

Monitoring the missing half: why reporting adolescent births is insufficient

Lack of national abortion data impedes development of sexual and reproductive health care policies and programs for young Australians

Recent data show a steady decrease in adolescent births to a historic low of 10 births per 1000 15–19-year-olds.¹ Notwithstanding that some adolescent pregnancies are planned or wanted, these data are surely positive, as pregnant adolescents are vulnerable to numerous adversities and delaying pregnancy is healthier for mothers and children.² However, birth rates reflect access to comprehensive sexuality education, reliable contraception and safe abortion. Specifically, as lower birth rates may reflect higher abortion rates, a complete national picture is required. More broadly, pregnancy and its outcomes reflect various inequities that continue to affect adolescents and their offspring across their lives. Greater understanding of adolescent pregnancy outcomes, including abortion, would help shape a suite of interventions for vulnerable adolescents, including interventions that facilitate access to quality schooling and alleviate poverty.

Yet national abortion data are unavailable in Australia. In New Zealand, 36% of pregnancies among 15–19-year-olds end in abortion,³ consistent with data from South Australia and Western Australia, the only two Australian states that publish abortion data. Medical abortion, a better option for uncomplicated pregnancies, has come to represent the majority of induced abortions in most European countries, presumably because of women's preference and ease of access.⁴ The absence of medical abortion data precludes confirmation of this shift in Australia, let alone understanding access by age. Further, while abortion is generally legal here, access varies widely (Box).

The recent controversy regarding My Health Record underscores concerns around potential abuses of routinely collected health data, and the ethical necessity of robust security. Abortion data are especially sensitive, with potential stigma and legal consequences attached to patients and providers. However, SA and WA have been uneventfully collecting and publishing anonymised data since 1970 and 1998, respectively. The Centers for Disease Control and Prevention (CDC) have reported United States abortion data since 1969. The CDC reasons for routine data collection equally apply in Australia: to "identify characteristics of women who are at high risk of unintended pregnancy; evaluate the effectiveness of programs for reducing teen pregnancies and unintended pregnancies among women of all ages; calculate pregnancy rates, on the basis of the number of pregnancies ending in abortion, in conjunction with birth data and pregnancy loss estimates; monitor changes in clinical practice patterns".⁵

Childbirth may result in considerable stigma, depending on a woman's circumstances, but

mandatory birth certificates collect extensive personally identifiable information about mother and child. We routinely collect data on stigmatising conditions when there is benefit to individuals or the community; information regarding potentially sensitive diagnoses (eg, cancer, infectious illnesses), surgical procedures and medications is gathered in various jurisdictions for reasons of public health or safety, and to understand trends.

Variation in legality and access

Adolescents are cost-sensitive. However, outside the Northern Territory and SA, abortions are provided almost exclusively by private clinics, and cost tends to be highest where access is least. Surgical abortion is generally available only in metropolitan areas. Mifepristone–misoprostol can be prescribed by obstetricians and gynaecologists and, after online training, certified physicians including general practitioners. Medical abortion is available in all states and territories and accessible by telehealth with postal delivery of medications, except in SA and the Australian Capital Territory. In practice, this is limited by the expectation that women stay within a 2-hour drive of 24-hour emergency care until the abortion is complete. In most jurisdictions, consent to abortion for minors is consistent with consent for other medical procedures (ie, Gillick competent mature minors may consent), except in WA where those aged under 16 years must apply to the Children's Court to waive parental notification.⁶

What is known in Australia

In Australia, existing data cannot be used to inform reliable national abortion estimates. Surgical interventions for abortion are included in Medicare Benefits Schedule data, but as coding excludes indication, abortion procedures are indistinguishable from other gynaecological conditions (eg, dilatation and curettage for menorrhagia). Public hospital procedures are not processed with Medicare codes, further limiting the utility of Medicare Benefits Schedule data. As the only indication for mifepristone–misoprostol is abortion, medical abortion rates could be estimated using Pharmaceutical Benefits Scheme or manufacturer data, but none have been published and these data alone may give an incomplete picture. Thus, mandatory notification is the only reliable means to monitor abortion.

Current understanding of adolescent pregnancy is drawn from national birth statistics and the complete data (births, pregnancy losses and terminations)

Jennifer L Marino^{1,2,3}

Susan M Sawyer^{2,3}

¹ Royal Women's Hospital, Melbourne, VIC.

² University of Melbourne, Melbourne, VIC.

³ Murdoch Children's Research Institute, Melbourne, VIC.

jennifer.marino@unimelb.edu.au

doi:10.5694/mja2.50047

Podcast with Susan Sawyer and Jennifer Marino available at <https://www.mja.com.au/podcasts>

Legal status and accessibility of abortion in Australian states and territories (at 6 February 2019)

