

ORIGINAL RESEARCH

Illegal abortions in Iran: a qualitative study

Shirin Shahbazi, Nahid Fathizadeh & Fariba Taleghani

Accepted for publication 20 November 2009

Correspondence to S. Shahbazi:
e-mail: shahbazishirin@yahoo.comShirin Shahbazi MS RN
Lecturer
Faculty of Nursing and Midwifery, Azad
Islamic University-Varamin Pishva Branch,
Varamin, IranNahid Fathizadeh MS RN
Lecturer
College of Nursing and Midwifery, Isfahan
University of Medical Sciences, IranFariba Taleghani PhD RN
Assistant Professor
Faculty of Nursing and Midwifery, Isfahan
University of Medical Sciences, IranSHAHBAZI S., FATHIZADEH N. & TALEGHANI F. (2009) Illegal abortions in Iran: a qualitative study. *Journal of Advanced Nursing*
doi: 10.1111/j.1365-2648.2009.05246.x**Abstract****Title.** Illegal abortions in Iran: a qualitative study.**Aim.** This paper is a report of a study of the consequences of illegal abortions experienced by Iranian women.**Background.** Despite the increase in effective and safe methods of contraception and the distribution of information about these methods, unwanted pregnancy is still a problem in some societies. Induced abortion is a common procedure throughout the world and at least half of more than 45 million induced abortions which happen in a year are performed under unsafe circumstances. Unsafe abortions carry a high risk of maternal mortality and morbidity, accounting for more than 80,000 maternal deaths per year.**Method.** In this qualitative study, 27 participants were interviewed in 2006. Some participants were women who had illegal abortions and others were people who had contact with those women. Content analysis was used to identify and categorize participants' responses to the interview questions.**Findings.** Four consequences of women's experiences of illegal abortion were identified: physical, psychological, socio-political and judicial.**Conclusion.** In Iran like some developing countries intentional abortion, except for some special cases, is illegal because of social and religious beliefs. In these countries, offering services and support to women with unwanted pregnancies seems to be the best solution for reducing or preventing illegal abortion.**Keywords:** abortion, consequences, illegal abortion, judicial, psychological, qualitative research, socio-political**Introduction**

Despite the increase in effective and safe methods of contraception and the distribution of information about these methods, unwanted pregnancy is still a problem in some societies (Abdullahi & Mohammadpour Tahamtan 2003).

Women facing unwanted pregnancy, whether in developed or developing countries, decide to terminate their pregnancy based on the same reasons (Cohen 2003). Induced abortion is a common procedure throughout the world and at least half of more than 45 million induced abortions which happen in a year are performed under unsafe circumstances. Unsafe

1 abortions carry a high risk of maternal mortality and
2 morbidity, accounting for more than 80,000 maternal deaths
3 per year (Milsom 2006).

4 Background

5
6
7 Legal abortion is one of the safest medical procedures for
8 women, and is twice as safe as natural delivery (Bruce &
9 Bentar 2003). However, unsanitary abortion, which is an
10 important and neglected health problem in developing
11 countries, is one of the main issues in women's lives during
12 the reproductive period. This kind of abortion is usually
13 performed outside the legal system by a person who does not
14 have enough knowledge and skill and in places with the
15 lowest medical standards. Based on the conditions in which
16 abortion is conducted and the methods used, the occurrence
17 of severe complications is a possibility. This makes illegal
18 abortion one of the main reasons for deaths in pregnant
19 women (Rasch *et al.* 2000). Zhirova *et al.* (2004), in their
20 study of the causes of maternal deaths after abortion in
21 Russia, reported that abortions which lead to death are
22 mostly performed by unskilled and unqualified doctors,
23 outside medical centres. Their results also showed that most
24 women who used this kind of abortion did so because the age
25 of the foetus was greater than the legal abortion limit. Almost
26 all the women in Zhirova's study (93%) delayed seeking
27 treatment for their unwanted pregnancy, and this delay could
28 increase the risk of death; therefore it is necessary to prevent
29 any delay in diagnosis and treatment.

30 Sepsis and bleeding are the most common causes of mother's
31 deaths after abortion (Richardson 2004). In addition to
32 possible physical complications and death, psychological
33 problems might also occur after abortion. A study by Broen
34 *et al.* (2005) showed that psychological disorders such as
35 depression and anxiety might also occur because of therapeutic
36 abortion; however, they are likely to be severe, symptomatic or
37 persistent in only 10% of women and are more common
38 among those with a history of psychological problems.

39 **4** Deverber and Genties (2005) report that when a pregnancy
40 ends, whether by induced abortion or by completed preg-
41 nancy, the occurrence of psychological disorders is possible.
42 In contrast, Fisher *et al.* (2005) state that no evidence was
43 found of any kind of psychological incompatibility in women
44 seeking repeated induced abortion. Deverber and Genties
45 (2005) believe that, although there is no consensus on
46 psychological issues after abortion, the conclusions of all
47 relevant studies show that these problems occur after induced
48 abortion in 10% of women. Because many abortions are
49 conducted each year, this should be considered an important
50 public health issue.

