Complications of illegal abortion in the suburbs of Tehran: A 9-year cross-sectional study

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Background: Illegal abortion is a common way to terminate unintended pregnancy. It may be associated with severe complications and may raise maternal mortality and morbidity rate. Illegal abortion is one of the important concerns in health system. In our study, we consider illegal abortion claims in Medical Council court in the suburbs of Tehran. **Materials and Methods**: A retrospective study was conducted. Data were extracted from registered judicial complainant cases of illegal abortion in Shahriyar medical court, Iran, during 2009–2017. **Results**: There were 751 registered claims during 2009–2017. Among them, a total of 95 gynecological claims were included in the study. Four (4.2%) registered claims were illegal abortion with severe complications such as peritonitis, rupture of uterine, small intestine, rectum, and mesentery perforation. Three cases had consumed misoprostol (prostaglandin E2) and one case had used prostaglandin E1 before curettage. Misoprostol was also used significantly more frequently than other methods for abortion before curettage (P < 0.05). Minor and short-term complications did not registered. **Conclusion**: The feature of claims showed that only severe morbidity and complications were registered in medical court. The definition of illegal abortion as a criminal act can be one of the factors of decreasing of abortion's complication claims.

Keywords: Illegal abortion, Iran, maternal morbidity and mortality

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INTRODUCTION

Abortion is defined as terminating pregnancy before the fetus becomes viable.^[1] Abortion based on mother's request is the most common cause of illegal abortion.^[2,3] It is often performed by unskilled or uneducated individuals out of the legal system, and without satisfying medical standards.^[4]

Global statistics show that between 2015 and 2019, there were approximately 121 million unintended pregnancies worldwide each year, 61% of which resulted in abortion. This means that 73 million abortions were performed annually worldwide.^[5] Each year, pregnancy-based complications lead to more than half a million deaths

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and 120 million disabilities in the world.^[6,7] In countries with restricted abortion laws, unintended pregnancy leads to increased tendency to unsafe abortion. Illegal or unsafe abortions could be an important cause of maternal mortality and morbidity.^[8,9] In Iran, similar to other developing countries, complications of illegal abortion are more prevalent as compared to developed countries.^[10,11]

Selective abortion is beyond a medical issue for the mother and the fetus;, it is an important topic for theoretical debate. However, the objective existence of the mother is faded out or even dismissed in theoretical sciences; most of the discussions are about personhood, soul of the fetus, and eventually defense of the fetus.^[12-14]

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The substantial number of induced and illegal abortions throughout the world, especially in developing countries, is resulting in maternal mortality in the reproductive age and a variety of physical and sexual morbidities in different societies.^[15-17] In other words, illegal abortion may not only be associated with severe complications, but may also lead to a rise in the rate of maternal mortality and morbidity. We evaluated illegal abortion claims in Medical Council court in the suburbs of Tehran.

MATERIALS AND METHODS

A retrospective study was conducted. Data were extracted from registered judicial complainant cases of illegal abortion in Shahriyar medical court, suburbs of Tehran.

The eligibility criteria of the study were all registered gynecological claims in medical court of Shahriyar during 2009–2017. The source of data was available in medical court of Shahriyar.

The data were collected confidentially so that the identities and personal information kept secret. The data related to complications of illegal abortion, drugs taken, types, and causes of abortion along with other demographic information about patients (age, duration of pregnancy, and place of residence) were collected and statistically analyzed.

Our exclusion criteria were duplicated claims, several registered claims for other gynecological complications.

The consent of complaints was obtained.

Statistical analysis

After collecting the data, they were statistically analyzed by SPSS Statistical Package for the Social Sciences (SPSS) version 19 through descriptive statistics (mean, standard deviation, and frequency of distribution) and inferential statistics (independent-samples *t*-test and Chi-square test) at the significant level of P < 0.0001 or P < 0.05.

