young ages as they planned (3). Therefore, it can be considered that older women do not want to have unwanted pregnancies and have a positive attitude towards induced abortion, which is congruent with the results of the studies by Balakrishnan et al. (20), Hollá (27) and Norup (28), Stricker and Danigelis (29), Esposito and Basow (30).

Women living in a nuclear family had a more positive attitude towards induced abortion than those living in an extended family. It may be that the women with an extended family were more dependent on traditions and customs and more conservative, but that those with a nuclear family could make their own decisions freely and had more opportunities to express their opinions (31).

The scores for attitudes towards induced abortion had an inverse linear relationship with the number of living children. Women with fewer living children were most likely to use modern family planning methods and want to have a small family. Balakrishnan et al. (20) and Remennick et al. (32) also showed that women with fewer children had a more favourable attitude towards induced abortion.

Women who had a previous induced abortion had a more positive attitude towards induced abortion than those who did not have induced abortion. This might have been due to the latter group of women’s lack of experience in induced abortion. Erol et al. (25), Esposito and Basow (30) and Hollis and Morris (33) also revealed that women who had

experienced induced abortion more frequently attempted to undergo this procedure than those who did not have such experience. However, it should be kept in mind that women who had induced abortion before might be using this procedure as a method of preventing pregnancy. In fact, the rate of induced abortion was 16.5% in this study, which is higher than the rate in Turkey (10%) (3). Therefore, women presenting for induced abortion should be informed about contraceptives and the contraceptives should be easily available to them.

Women using modern family planning methods had a more positive attitude towards induced abortion than those not using any family planning methods and those using conventional methods. In the literature, it has been noted that there is a direct relation between social status and access to and use of family planning methods (3,34,35). The two most important variables determining the social status of women are education and employment (36). In this study, we also found that women with higher education displayed a more positive attitude towards induced abortion. As a result, social status and determination to have children of women using a modern family planning method might affect women’s attitudes towards the issue (37).

Considering the processes of accepting and rejecting abortion since ancient times, all religious systems had different approaches and practices, and each system of beliefs has harboured different interpretations of abortion (38). Studies conducted on this issue so far have shown the effects of religious beliefs on induced abortion (9,14-17,19-21,28,32). In this study, which was conducted in Turkey where 99% of the population is Muslim, the women defining themselves as religious had a more negative attitude towards induced abortion, but their negative attitude disappeared in conditions such as possibility of negative effects on mothers’ and babies’ psychological and social health, and rapes.

As the scores for knowledge of induced abortion increased, the scores for attitudes towards the issue also increased, and there was a positive linear relationship between them. Knowledge on its own is not enough to change individuals’ attitudes; however, it can be one of the leading effects on changes. Rich background information allows individuals to evaluate issues from a wider perspective, which helps them to have more tolerant and favourable attitudes and behaviour (39). In this study,

women with higher scores for knowledge of induced abortion also had a more favourable attitude towards the issue, which is consistent with the results of the studies by Esposito and Basow (30) and Banerjee et al. (40).

Women with high school and higher education had a more favourable attitude towards induced abortion, which is congruent with evidence reported by Betts (9), Olaitan (14), Fawcett et al. (15), Bahr and Marcos (16), Roman and Lester (17), Esmer (19), Balakrishnan et al. (20), Palermo (21), Norup (28) and Remennick et al. (32). As the education level of women increases, they receive scientific, updated information from health institutions instead of family members and other people around them (3,37). In addition, as education levels increase, women become more autonomous and make decisions about their bodies. This may have a positive effect on women's attitudes towards induced abortion. However, women with lower education levels may have to give birth in cases of unwanted pregnancies due to various social, cultural and religious factors.

Study Limitations

Our study has some limitations. Data were collected from a sample of married women living in the city of Manisa, Turkey. Therefore, the findings represent only this population and cannot not be generalized to the general population. Failure to perform all methodological analyses of the inventory is another limitation of the study. Future qualitatively designed studies with larger samples are needed to confirm these findings.

Conclusion

The results of the study revealed that attitudes of the women towards induced abortion were affected by their religious beliefs, but that women were flexible enough to have a positive attitude towards the procedure in medical and social conditions. Although about half of the women noted that they received information about induced abortion, they had low scores for their knowledge, which suggests that the quality of education given should be questioned. The rate of women presenting for induced abortion indicates unfulfilled needs for family planning methods. For these reasons, couples should be informed about family planning methods and induced abortion by health institutions, and these services should be available to them. The results of the study revealed some variables affecting induced abortion; however, both qualitative studies and quantitative studies with larger sample sizes are needed to elucidate other factors likely to affect the issue.