Because of religious and social disapproval of abortion, it
has always been subject to legal and social punishments. For
example, in Cameroon, the punishment is 5 years in jail for
the person who conducts the abortion, 1 year for the woman
who has the abortion and 2 years for the person who
prepares the instruments and drugs; however, there are few
legal prosecutions (Schuster 2005). In Iranian law, it is a
crime to harm the foetus and the perpetrator would be
punished decisively (Hosseyni 2006). **5**

The study

Aim

The aim of this study was to describe the consequences of
illegal abortions experienced by Iranian women.

Design

A qualitative descriptive design was adopted. The method-
ology was qualitative as this was an inquiry to understand a
problem about which there was little existing knowledge.

Participants

A convenience sample of 27 people who had either an
experience of illegal abortion or whose occupation was
relevant to this experience participated in the study. To
understand the process of illegal abortion and its conse-
quences better, participants were drawn from different
settings. Sample size was determined by theme saturation.
The participants included seven women who had an illegal
abortion, one woman who referred to hospital and begged
doctors for induced abortion, the husband of a woman who
had an incomplete abortion, six midwives, three obstetri-
cians, two lawyers, two psychologists, two clergymen, one
general physician and one politician.

Data collection

The data were collected in 2006. The first author conducted
semi-structured, face-to-face interviews. The interviews
began with general questions, followed by more specific
ones (see Table 1). Each interview took approximately 30–
120 minutes and was tape-recorded. The interviews were
conducted in hospitals, participants' residences or private
offices, according to their wishes. After the interviews, the
tapes were transcribed by the first author and checked by
research assistant and educator. Data collection was done
concurrently with data analysis and was discontinued when

Table 1 Interview questions**General questions**

1. Could you briefly describe your experience of illegal abortion? (for women)
2. How did you treat a woman who wanted you to terminate her unwanted pregnancy? (for doctors)
3. Could you describe the hospital personnel's reactions when you went to the hospital because of complications after illegal abortion? (for women)
4. Could you describe your experience of having clients who had complaint against an abortion provider? (for lawyer)
5. Did you agree to your wife's decision for having an induced illegal abortion? (for husbands)
6. What does the government want to do to help women who want to terminate their unwanted pregnancy without a legal reason? (for statesman)
7. Could you describe the reason for Islamic restrictions on induced abortion? (for clergymen)

theme saturation was achieved during the last two interviews.

Ethical considerations

Approval for the study was obtained from a university research ethics committee. All participants were sent a transcript of their interview for clarification and agreed for their transcript to be used in publications.

Data analysis

Content analysis was used to analyse the data. The first step was data reduction in which the data were manually coded. After reading the interview transcripts several times, the researcher identified significant statements, line by line, without making any assumptions, and then compared transcripts between participants to determine similarities and differences in the codes. The second step was data display, in which a diagram was developed to display the relationships between codes, and then pattern coding was done. This involved sorting the codes according to areas of illegal abortion consequences. The third step was conclusion-drawing, in which themes were identified and named to describe the consequences of illegal abortion.

Rigour

- 6 We followed Lincoln and Guba's (1985) guidelines for ensuring trustworthiness, which was established through consistency, prolonged engagement, peer debriefing, dependability and confirmability. Taped interviews and written

transcripts were examined by three researchers to ensure consistency. Participants who gave important insights were interviewed a second time, which is called prolonged engagement. All authors were experienced in conducting qualitative studies, and all took part in analysing the transcripts and discussing the themes and sub-themes (peer debriefing) until consensus was achieved, thus establishing dependability. Finally, confirmability was ensured by two participants, who examined and validated our interpretation of the findings.

Findings

Our findings showed that illegal abortion consequences could be understood through four themes: physical, psychological, socio-political and judicial.

Physical consequences

Induced abortion is a procedure that needs skill and equipment to be done safely. If it is performed by unskilled operators, using non-standard and unsafe methods and ignoring sterilization principles, it can cause many physical problems for women. As most operators do not follow-up their patients and do not teach them about warning signs such as frequent bleeding, retained products of induced abortion can cause severe uterine infection and patients may be hospitalized because of fever, septic shock and severe bleeding.

According to our participants, the reason for delay in seeking medical assistance was lack of knowledge of the reasons for and consequences of bleeding after abortion, and this delay could cause a severe fall in blood pressure, severe anaemia and even the need for blood transfusion.

Using dangerous instruments was another reason for the occurrence of severe symptoms after induced abortion. Referring to an induced abortion which led to colostomy, a member of the medical team stated:

'Most of the unmarried women go after unsanitary and dangerous methods of abortion to hide it from their families, who do not support it. Therefore, the rate of problems caused by induced abortion is higher among unmarried women'. An obstetrician said: 'Illegal and unlawful sexual intercourses have extreme and expanded consequences because such pregnancies are prohibited and will end up with using illegal and expired drugs or into underground networks'.