RESULTS

In our study, the average age of women undergoing complications of illegal abortion was 26 years. Table 1 shows the demographic and pregnancy data for the patients with illegal abortion. There were 751 registered claims. A total of 95 gynecological claims were included in the study; only four (4.2%) registered claims were illegal abortion with severe complications such as peritonitis, rupture of uterine, small intestine, rectum, and mesentery perforation. Three cases had consumed misoprostol (prostaglandin E2) and one case had used prostaglandin E1 before curettage. Misoprostol was also used significantly more frequently than other methods for abortion before curettage (P < 0.05).

One patient had a previous induced abortion, two patients had abortion at 9 weeks of pregnancy, and two patients had abortion on 14 and 16 weeks after gestation age,

Variable	Frequency
Marital status	
Legal marriage	4
Illegitimate sexual relations	0
Education	
Illiterate	0
Diploma	4
University	0
Job	
Housewife	3
Employed	1
Pregnancy number	
First pregnancy	3
Second pregnancy	1
Abortion number	
0	3
1	1
Abortion type	
Induced	4
Spontaneous	0
Abortion procedure	
Medicinal	
Misoprostol	3
PG E1	1
Mechanical	4
Curettage	4
Financial situation	
Good	1
Bad	3

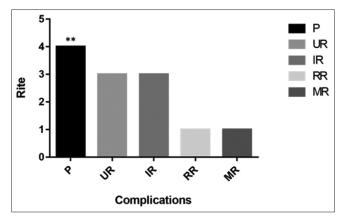


Figure 1: Complications due to illegal abortion in patients under study (P = Peritonitis; UR = Uterine perforation; IR = Intestinal perforation; RR = Rectal perforation; MR = Mesenteric perforation). **The most frequent complication following illegal Abortion (ANOVA test)

respectively. The most common complications in four cases of illegal abortion were peritonitis, uterine, intestinal, rectum, and mesenteric perforation [Figure 1]. All of four illegal abortions were on request.

DISCISSION

The results of our study showed that about 4.21% of the claims in medical court underwent illegal abortion. The real prevalence rate of illegal and unsafe abortion and related claims may be higher than the reported rate. A study by Erfani showed that the estimated abortion rate was 0.16 abortions per woman in Tehran. It has been estimated that 8.7 out of every 100 known pregnancies end up in abortion.[18] A study by Abdoljabbari et al. showed that 26% of women were 26 years old. The results also showed that 42.4% of the respondents considered abortion as an illegal religious practice.^[19] The findings of our study showed that the most complications of illegal abortion in women were peritonitis, uterine, intestinal, rectum, and mesenteric perforation. Women, who survive after unsafe abortion, may suffer from long-term complications.^[20] Social, religious, and political factors, and poverty, especially in developing countries, seem to be the most important cause of unsafe abortion.[21-24]

CONCLUSION

The feature of claims showed that the severe morbidity and complications were registered in medical court. Minor and short-term complications did not register. Increasing trend of illegal abortion in Iran and definition of abortion as a criminal act can be one of the factors of decreasing of abortion's complication claims. Practical solutions seem necessary for decreasing illegal abortion and preventing its complications.

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This study was extracted from the researcher's Ph.D. dissertation that was approved by the Ethical Committee of Tehran University of Medical Sciences. The approval number is: IR.TUMS.MEDICINE.REC.1397.836.

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Conflicts of interest

There are no conflicts of interest.

REFERENCES

- 1. Cunningham F, Leveno K, Bloom S, Spong CY, Dashe J. Williams,obstetrics, 25e. New York: Mcgraw-Hill; 2018.
- Bhattacharyya SK, Saha SP, Bhattacharya S, Pal R. Consequences of unsafe abortion in India- a case report. Proc Obstet Gynecol. 2011;2:Article 12 [4 p.]. https://doi.org/10.17077/2154-4751.1114.
- Khan KS, Wojdyla D, Say L, Gülmezoglu AM, Van Look PF. WHO analysis of causes of maternal death: A systematic review. Lancet

2006;367:1066-74.