Ethics Committee Approval: Approval was obtained from Ethical Committee of Celal Bayar University Faculty of Medicine and the Health Directorate of Manisa (decision no: 5.1, date: 04.01.2012).

Informed Consent: Informed consent was obtained from all participants included in the study.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept - D.Ö., A.Ç.Ç., S.C.U., N.B.; Design - D.Ö., A.Ç.Ç., S.C.U., N.B.; Supervision - D.Ö., A.Ç.Ç., S.C.U., N.B.; Data Collection and/or Processing - A.Ç.Ç., S.C.U., N.B.; Analysis and/or Interpretation - A.Ç.Ç., S.C.U., N.B.; Literature Search - D.Ö., N.B.; Writing Manuscript - D.Ö., A.Ç.Ç., S.C.U., N.B.; Critical Review - D.Ö., A.Ç.Ç., S.C.U., N.B.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support

References

1. World Health Organization. Abortion facts and figures 2011(cited 2014 june 5):3. Available from: <https://assets.prb.org/pdf11/abortion-facts-and-figures-2011.pdf>.
2. Öztürk H, Okçay H. İstenmeyen gebelikler ve istemli düşükler. *Aile ve Toplum* 2003; 2: 63-9.
3. Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, Türkiye nüfus ve sağlık araştırması ana raporu. Ankara; 2013.p.95-104.
4. Bozbeyoğlu AÇ. Doğurganlık kontrolünde rasyonelliğin sınırları: Türkiye kürtaj ve gebeliği önleyici yöntem kullanımı. *Fe Dergisi* 2011; 1: 24-37.
5. Baykan Z, Çetinkaya F, Naçar M, Poyrazoğlu S. 18-49 yaş evli kadınların istemli düşüğe bakış açıları 2012 (cited 2018 june 18). Available from: http://halksagligiokulu.org/anasayfa/components/com_booklibrary/ebooks/15.UHSK%20K%C4%B0TAP_14_10_12.pdf
6. 2827 Sayılı Nüfus Planlaması Hakkında Kanun, 27 Mayıs 1983 Tarihinde 18059 Sayılı Resmî Gazetede Yayınlanmıştır, Ankara; 1983.
7. Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, Ulusal anne ölümleri çalışması, 2005. Sağlık Bakanlığı Ana Çocuk Sağlığı ve Aile Planlaması Genel Müdürlüğü ve Avrupa Komisyonu Türkiye Delegasyonu, Ankara; 2006.
8. Dimoula Y, Iordani M, Konstantinou D, Kamenidou D, Zirilios K, Katsaouni M, et al. Attitudes towards abortion. *Health Science Journal* 2007; 1: 1-11.
9. Betts K. Attitudes to abortion in Australia: 1972 to 2003. *People and Place* 2004: 22-8.
10. Hill A. The Relationship between attitudes about abortion and cognitive complexity. *UW-L Journal of Undergraduate Research VII*. 2004: 1-6.
11. Becker D, Garcia SG, Larsen U. Knowledge and opinions about abortion law among Mexican youth. *International Family Planning Perspectives* 2002; 28: 205-13.
12. Norris A, Bessett D, Steinberg JR, Kavanaugh ML, De Zordo S, Becker D. Abortion stigma: A reconceptualization of constituents, causes, and consequences. *Womens Health Issues* 2011; 21(3 Suppl): 49-54.
13. Vieira EM. Do women's attitudes towards abortion and contraceptive methods influence their option for sterilization. *Cad Saude Publica* 1999; 15: 739-47.
14. Olaitan OL, Adeyemi MF, Oloyede TA. Attitudes of university students towards abortion in Nigeria. *Int J Trop Med* 2011; 6: 52-7.
15. Fawcett J, Andrews V, Lester D. Religiosity and attitudes about abortion. *Psychol Rep* 2000; 87: 980.
16. Bahr SJ, Marcos AC. Cross-cultural attitudes toward abortion--Greeks versus Americans. *J Fam Issues* 2003; 24: 402-24.
17. Roman RE, Lester D. Abortion attitudes and personality. *Psychol Rep* 1999; 85: 528.
18. KONDA. Gündelik yaşamda din laiklik ve türban. 2007 (cited 2014 june 9). Available from: www.konda.com.tr/tr/raporlar.php
19. Esmer Y. Kürtaj konusunda türk ve avrupa kamuoyu 1990-2011. Bahçeşehir Üniversitesi Ekonomik ve Toplumsal Araştırma Merkezi 2011; 133: 1-5.
20. Balakrishnan TR, Adamcyk EL, Krotki KJ. Attitudes towards abortion in Canada. *Canadian Studies in Population* 1988; 15: 201-15.
21. Palermo TM, Wilson KS, García SG, Díaz-Olavarrieta C. Abortion and women's roles in society: Opinions from Tlaxcala, Mexico. *Salud Pública Méx* 2010; 52: 52-60.