Psychological consequences

Based on our findings, in addition to adverse physical s, women may also face psychological disorders after induced

1 abortion. Women usually needed some time to forget about
2 the bitter memory of this unethical action and cope with their
3 guilt:

4 I had nightmares for a year. They were mostly about my abortion.
5 This continued for 9 months to a year. Then I somehow forgot about
6 it. I always consider ethical and moral aspects of my actions rather
7 than religious aspects. After my abortion I donated some money to a
8 needy family to clear my conscience.
9

10 This participant had had an abortion with no complications
11 about a decade before the interview, and about a year after
12 her abortion she had coped with its consequences and had no
13 regrets. However, another woman who had a complicated,
14 stressful and expensive abortion mentioned it as a bitter and
15 unforgettable memory. Although she had no regrets, the
16 experience became a stress factor whenever she thought
17 about pregnancy again:

18 I have no regrets at all but sometimes the memory comes back to me
19 and makes me stressed out. I think, 'What if I get pregnant again?' ...I
20 can't forget it. Believe me, I think about it every day. I always discuss
21 it, especially with my sister and mother. And whenever I pray to God
22 in private I ask for His forgiveness. I'm really sad because of what I
23 did.
24

25 Socio-political consequences

26 A psychologist who participated in this study believed that
27 the rates of depression and sadness are higher among
28 unmarried young women than married women, because they
29 are emotionally immature, have limited social support and
30 are concerned about the effect of abortion on their future
31 marriage. Sometimes these concerns become so serious that
32 they make them avoid marriage:
33

34 Many of these cases remain hidden and become the source of their
35 depression. It wouldn't be revealed and nobody would ever know.
36 Then everybody thinks that she is depressed because life is so
37 complex and cruel (poor thing! Everything is so hard on her, she has
38 so much to study and her job is so hard). But the root of her
39 depression is something else [abortion]. These girls' problems should
40 be studied. These are the girls who may never get married. There are
41 some girls who don't want to get married because they've lost their
42 virginity or experienced abortion.
43

44 Another psychologist told us about the effect of abortion on
45 spousal relationships in one of her patients:

46 This woman showed postabortion depression with severe symptoms
47 of phobia; she was scared of people. She thought that someone was
48 following her around and that there was something moving in her
49 abdomen. She had nightmares and had all the typical symptoms of
50

depression, like anorexia, insomnia and extreme hatred of sexual
relations. I even had a case that, because the woman became so cold
after her abortion, her husband wanted to divorce her.

Women who go to hospital for postabortion problems
usually hide the truth about their induced abortion because
they are afraid of the legal consequences. One of the
participants told us about healthcare personnel's attitudes
towards these women:

They don't have a good attitude toward women who go to hospitals
for postabortion problems. They think that everyone with an induced
abortion must have illegal relationships and is a street woman. They
never care to find out the real reason that caused these women to
have an abortion. They just treat them differently.

Judicial consequences

Participants in this research believed that women's and
healthcare personnel's tendency to hide abortion is one of the
main reasons for not having accurate statistics on illegal
abortions. Families mostly worry about their reputation and
the complicated bureaucracy of courts, while medical staff
worry about prosecution.

Sometimes women who are victims of illegal abortion
operation prevent their husbands from suing the operator;
because they believe that the operator did them a favour by
ending their pregnancy and should not be punished or sued
for any further complications:

My husband was complaining and didn't want to pay her [the
operator], saying that he spent ten times more for my treatment and
for that he was going to sue her. He still wants to sue her and always
talks about it. But I told him to stop. She had done her job right;
maybe I was too sensitive that these complications happened to me.

Legal experts believe that there are several reasons for not
having any clear statistics available on illegal abortion, and
these include fear of punishment, collusion with the physician
or general fear of judicial system. As induced abortion in Iran
is against law and religion, not only there is no benefit for
families to report it, but also it involve them in legal issues
and penalties:

If it is proved that the woman has willingly undergone abortion, she
won't benefit from the lawsuit. Therefore they would rather to
conspire with the physician instead of filing a lawsuit.

In Iran, abortion is only allowed in special cases. Based on the
abortion therapy law, which has its origins in Islamic
principles and the social and religious environment of Iranian
society, abortion is only allowed in the case of pregnancies
which lead to serious life-threatening problems for women

and disorders which can cause foetal death during pregnancy or immediately after delivery; in other cases abortion is contrary to the religion and hence illegal. With regard to limiting legal abortion indications to cases which threaten the woman's or fetus's life, one of the health policymakers interviewed in our study said:

This law can be a solution in cases of life-threatening problems for mothers, serious economical problems, or severe psychological or other issues for families. This law might not cover some other issues, but we must wait to see reactions and feedbacks toward this law and how it functions before we make further decisions.

According to a politician who participated in this study, clear statistics on documented and registered abortions conducted because of other reasons are needed to expand this law and send it to Parliament for approval.

One of the psychologists believed that women do not report their abortions because they are afraid of bringing dishonour to their families. Also, they avoid legal procedures because they are so complicated and they believe that they are useless:

The doctor can't report it because it's against administrative laws, and families don't report it because they don't want scandals. There are cases where the families are aware but they don't report it...also the law has a lot of administrative complexities. It means that when you go to the Public Prosecutor's Office for a lawsuit, the bureaucracy and useless wrangles make people so sick of it and they give up their rights.