- Odland ML, Membe-Gadama G, Kafulafula U, Jacobsen GW, Kumwenda J, Darj E. The use of manual vacuum aspiration in the treatment of incomplete abortions: A descriptive study from three public hospitals in Malawi. Int J Environ Res Public Health 2018;15:370.
- Guttmacher Institute. Unintended pregnancy and abortion worldwide [Internet]. 2020. Available from: https://www. guttmacher.org/fact-sheet/induced-abortionworldwide#. [Updated 2020 July].
- Hosseini H, Erfani A, Nojomi M. Factors associated with incidence of induced abortion in Hamedan, Iran. Arch Iran Med 2017;20:282-7.
- Shaikh Z, Abbassi RM, Rizwan N, Abbasi S. Morbidity and mortality due to unsafe abortion in Pakistan. Int J Gynaecol Obstet 2010;110:47-9.
- Horga M, Caitlin G, Malcolm P. The remarkable story of Romanian women's struggle to manage their fertility. J Fam Plann Reprod Health Care 2013;39:2-4.
- 9. Rashidpouraie R, Sharifi MN. COVID-19 and abortion right. Obstet Gynecol Sci 2020;63:743-4.
- Erfani A, McQuillan K. Rates of induced abortion in Iran: The roles of contraceptive use and religiosity. Stud Fam Plann 2008;39:111-22.
- Motaghi Z, Poorolajal J, Keramat A, Shariati M, Yunesian M, Masoumi SZ. Induced abortion rate in Iran: A meta-analysis. Arch Iran Med 2013;16:594-8.
- Sedgh G, Henshaw S, Singh S, Ahman E, Shah IH. Induced abortion: Estimated rates and trends worldwide. Lancet 2007;370:1338-45.
- Fergusson DM, Horwood LJ, Ridder EM. Abortion in young women and subsequent mental health. J Child Psychol Psychiatry 2006;47:16-24.
- Grossman D, Baum SE, Andjelic D, Tatum C, Torres G, Fuentes L, et al. A harm-reduction model of abortion counseling about misoprostol use in Peru with telephone and in-person follow-up: A cohort study. PLoS One 2018;13:e0189195.
- Singh S, Shekhar C, Acharya R, Moore AM, Stillman M, Pradhan MR, et al. The incidence of abortion and unintended pregnancy in India, 2015. Lancet Glob Health 2018;6:e111-20.
- Sherigar JM, Dalal AD, Patel JR. Uterine Perforation with subtotal small bowel prolapse – A rare complication of dilatation and curettage. Online J Health Allied Sci 2005;1:6.
- Okonofua F, Omo-Aghoja L, Bello Z, Osughe M, Agholor K. Self-reporting of induced abortion by women attending prenatal clinics in urban Nigeria. Int J Gynaecol Obstet 2010;111:122-5.
- 18. Erfani A. Induced abortion in Tehran, Iran: Estimated rates and correlates. Int Perspect Sex Reprod Health 2011;37:134-42.
- Abdoljabbari M, Karamkhani M, Saharkhiz N, Pourhosseingholi M, Khoubestani MS. Study of the effective factors in women's decision to make abortion and their belief and religious views in this regard. J Res Relig Health 2016;2:46-54.
- Haddad LB, Nour NM. Unsafe abortion: Unnecessary maternal mortality. Rev Obstet Gynecol 2009;2:122-6.
- 21. Erfani A, Yuksel-Kaptanoglu I. The use of withdrawal among birth limiters in Iran and Turkey. Stud Fam Plann 2012;43:21-32.
- Erfani A. Low fertility intention in Tehran, Iran: The role of attitudes, norms and perceived behavioural control. J Biosoc Sci 2017;49:292-308.
- Iyengar K, Danielsson KG. A need for overhaul of policy on contraception and abortion in India. Lancet Glob Health 2018;6:e16-7.
- Sedgh G, Bearak J, Singh S, Bankole A, Popinchalk A, Ganatra B, et al. Abortion incidence between 1990 and 2014: Global, regional, and subregional levels and trends. Lancet 2016;388:258-67.