Caspian J Reprod Med, 2025, 11 (1): 10-11

Caspian Journal of Reproductive Medicine

Journal homepage: www.caspjrm.ir

Letter to Editor

Discrepancies in Iran's Abortion Statistics: A Call for Evidence-Based Policy

Javad Ghasemi [1], Nouzar Nakhaee [2,*]

[1] Social Determinants of Health Research Center, Institute for Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran
[2]Health Services Management Research Center, Institute for Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran

Received: 1 Jan 2025 Accepted: 22 June 2025

Abstract

Background: Conflicting abortion statistics in Iran hinder policymaking, with scientific estimates (7.5–10.8 per 1,000) differing from official figures (300,000–600,000 annually).

Methods: We employed a regression equation approach to estimate abortion rates based on the correlation between modern contraceptive prevalence and the total abortion rate (TAR). Data from the 2022 Kerman Fertility Survey (4,684 married women) indicated a contraceptive prevalence of 52.2%. The TAR was calculated using the formula TAR = 4.0 − 0.07 × modern contraceptive use, leading to the annual abortion rate estimation.

Results: The estimated annual abortion rate was 9.89 per 1,000 married women, consistent with scientific studies and significantly lower than official estimates, which suggest rates of 17.1 to 35.4 per 1,000.

Conclusion: The disparity between scientific and governmental estimates underscores the importance of relying on evidence-based research for policymaking in Iran to effectively address unsafe abortions and improve reproductive health strategies.

Keywords: Abortion, Iran, Policy, Pregnancy

Introduction

Contraceptive use significantly impacts fertility rates in developing countries, yet induced abortion remains a critical factor in fertility reduction. The accuracy of abortion rates is often questioned due to underreporting and inadequate registration systems, particularly in developing countries. Reliable abortion data are essential for policymakers to address unsafe abortion risks (1). Abortion in Iran is heavily restricted under Islamic law and is only legally permitted under specific medical circumstances. According to Iranian law, abortion is allowed when the mother's life is at risk or when the fetus has severe congenital abnormalities, as approved by a panel of medical experts (2).

Reliable abortion data are crucial for policymakers to develop preventive measures against unsafe abortion and its associated risks. In Iran, contradictory figures are reported regarding induced abortion rates, leading to uncertainty about the actual numbers. Scientific estimates suggest an annual abortion rate ranging from a minimum of 7.5 per 1,000 married women (3) to a maximum of 10.8 per 1,000 married women (4). Applying Erfani et al.'s (3) abortion rate to the 2016 census data (16.97 million married women aged 15-49) results in an estimated 127,000 annual abortions. A nationwide study using the network scale-up approach estimated between 129,000 and 219,000 induced abortions per year (4).

In contrast, official estimates from the Iranian Ministry of Health, based on unpublished data, suggest 300,000 to 600,000 illegal abortions occur annually (5). To assess which estimate is more accurate, we applied a regression equation approach, which relies on the strong inverse correlation (-0.91) between modern contraceptive prevalence and the total abortion rate (TAR) (3) TAR represents the lifetime number of abortions a woman would have if abortion rates remained constant and is analogous to the total fertility rate (TFR) (1). Using the formula proposed by Erfani et al. (3):

***Correspondence author:** Dr. Nouzar Nakhaee, Professor of Community Medicine, Neuroscience Research Center, Kerman University of Medical Sciences, Kerman, Iran, Tel: +983431325700, Email: nakhaeen@kmu.ac.ir

[DOI: 10.22088/caspjrm.11.1.10]

Using the formula proposed by Erfani et al. (3): TAR= 4.0 – 0.07 * modern contraceptive use

We estimated TAR based on modern contraceptive prevalence from the 2022 Kerman Fertility Survey, which examined 4,684 married women in southeastern Iran. The reported prevalence of modern contraceptive methods was 52.2%, yielding a TAR of 0.35. The annual abortion rate per 1,000 married women was then calculated as 9.89 by dividing TAR by 35 (reproductive years) and multiplying by 1,000 (1). This figure is consistent with a meta-analysis of ten studies with 102,394 participants, which estimated a rate of 8.9 per 1,000 Iranian women (6). Another study using the network scale-up method found rates between 6.3 and 10.8 per 1,000 women (4).

If official estimates of 300,000 to 600,000 abortions per year were correct, the abortion rate would range from 17.1 to 35.4 per 1,000 married women—substantially higher than peer-reviewed research findings (3, 4, 6). To ensure informed decision-making and mitigate risks associated with unsafe abortions, reliance on scientifically validated data is imperative.

Conclusion

The study's regression-based estimate of 9.89 abortions per 1,000 married women aligns with peer-reviewed findings, contrasting sharply with inflated governmental numbers. This significant discrepancy highlights the need for policymakers and researchers to rely on scientifically validated data rather than unverified governmental reports when addressing abortion policy and reproductive health issues in Iran.

Acknowledgements

None

Conflicts of Interest

We have no commercial or financial gains for this study.

References

1. Singh S, Remez L, Tartaglione A. Methodologies for estimating abortion incidence and abortion-related morbidity: a review: Guttmacher Institute; 2010.
2. Abbasi M, Gooshki ES, Allahbedashti N. Abortion in Iranian legal system. Iran j allergy asthma immunol 2014: 71-84.
3. Erfani A, McQuillan K. Rates of induced abortion in Iran: the roles of contraceptive use and religiosity. Stud Fam Plan 2008; 39(2): 111-22.
4. Rastegari A, Baneshi MR, Haji-Maghsoudi S, Nakhaee N, Eslami M, Malekafzali H, et al. Estimating the annual incidence of abortions in Iran applying a network scale-up approach. Iran Red Crescent Med J 2014; 16(10).
5. Burki T. Iran's population policy: consequences for youth. Lancet Child Adolesc Health 2022; 6(9): 601.
6. Shariati M. Induced abortion rate in Iran: a meta-analysis. Arch Iran Med 2013; 16(10): 594.

[DOI: 10.22088/caspjrm.11.1.10]