Discussion

Study limitations

The sample size was relatively small but, because this was a qualitative study, it provided rich data and a culturally sensitive perspective on illegal abortion consequences for Iranian women. However, theme saturation was achieved and the usefulness of the data is more important than generalization of the findings.

Some women who are hospitalized because of complications of an illegal incomplete abortion do not feel able to talk about it. During the 6 months of the study, only two women agreed to be interviewed. Other participants were introduced by these two and then agreed to interview. The therapy team who participated in the study believed that it would not be possible to gain research access to abortionists because they mostly conduct abortions in basements and secret places. Two people were introduced to us as conductors of abortions, but in their interviews they did not agree that

they did this. A woman who despite her husband's disapproval had an illegal abortion in a basement conducted by a man who she believed was one of the hospital's employees, did not agree to interview because it would remind her of bitter memories. When women were asked to bring their husbands to the interview or to give us their phone numbers, they immediately answered: 'My husband won't cooperate'. They also claimed that their husbands would not have time to participate or would not approve of the data gathering method, i.e. interviewing. Even some of the specialists did not agree to be interviewed when they realized that abortion was the topic of the study. However, except for two women who were interviewed in the hospital and a midwife and a gynaecologist who agreed to cooperate during direct recruitment, most of the participants were introduced by other participants; this illustrates the need to use a recruitment approach which allows potential participants to have trust in the researchers in studies of this sensitive nature. Only married women who had illegal abortions were interviewed, which limited this study. Unmarried women usually avoid interviews or talking about their experiences because they keep their abortion a secret because of family and social issues.

Physical consequences

In countries where abortion is illegal, induced abortions are the main healthcare problem for women in the reproductive years (Amirul Islam 2005). The common problems that may occur after induced abortion include incomplete abortion, infection, severe bleeding and rupture and injuries of intra-pelvic organs, such as uterine perforation or rupture (Behjati Ardakani *et al.* 2004). A member of medical team who participated in this study had a patient with a septic abortion, the infection spread to her colon and she had to have a colostomy. Singh *et al.* (2005) also reported a case in which the patient had to have complete colostomy and removal of the sigmoid colon because of septic abortion.

Our findings show that women who face postabortion problems usually delay seeking medical care, which leads to critical health conditions. Rana *et al.* (2004) also showed that delay in getting treatment for postabortion complications causes severe bleeding, infection, hospitalization and the need for blood transfusion. Rossier *et al.* (2004) also showed that postabortion complications occurred in women who self-aborted their pregnancies more than in those whose induced abortion was done by traditional operators or healthcare staff. In the present study, most of the abortions were done by non-professional operators and in non-standard conditions. Most of the women had tried to end their pregnancies by

1 taking herbal medicine, carrying heavy objects or injecting
2 themselves before seeking induced abortion.

3 According to participants, while not all illegal abortions
4 were performed in non-standard and unsanitary places, some
5 women had had safe and healthy abortions conducted by
6 skilled professionals in private clinics. Rasch *et al.* (2004)
7 believe that complications after induced abortion depend on
8 the operator's skills. In most countries, physicians conduct
9 induced abortion in their clinics in conditions as safe as legal
10 abortion in hospitals. The abortion might be illegal under this
11 condition, but it is safe.

12 Participants in this study believed that sexual intercourse
13 before marriage is increasing among Iranian teenagers, but
14 that they do not have enough information about birth control
15 methods and this leads to unwanted pregnancies. Because in
16 Iranian culture these pregnancies lead to dishonour and
17 scandal for the girl and her family and can cause problems in
18 her marriage, these girls usually have an illegal abortion.
19 Santhya and Verma (2004) have also written that abortion is
20 connected with scandal especially in women who are not
21 married. The Planned Parenthood Federation (2000) has also
22 stated that, because teenagers usually have unsafe abortions
23 and they delay more than older women, their risk of having
24 serious problems afterwards is higher. Having a healthy and
25 clean abortion is expensive and most single women cannot
26 afford it. Silberschmidt and Rasch's (2001) with teenagers
27 who were hospitalized in the capital of Tanzania because of
28 complications from abortion during 1997, showed that 38 of
29 51 participants had a safe abortion while 13 had unsafe
30 abortions done by unskilled operators. Ganatra and Hirve
31 (2002), in their qualitative study, showed that lack of support
32 and cooperation by families and sexual partners had an effect
33 on achieving a safe and healthy abortion unmarried
34 teenagers.

35 Because many aspects of teenage girls' sexual behaviours
36 are still not understood, there are no documented statistics on
37 pregnancies and illegal abortions in this group. Iranian
38 teenagers, like those in other countries, are at the risk of
39 dangerous sexual behaviours before marriage while, because
40 of religious restrictions, there is little or no teaching for
41 teenagers about dangerous sexual behaviours.

42 **Psychological consequences**

43
44
45 Abortion can have also psychological consequences. In this
46 study, women explained their satisfaction with the abortion
47 based on the consequences. They had no regrets, but those
48 who had postabortion complications were dissatisfied and
49 complained about the operator. Our findings also showed
50 that psychological problems such as depression occur in a few

women and mostly in girls, but they eventually coped with
the situation although they never forgot about it. With regard
to psychological issues, Cawluck *et al.* (2006) state that most **11**
women who abort unwanted pregnancies feel guilty and
angry afterwards. However, Broen *et al.* (2005) reported that **12**
women who had support from their sexual partner when
having an abortion overcame their negative feelings soon
afterwards. If important people in a woman's life, especially
her sexual partner, do not support her decision about ending
the pregnancy and put her under pressure to do something
she does not want to do, she may face severe psychological
repercussions.

