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## Annotated bibliography: Women's Sexual and Reproductive Health in Mexico

### Introduction

This bibliography presents findings from a 10 year collaboration with Mexico's National Institute of Public Health (Instituto Nacional de Salud Publica/INSP), Ipas, Catholics for Free Choice (Catholicas por el Derecho a Decidir), and other investigators. This body of work mostly relies on large publicly available datasets to study sexual and reproductive health care access, utilization, and outcomes among Mexican women. This collaborative body of research addresses issues that are critical to the health of women around the globe.

### Contraception

Mexico has the highest adolescent fertility rates of OECD nations and adolescent pregnancy is a public policy priority. These papers explore factors affecting pregnancy among Mexico's adolescents and young adults, including cash transfer programs aimed at improving health services utilization, use of long-acting-reversible contraception and emergency contraception, provision of postpartum contraception, parental support, and the quality of the family planning services accessible to adolescents. While adolescent use of the most and moderately effective contraception methods as well as emergency contraception have increased over time, many young people continue to experience disparities in access. These groups include adolescents with lower levels of education, those living in rural areas or utilizing public healthcare facilities, and those without a prior pregnancy. Adolescents also report receiving lower quality family planning services.

1. Kung, S. A., Saavedra, B., Evelyn, A., Vélez, A., Consuelo, M., Piñeros, M., ... Darney, B. G. (2021). Factors Associated with Support for Adolescent Access to Contraception Among Mexican Catholic Parents. *Journal of Religion and Health*, <https://doi.org/10.1007/s10943-021-01186-w>
2. de la Vara-Salazar, E., Hubert, C., Saavedra-Avenidaño, B., Suárez-López, L., Villalobos, A., Ávila-Burgos, L., ... Darney, B. G. (2020). Provisión de métodos anticonceptivos en el posparto inmediato en México, 2018-19. *Salud Publica de Mexico*, 62(6), 637–647. <https://doi.org/10.21149/11850>
3. Darney, Blair G., Fuentes-Rivera, E., Saavedra-Avenidaño, B., Sanhueza-Smith, P., & Schiavon, R. (2020). Contraceptive receipt among first-trimester abortion clients and postpartum women in urban Mexico. *International Perspectives on Sexual and Reproductive Health*, 46, 35–43. <https://doi.org/10.1363/46e0720>
4. Darney, B. G., & Saavedra-Avenidaño, B. (2018). Quality measurement is key to improving family planning services and outcomes for adolescents in Low- and Middle-Income Countries. *Journal of Adolescent Health*, 62(3), 251-252. <http://doi.org/10.1016/j.jadohealth.2017.12.006>
5. Han, L., Saavedra-Avenidaño, B., Rodriguez, M., & Darney, B. G. (2017). Emergency Contraception in Mexico: Trends in Knowledge and Ever-Use 2006-2014. *Maternal and Child Health Journal*, 21(11). <http://dx.doi.org/10.1007/s10995-017-2328-6>
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7. Saavedra-Avenidaño, B., Andrade-Romo, Z., Rodriguez, M. I., & Darney, B. G. (2017). Adolescents and Long-Acting Reversible Contraception: Lessons from Mexico. *Maternal and Child Health Journal*, 21(9). <http://dx.doi.org/10.1007/s10995-016-2013-1>
8. Darney, B. G., Saavedra-Avenidaño, B., Sosa-Rubi, S. G., Lozano, R., & Rodriguez, M. I. (2016). Comparison of family-planning service quality reported by adolescents and young adult women in Mexico. *International Journal of Gynecology & Obstetrics*, 134(1), 22-28. <http://dx.doi.org/10.1016/j.ijgo.2015.12.003>
9. Darney, B. G., Sosa-Rubi, S. G., Servan-Mori, E., Rodriguez, M. I., Walker, D., & Lozano, R. (2016). The relationship of age and place of delivery with post-partum contraception prior to discharge in Mexico: A retrospective cohort study. *Contraception*, 93, 478-484. <http://dx.doi.org/10.1016/j.contraception.2016.01.015>
10. Darney, B. G., Weaver, M., Sosa-Rubi, S. G., Walker, D., Mori, E., Prager, S., & Gakidou, E. (2013). The Oportunidades Conditional Cash Transfer Program: Effects on Pregnancy and Contraceptive Use Among Young Rural Women in Mexico. *International Perspectives on Sexual and Reproductive Health*, 39(4), 205-217. <http://dx.doi.org/10.1363/3920513>

### Abortion

The safety of abortion has long been established, but access to legal abortion remains restricted in most Mexican states and across Latin America. In Mexico City where first trimester abortion is legal and free or low-cost, abortion rates increased then plateaued after legalization while case fatality rates declined. However, adolescents, women with low education levels, and women living outside the metropolitan area continue to experience reduced access to abortion. Young women use abortion to prevent first births, and abortion plays a role in reducing total fertility by age 24. Nationwide, we document a need for second trimester abortion. Women can estimate gestational age using last menstrual period date; lack of ultrasonography access should not be a barrier to abortion care. Misoprostol is widely available in Mexico City, improving pharmacy staff knowledge and practices can help reduce unsafe abortion. The majority of Mexican Catholics are supportive of abortion in at least some situations, although opinions on acceptable situations vary. Columbia decriminalized abortion under limited circumstances one year earlier than Mexico City's legalization, but access, particularly with modern technologies, and the use of codified health exceptions remains limited.