22. Geary CW, Gebreselassie H, Awah P, Pearson E. Attitudes toward abortion in Zambia. *Int J Gynaecol Obstet* 2012; 118(Suppl 2): 148-51.
23. Saka G, Ceylan A, Ertem M, İçlin E. Kadın sağlığı merkezinde istemli düşük yaptıran kadınların özellikleri-Diyarbakır. *Sağlık ve Toplum* 2004; 14: 73-87.
24. Serap H. İstemli kürtaj olan kadınların kürtaj olma nedenleri ve kürtaj sonrası yöntem seçimi dağılımının incelenmesi (yüksek lisans tezi). Sağlık Bilimleri Enstitüsü Hemşirelik Anabilim Dalı: Gaziantep Üniversitesi, 2005.
25. Erol N, Ergin I, Döner B, Onmuş RD, Şakrı N, Kirca Ü. İzmir Konak Doğumevi'ne istemli düşük için başvuran kadınların doğurganlık öyküleri ve aile planlaması davranışları. *Ege Tıp Dergisi* 2003; 42: 155-60.
26. Moore AM, Jagwe-Wadda G, Bankole A. Men's attitudes about abortion in Uganda. *J Biosoc Sci* 2011; 43: 31-45.
27. Hollá K, Weiss P, Unzeitig V, Cibula D. Attitudes of Czech women toward induced abortions. *Ceska Gynekol* 2009; 74: 92-6.
28. Norup M. Attitudes towards abortion in the Danish population. *Bioethics* 1997; 11: 439-49.
29. Strickler L, Danigelis NL. Changing frameworks in attitudes toward abortion. *Social Forum* 2002; 17: 187-201.
30. Esposito CL, Basow SA. College student's attitudes toward abortion: The role of knowledge and demographic variables. *Journal of Applied Social Psychology* 1995; 25: 1996-2017.
31. Koç İ, Eryurt MA, Adalı T, Seçkiner P. Türkiye'nin demografik dönüşümü: doğurganlık, aile planlaması, anne-çocuk sağlığı ve beş yaş altı ölümlerdeki değişimler: 1968- 2008 (cited 2018 July 18). Available from: http://www.hips.hacettepe.edu.tr/TurkiyeninDemografikDonusumu_220410.pdf
32. Remennick L, Hetsroni A. Public Attitudes toward Abortion in Israel: A Research Note. *Social Science Quarterly* 2001; 82: 420-31.
33. Hollis HM, Morris TM. Attitudes toward abortion in female undergraduates. *College Student Journal* 1992; 26: 70-4.
34. Akın A, editor. Kadının statüsü ve sağlığı ile ilgili gerçekler. Ankara: Afşaroğlu Matbaası, 2008.
35. Bostancı MS. Doğu Anadolu Bölgesi'ndeki bir ilçede kadınların kullandıkları kontraseptif yöntemleri için bilgi kaynakları ve istenmeyen gebeliklerle ilişkisi. *Dicle Tıp Dergisi* 2011; 38: 202-7.
36. Akın A, Mıhçıokur S. Kadının statüsü ve anne ölümleri (cited 2018 July 18). Available from: http://www.huksam.hacettepe.edu.tr/Turkce/SayfaDosya/kadinin_statusu_anne_olumleri.pdf
37. Akın A, Kırçaloğlu N, Biliker MA. Abortion in Turkey: Socio-cultural and psychological factors influencing couples decision to obtain abortion and family planning services. A WHO Collaborative Study 1991-1992. Project No: 89057, Turkey, 1997.
38. Balsoy G. The female body as a field of political-the prohibition of abortion in Ottoman society. *Journal of Social History* 2012; 223: 38-43.
39. İnceoğlu M. Tutum algı iletişim. 5.Baskı. İstanbul: Beykent Üniversitesi Yayınları, 2010.
40. Banerjee SK, Andersen KL, Buchanan RM, Warvadekar J. Woman-centered research on access to safe abortion services and implications for behavioral change communication interventions: a cross-sectional study of women in Bihar and Jharkhand, India. *BMC Public Health* 2012; 12: 175.