One of the psychologists who participated in this study
mentioned that the probability of postabortion depression is
greater in unmarried girls than married women; the former
usually hide their unwanted pregnancy and abortion and so
they do not get support from their family. Also, some of our
women who felt guilty said that this feeling was caused by
their religious thoughts. However, other participants, even
those who had abortions a long time ago, did not mention
severe psychological issues that needed treatment. Neverthe-
less, some of the women became sad or even cried when
talking about their experiences. One participant who had an
abortion a long time previously (15 years ago) still felt guilty
and sorry for her foetus. However, another participant said
that nightmares and bad feelings had just happened for a
short time and after a while she had adjusted to her situation
and did not feel regrets any more. Facing unpleasant
consequences of induced abortion or getting pregnant again
were the main reasons that women felt regretful. However,
whether feeling regretful or not, they all felt a kind of
constant sorrow because they all believed that abortion was
an unethical an unreligious act. Warning others about
unwanted pregnancy and using secure contraception methods
after abortion are obvious signs of regret after abortion.

Based on Islamic rules, abortion after quickening is
forbidden even if there is a risk to mother's physical or
mental health. However, abortion is allowed before quick-
ening if the pregnancy causes risks to the woman's health;
this is because the mother has a conscious existence but the
foetus has not reached this position yet, and the mother's life
comes before the vegetative life of foetus (Hosseyini 2006).

Socio-political consequences

Another result of illegal abortion is its socio-political conse-
quences. Social and political limitations cause women to have
hidden illegal abortion. They avoid going to government-
funded health centres after having an abortion to prevent
hospitalization, public disclosure, being blamed by their

families, having to pay large sums of money for the healthcare, or because they are afraid of anaesthesia (Pheterson & Azize 2005).

13 Jewkes *et al.* (2005) writes that, in South Africa, women who cannot go to hospitals for abortion have only one other option and this is self-abortion; the hospitals have long waiting lists, which would take women into the second trimester, or the services are too expensive. Another reason that stopped women in our study from going to public health centres for help was fear of the personnel's reaction and worrying about confidentiality. Some of the women were called murderers by nursing staff. Being questioned about ethical issues related to abortion by nursing staff was one the main reasons that women did not go to public health centres for help. In fact, there were women who could have had a legal abortion but instead tried induced abortion because they were afraid of hospital personnel's reactions. Therefore hospital personnel's beliefs and reactions have a strong impact on women's decision about their abortion method.

In the present study, most of the women who experienced postabortion complications preferred tolerating pain to being scolded by healthcare staff, and as a result delayed going to hospital and tried to hide their induced abortions.

Rasch *et al.* (2004) claim that in countries where abortion is illegal, women do not like to admit to induced abortion. Also interviewing hospital personnel, Schuster (2005) found that they found it hard to take a history from women with induced abortion. Therefore, to encourage women to talk about their induced abortions, it is necessary for healthcare personnel to reassure them that all the information they give will remain confidential.

Some of our participants believed that women who had temporary marriages (this is a kind of marriage in Iran in which couples decide to stay together only for a limited time and therefore the wife must not become pregnant during this time) as well as unmarried girls would not be accepted in hospitals easily and would be treated rudely by hospital staff. However, one the obstetricians, who was in charge of the gynaecology ward, denied this and said that such reactions were rare and if they happened they were just to warn women to be more careful.

Another postabortion problem discussed in this study was disruption in sexual intercourse between spouses. A few researchers have studied the effect of induced abortion on relationships or sexual intercourse with spouses. Rasch *et al.* (2004) reports that in more than 20% cases induced abortion has a negative effect. Bradshaw and Slade (2003) stated that there are different statistics regarding the effect of abortion on relationships between couples. Some declared that after abortion they have got more satisfaction and their sex appeal

has increased but it has decreased in some other and some have reported no change. Fok *et al.* (2006) conducted a study with 1040 Chinese women who had had an abortion and found that 8–30% felt that they had a decrease in every aspect of their desire for sex after abortion. In addition, desire for sex and satisfaction in one third of these women were affected. According to psychologists in our research, fear of becoming pregnant again disrupts sexual intercourse. It mostly affects women's desire for sex and, in some cases, both partners in the relationship.

Judicial consequences

Another sequel of illegal abortion is judicial consequence. Based on our findings, there are no lawsuits regarding postabortion complications in Iranian courts because this would probably lead to legal penalties for the prosecutors. In addition, because of the complicated judicial bureaucracy in Iran, filing a lawsuit only leaves the prosecutor with emotional and physical exhaustion and has no other. Cook *et al.* (2004) believe that it is possible to devise appropriate **14** abortion laws, in view of the practical implications of epidemiological, social scientific and healthcare research such as studies of maternal deaths because of unwanted pregnancies and induced abortion.