1. Darney, B. G., Fuentes-Rivera, E., Saavedra-Avenidaño, B., Sanhueza-Smith, P., & Schiavon, R. (2021). Preventing first births among adolescents in Mexico City's public abortion programme. *BMJ Sexual and Reproductive Health*, 0, 1-6. <https://doi.org/doi:https://doi.org/bmjsexrh-2020-200795>  
Universal access to safe and legal abortion care: the missing link to guarantee the sexual and reproductive rights of adolescent women in Mexico <https://blogs.bmj.com/bmjsexrh/2019/08/19/rare-but-there-exploring-utilization-of-second-trimester-abortion-in-mexico/>
2. Saavedra-Avenidaño, B., Schiavon, R., & Darney, B. G. (2021). The relationship between abortion at first pregnancy and live births by young adulthood: a population-based study among Mexican women. *Journal of Pediatric & Adolescent Gynecology*. <https://doi.org/10.1016/j.jpog.2021.01.007>
3. Weaver, G., Schiavon, R., Collado, M. E., Kung, S., & Darney, B. G. (2020). Misoprostol knowledge and distribution in Mexico City after the change in abortion law: A survey of pharmacy staff. *BMJ Sexual and Reproductive Health*, 46(1), 46-50. <http://doi.org/10.1136/bmjsexrh-2019-200394>

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5. Darney, B. G., Fuentes-Rivera, E., Polo, G., Saavedra-Avendaño, B., Alexander, L., & Schiavon, R. (2020). Con la ley y sin la ley/With and without the law: Utilization of abortion services and case fatality in Mexico, 2000–2016. *International Journal of Gynecology & Obstetrics*, 148, 369–374. <http://doi.org/10.1002/ijgo.13077>
6. Friedman, J., Saavedra-Avendaño, B., Schiavon, R., Alexander, L., Sanhueza, P., & Darney, B. G. (2019). Quantifying disparities in access to public-sector abortion based on legislative differences within the Mexico City metropolitan area. *Contraception*, 99, 160-164. <http://doi.org/10.1016/j.contraception.2018.11.012>
7. Alexander, L., Fuentes, E., Saavedra-Avendaño, B., Schiavon, R., Madonaldo Rueda, N., Hernandez, B., . . . Darney, B. G. (2019). Utilisation of second-trimester spontaneous and induced abortion services in public hospitals in Mexico, 2007–2015. *BMJ SRH*, 45. <http://doi.org/10.1136/bmjshr-2018-200300> Rare but there: exploring utilization of second-trimester abortion in Mexico <https://blogs.bmj.com/bmjshr/2019/08/19/rare-but-there-exploring-utilization-of-second-trimester-abortion-in-mexico/>
8. Darney, B. G., Kapp, N., Andersen, K., Baum, S. E., Blanchard, K., Gerdts, C., . . . Powell, B. (2019). Definitions, measurement, and indicator selection for quality of care in abortion. *Contraception*, 100(5), 354-359. <http://doi.org/10.1016/j.contraception.2019.07.006>
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10. Saavedra-Avendaño, B., Schiavon, R., Sanhueza Smith, P., Rios-Polanco, R., Garcia-Martinez, L., & Darney, B. G. (2018). Who presents past the gestational age limit for first trimester abortion in the public sector in Mexico City? *PLoS ONE*, 13(2). <http://doi.org/10.1371/journal.pone.0192547>
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9. Servan-Mori, E., Sosa-Rubí, S. G., Najera-Leon, E., & Darney, B. G. (2016). Timeliness, frequency and content of antenatal care: which is most important to reducing indigenous disparities in birth weight in Mexico? *Health Policy Plan*, 31(4), 444-453. <http://dx.doi.org/10.1093/heapol/czw082>

## Health Systems

Improvements in maternal and child health have reduced some disease burden and improved female life expectancy. However, rates of non-communicable have increased. Primary care physicians and health promoters are lacking in Mexico.

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## Maternal Health

Maternal mortality in Mexico is increasing for indirect causes as it declines for direct causes, and disparities persist by community-level socio-economic status. Most women receive at least some prenatal care, but gaps remain in adequacy of care. Women with low education or socioeconomic levels are less likely to receive adequate prenatal care, although having public health insurance can help to improve care among low-income adolescent populations. Adequate prenatal care can also help to reduce the low birth weights often experienced by indigenous women. Group Antenatal Care (G-ANC) has been successfully adapted and implemented in Mexico. Cesarean delivery is very common in Mexico, particularly among obese women, highlighting ongoing dual epidemics of obesity and cesarean.