Modern thinking has changed views on abortion law from a criminal punishment approach towards a protection and health development approach (Cook *et al.* 2004). Many Islamic countries have changed their abortion laws and permitted abortion in necessary cases based on the new perspective emanating from the WHO (Behjati Ardakani *et al.* 2004). In Iran, abortion is legal when the life of either mother or foetus is in danger or when judges conclude that it is too difficult for parents to have another baby because of poverty or mental illness. Although these exceptions include 52 diseases, most abortions have other reasons which make them a crime in the eyes of law.

In the present study, participants believed that there were no lawsuits regarding postabortion complications in Iran because induced abortion is illegal and is conducted secretly. All of the medical team who participated in the study believed that abortion was a crime, but only a few women with abortion history believed this. In fact, women were worried about ethical and emotional aspects of abortion more than its legal aspects. This means that hiding induced abortion is mainly related to social pressure rather than fear of legal punishment. Unmarried girls and their families especially never try to file a lawsuit because they do not want to ruin their reputations. However, operators who encourage women to keep their names and addresses secret

What is already known about this topic

- Despite the increase in effective and safe methods of contraception and the distribution of information about these methods, unwanted pregnancy is still a problem in some societies.
- Induced abortion is a common procedure throughout the world and unsafe abortions carry a high risk of maternal mortality and morbidity, accounting worldwide for more than 80,000 maternal deaths per year as well as for psychological complications.
- In Iran, except for some special reasons, abortion is unlawful and often Iranian women try to end up their unwanted pregnancies illegally.

What this paper adds

- Four consequences of women's experiences of illegal abortion were identified: physical, psychological, socio-political and judicial.
- The main reason for hiding abortion by women is social pressure, not legal penalties.
- There are no legal lawsuits regarding postabortion complications in Iran because intentional abortions are always conducted secretly.

Implications for practice and/or policy

- Policymakers should find strategies to obtain accurate statistics for unwanted pregnancies and related abortions.
- There is an urgent need to implement services in Iran for women with unwanted pregnancies.
- Educating people about religious and moral laws related to abortion can reduce the number of unsafe abortions among married women.

and do not accept a patient for abortion without a recommendation, are obviously afraid of legal punishment because they conduct a procedure which is outside their professional limits and is therefore against the law.

Conclusion

To revise abortion laws, real data are needed about unsanitary abortions and their complications. Therefore, it is necessary to find ways to encourage women to talk about their reproductive health problems. Until possible legal revisions based on Islamic principles and human ethics are

developed, it seems that preventing unwanted pregnancies and giving appropriate support to women who unwillingly become pregnant are the most practical solution; this could have a positive effect on reducing these kinds of abortions and their consequences.

Acknowledgement

We would like to thank all the participants for their help. This research was funded by Isfahan University of Medical Sciences.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Conflict of interest

No conflict of interest has been declared by the authors.

Author contributions

SS, NF and FT were responsible for the study conception and design. SS performed the data collection. SS, NF and FT performed the data analysis. SS were responsible for the drafting of the manuscript. NF and FT made critical revisions to the paper for important intellectual content. NF and FT provided administrative, technical or material support. NF and FT supervised the study.

References

- Abdullahi F. & Mohammadpour Tahamtan R.A. (2003) Study on consequences of unwanted pregnancies in women admitted to hospitals administered by Mazandaran University of Medical Science, 1999–2000. *Journal of Mazandaran University of Medical Sciences* 14, 40–45.
- Amirul Islam M. (2005) Evaluation of reported induced abortion in Bangladesh: evidence from the recent DHS. In *Proceedings of I-USSP International Population Conference, France Tours (France)*, 18–23 July Poster Session 1.
- Behjati Ardakani Z., Akhoondi M.M., Sadeghi M.R. & Sadri Ardakani H. (2004) Necessity of assessing different aspects of abortion in Iran. *Fertility & Infertility Quarterly* 4, 299–320.
- Bradshaw Z. & Slade P. (2003) Effects of induced abortion on emotional experiences and relationships: a critical review of the literature. *Clinical Psychology Review* 23, 929–958.
- Broen A.N., Moum T., Bodtker A.S. & Ekeberg O. (2005) Reasons for induced abortion and their relation to women emotional distress: a prospective two year follow-up study. *General Hospital Psychiatry* 27, 36–43.

- Bruce O. & Bentar S. (2003) *Policy Update on Safe and Legal Abortion 30 Years After Roe.V.Wade*, IWPR Population #241. Retrieved from <http://www.iwpr.org/pdf/B241.pdf>. **16**
- Cohen S.A. (2003) Envisioning life without Roe: lessons without Borders. *The Guttmacher Report on Public Policy* 6, 2. Retrieved from <http://www.guttmacher.org/pubs/tgr/06/2/gr060203.html>. **17**
- Cook R.J., Dickens B.M. & Horga M. (2004) Safe abortion: WHO technical and policy guidance. *International Journal of Gynecology & Obstetrics* 86, 79–84.
- Deveber L.L. & Genties I. (2005) Psychological aftermath of abortion / [two of the authors respond]. *Canadian Medical Association* 173, 466–467.
- Fisher W.A., Singh S.S., Shuper P.A., Carey M., Otchet F. & Maclean-Brine D. (2005) *Characteristic of women undergoing repeat induced abortion*, Canadian Medical Association, Ottawa. Retrieved from <http://www.cmaj.ca/cgi/content/full/172/5/637>. **18**
- Fok W.Y., Siu Sh.Sh.N. & Lau T.K. (2006) Sexual dysfunction after a first trimester induced abortion in a Chinese population. *European Journal of Obstetrics and Gynecology and Reproductive Biology* 126, 255–258. **19**
- Ganatra B. & Hirve S. (2002) Induced abortions among adolescent women in rural Maharashtra, India. *Reproductive Health Matters* 10, 76–85.
- Hosseyini S.H. (2006) Changing of abortion law in Australia from the world viewpoint with a short review of Iranian laws and fundamentals of legal freedom changing abortion law in the world, a short review of Iranian laws and fundamentals of legal freedom. *Barvari and Nabarvari Quarterly* 4, 398–409.
- Jewkes R.K., Gumede T., Westaway M.S., Dickson K., Brown H. & Rees H. (2005) Why are women still aborting outside designated facilities in metropolitan South Africa? *BJOG: An International Journal of Obstetrics & Gynecology* 112, 1236.
- Milsom I. (2006) *Contraception and family planning*. *European Practice in Gynecology and Obstetrics Series*, 1st edn. Elsevier, Sweden, p. 1.
- Pheterson G. & Azize Y. (2005) Abortion practice in the northeast Caribbean: “Just write down stomach pain”. *Reproductive Health Matters* 13, 44–53.
- Planned Parenthood Federation (2000). Retrieved from <http://www.plannedparenthood.org/.../politics-policy/international-issues/tanzania-gag-646/htm>. **20**
- Rana A., Pradhan N., Guring G. & Singh M. (2004) Induced septic abortion: a major factor in maternal mortality and morbidity. *Journal of Obstetrics & Gynecology Research* 30, 3.
- Rasch V., Muhammad H., Urassa E. & Bergstorm S. (2000) The problem of illegally induced abortion: result from a hospital – based study conducted at district level in Dar es salaam. *Tropical Medicine & International Health* 5, 495–502.
- Rasch V., Massawe S., Yambesi F. & Bergstrom S. (2004) Acceptance of contraceptive among women who had an unsafe abortion in Dar es Salaam. *Tropical Medicine & International Health* 9, 399–405.
- Richardson k. (2004) Abortion prior to eight weeks safer for women. *Medical Post, Toronto* 40, 8.
- Rossier C., Guiella G., Ouedraogo A. & Thieba B. (2004) *Estimating Clandestine Abortion with the Confidants' Method. Results from Ouagadougou, Burkina Faso*. Population Association of America, Boston. Retrieved from <http://paa2004.princeton.edu/download.asp?submissionId=41577>. **21**
- Santhya K.G. & Verma Sh. (2004) Induced abortion: the current scenario in India. In Regional Health Forum 8. Retrieved from http://www.searo.who.int/LinkFiles/Regional_Health_Forum_Induced_Abortion.pdf. **22**
- Schuster S. (2005) Abortion in the moral world of the Cameroon. *Reproductive Health Matters* s13, 130–138.
- Silberschmidt M. & Rasch V. (2001) Adolescent girls, illegal abortions and “sugar-daddies” in Dar Es Salaam: vulnerable victims and active social agents. *Social Science and Medicine* 52, 1815–1826.
- Singh S., Parada E., Mirembe F. & Kiggundu Ch. (2005) The incidence of induced abortion in Uganda. *International Family Planning Perspectives* 31, 183–191.
- Zhirova I.A., Frolova O.G., Astakhova T.M. & Ketting E. (2004) Abortion-related maternal mortality in the Russian Federation. *Studies in Family Planning* 35, 178–187.

The *Journal of Advanced Nursing (JAN)* is an international, peer-reviewed, scientific journal. *JAN* contributes to the advancement of evidence-based nursing, midwifery and health care by disseminating high quality research and scholarship of contemporary relevance and with potential to advance knowledge for practice, education, management or policy. *JAN* publishes research reviews, original research reports and methodological and theoretical papers.

For further information, please visit the journal web-site: <http://www.journalofadvancednursing.com>

Reasons to publish your work in *JAN*

High-impact forum: the world’s most cited nursing journal within Thomson Reuters Journal Citation Report Social Science (Nursing) with an Impact factor of 1.654 (2008) – ranked 5/58.

Positive publishing experience: rapid double-blind peer review with detailed feedback.

Most read journal globally: accessible in over 6,000 libraries worldwide with over 3 million articles downloaded online per year.

Fast and easy online submission: online submission at <http://mc.manuscriptcentral.com/jan> with publication within 9 months from acceptance.

Early View: quick online publication of accepted, final and fully citable articles.

Author Query Form

Journal: JAN

Article: 5246

Dear Author,

During the copy-editing of your paper, the following queries arose. Please respond to these by marking up your proofs with the necessary changes/additions. Please write your answers on the query sheet if there is insufficient space on the page proofs. Please write clearly and follow the conventions shown on the attached corrections sheet. If returning the proof by fax do not write too close to the paper's edge. Please remember that illegible mark-ups may delay publication.

Many thanks for your assistance.

Query reference	Query	Remarks
1	AUTHOR: A running head short title was not supplied; please check if this one is suitable and, if not, please supply a short title that can be used instead.	
2	AUTHOR: Please check/confirm all author affiliation addresses.	
3	AUTHOR: Abdullah & Mohammad pour, 2005 has been changed to Abdullahi and Mohammadpour Tahamtan 2003 so that this citation matches the Reference List. Please confirm that this is correct.	
4	AUTHOR: Deveber and Gentis (2006) has been changed to Deveber and Genties (2005) so that this citation matches Reference List. Please confirm that this is correct.	
5	AUTHOR: Hosseyni, 2004 has been changed to Hosseyni 2006 so that this citation matches the Reference List. Please confirm that this is correct.	
6	AUTHOR: Lincoln and Guba's (1985) has not been included in the Reference List, please supply full publication details.	
7	AUTHOR: Amirul, 2005 has been changed to Amirul Islam 2005 so that this citation matches the Reference List. Please confirm that this is correct.	
8	AUTHOR: Behjati, 2004 has been changed to Behjati Ardakani <i>et al.</i> 2004 so that this citation matches the Reference List. Please confirm that this is correct.	
9	AUTHOR: Singal (2005) has been changed to Singh <i>et al.</i> (2005) so that this citation matches the Reference List. Please confirm that this is correct.	
10	AUTHOR: Rossier (2004) has been changed to Rossier <i>et al.</i> (2004) so that this citation matches the Reference List. Please confirm that this is correct.	

11	AUTHOR: Cawluck <i>et al.</i> (2006) has not been included in the Reference List, please supply full publication details.	
12	AUTHOR: Broen (2005) has been changed to Broen <i>et al.</i> (2005) so that this citation matches the Reference List. Please confirm that this is correct.	
13	AUTHOR: Jewkes (2005) has been changed to Jewkes <i>et al.</i> (2005) so that this citation matches the Reference List. Please confirm that this is correct.	
14	AUTHOR: Cook <i>et al.</i> (2000) has been changed to Cook <i>et al.</i> (2004) so that this citation matches the Reference List. Please confirm that this is correct.	
15	AUTHOR: Please provide editor name, publisher name, publisher city location and page range for reference 'Amirul Islam (2005)'.	
16	AUTHOR: Please provide Accessed date, month and year for Bruce & Bentor (2003).	
17	AUTHOR: Please provide Accessed date, month and year for Cohen (2003).	
18	AUTHOR: Please provide Accessed date, month and year for Fisher <i>et al.</i> (2005).	
19	AUTHOR: Please check forename 'Sh.Sh.N.' of author 'Siu'.	
20	AUTHOR: Please provide document title and last accessed date for reference 'Planned Parenthood Federation (2000)'.	 
21	AUTHOR: Please provide Accessed date, month and year for 'Rossier <i>et al.</i> 2004'.	
22	AUTHOR: Please provide Accessed date, month and year for 'Santhya & Verma (2004)'.	
23	AUTHOR: Figure 1 has been changed as Table 1. Please check.	

MARKED PROOF

Please correct and return this set

Please use the proof correction marks shown below for all alterations and corrections. If you wish to return your proof by fax you should ensure that all amendments are written clearly in dark ink and are made well within the page margins.

<i>Instruction to printer</i>	<i>Textual mark</i>	<i>Marginal mark</i>
Leave unchanged	... under matter to remain	Ⓟ
Insert in text the matter indicated in the margin	∧	New matter followed by ∧ or ∧ [Ⓢ]
Delete	/ through single character, rule or underline or ┌───┐ through all characters to be deleted	Ⓞ or Ⓞ [Ⓢ]
Substitute character or substitute part of one or more word(s)	/ through letter or ┌───┐ through characters	new character / or new characters /
Change to italics	— under matter to be changed	↙
Change to capitals	≡ under matter to be changed	≡
Change to small capitals	≡ under matter to be changed	≡
Change to bold type	~ under matter to be changed	~
Change to bold italic	≈ under matter to be changed	≈
Change to lower case	Encircle matter to be changed	≡
Change italic to upright type	(As above)	⊕
Change bold to non-bold type	(As above)	⊖
Insert 'superior' character	/ through character or ∧ where required	Υ or Υ under character e.g. Υ or Υ
Insert 'inferior' character	(As above)	∧ over character e.g. ∧
Insert full stop	(As above)	⊙
Insert comma	(As above)	,
Insert single quotation marks	(As above)	ʹ or ʸ and/or ʹ or ʸ
Insert double quotation marks	(As above)	“ or ” and/or ” or ”
Insert hyphen	(As above)	⊞
Start new paragraph	┌	┌
No new paragraph	┐	┐
Transpose	┌┐	┌┐
Close up	linking ○ characters	○
Insert or substitute space between characters or words	/ through character or ∧ where required	Υ
Reduce space between characters or words		↑