| Legal status of abortion | | | | | |
|------------------------------|--|---|---|--|--|
| State or territory | Criminality | Gestational age, practitioner approval | Other legally imposed restrictions | Conscientious objection recognised* | Accessibility |
| Australian Capital Territory | Removed from the criminal code in 2002 Lawful on request | No gestational age restrictions | Abortion services must be provided by a medical practitioner in a ministerially designated medical facility | Yes | One private clinic in Canberra provides surgical and medical abortions Medical abortion in the community, eg, general practice or by telehealth, is not permitted Safe access zones [†] |
| New South Wales | Criminal offence for patient and provider if undertaken unlawfully A patient was convicted in 2017 for attempting to end a pregnancy with unprescribed medications at 26 weeks' gestation | No gestational age restrictions in criminal statute or imposed by case law | Case law established precedents that abortion is generally considered lawful when undertaken by a medical practitioner to prevent serious danger to the woman's physical or mental health, including economic or social reasons | No | Surgical and medical abortions are available at multiple private clinics in major and regional cities Surgical abortion is available up to 20 weeks in some private clinics Medical abortion is available by telehealth and from some general practitioners in metropolitan and regional locations Safe access zones |
| Northern Territory | Removed from the criminal code in 2017 | Abortion up to 14 weeks is lawful with the agreement of a suitably qualified medical practitioner, taking into account all medical circumstances and the woman's current and future physical, psychological and social circumstances, and professional standards applying to the practitioner, and under 23 weeks with the agreement of two suitably qualified medical practitioners No gestational age limit or second provider requirement in emergency | Suitably qualified medical practitioners are obstetricians, gynaecologists, or are credentialed in fertility control | Yes, except in emergency; referral mandatory | Surgical abortion requires referral to Darwin Private Hospital or Alice Springs Hospital; for abortions at 14–23 weeks, this referral must come from Royal Darwin Hospital Medical abortion is available from any suitably qualified medical practitioner, by telehealth, and from three private clinics Safe access zones |
| Queensland | Removed from the criminal code 2018 | Abortion up to 22 weeks lawful on request, and after 22 weeks if two medical practitioners agree, taking into account all medical circumstances and the woman's current and future physical, psychological and social circumstances, and professional standards applying to the practitioner; or with a single practitioner's agreement after 22 weeks in an emergency if immediately necessary to save her life or the life of another unborn child | | Yes, except in emergency; referral mandatory | Surgical abortion is available up to 14–20 weeks in private clinics in major cities Medical abortion is available by telehealth, from many of the same private clinics, and from some general practitioners in metropolitan and regional locations Safe access zones |
| South Australia | Criminal offence for patient and provider if undertaken unlawfully | Abortion up to 28 weeks is lawful if two legally qualified medical practitioners agree it will prevent serious fetal mental or physical abnormality, or serious danger to the woman's physical or mental health (account may be taken of the pregnant woman's actual or reasonably foreseeable environment); or with a single qualified practitioner's agreement if immediately necessary to save her life or prevent grave injury to her mental or physical health | Must be undertaken in a prescribed hospital | No | Free and fee-based medical and surgical abortions are available through the public system, including for those not eligible for Medicare, in multiple metropolitan and regional services Except for emergencies, patients are required to have resided in South Australia for at least 2 months Medical abortion in the community, eg, general practice or by telehealth, is not permitted No safe access zones are established |

(Continues)

(Continued)

| Legal status of abortion | | | | | |
|--------------------------|--|---|--|--|--|
| State or territory | Criminality | Gestational age, practitioner approval | Other legally imposed restrictions | Conscientious objection recognised* | Accessibility |
| Tasmania | Removed from the criminal code in 2013 | Abortion up to 16 weeks is lawful on request, and 16 weeks and beyond with the agreement of two medical practitioners that risk of injury to physical or mental health exceeds risk of procedure; one must be an obstetrician or gynaecologist | | Yes, except in emergency; referral mandatory | Surgical abortion is available by referral from general practitioner, Family Planning Tasmania or Tasmanian Women's Health Service Medical abortion is available by telehealth and from private clinics in the north and south Safe access zones |
| Victoria | Removed from the criminal code in 2008 | Abortion up to 24 weeks is lawful on request, and 24 weeks and beyond if a second provider agrees that abortion is in the patient's best interest | | Yes, except in emergency; referral mandatory | Surgical abortion is available from multiple private clinics in and near Melbourne Medical abortion is available by telehealth, from multiple private clinics in and near Melbourne, from private clinics in two regional cities, and from some general practitioners in metropolitan and regional locations Very limited appointments for medical and surgical abortions are available from the Royal Women's Hospital, with priority access given to complex cases without ability to access care in the private sector Safe access zones |
| Western Australia | Criminal offence for the provider if undertaken unlawfully | Abortion up to 20 weeks is lawful if there is serious danger to the physical or mental health of the patient, or if the patient will suffer serious personal, family or social consequences, and 20 weeks and beyond if two medical practitioners from a ministerially appointed panel of six agree that the patient or fetus has a severe medical condition that justifies the procedure | Patients must be offered counselling; for patients under 16 years, a custodial parent or legal guardian must be notified and offered counselling, or exception sought from the Children's Court Abortion services beyond 20 weeks must be provided in a ministerially approved facility | Yes | Surgical and medical abortion is available from two private clinics (one in Perth and one in a regional city) Medical abortion is available in the community, eg, general practice, or by telehealth No safe access zones |

* Conscientious objection: a medical or other health provider may refuse to provide or participate in a lawful treatment or procedure because of conflict with personal beliefs, values or moral concerns. †Safe access zones: defined areas around the premises where abortion services are provided, where specified behaviour (eg, harassment, intimidation, obstruction, video recording) is prohibited. Sources: *Health Act 1993 (ACT)*; *Crimes Act 1900 (NSW)* and *Public Health Amendment (Safe Access to Reproductive Health Clinics) Act 2018 (NSW)*; *Termination of Pregnancy Law Reform Act 2017 (NT)*; *Termination of Pregnancy Bill 2018 (Qld)*; *Criminal Law Consolidation Act 1935 (SA)* and *Criminal Law Consolidation (Medical Termination of Pregnancy) Regulations 2011 (SA)*; *Reproductive Health (Access to Terminations) Act 2013 (Tas)*; *Abortion Law Reform Act 2008 (Vic)*; *Health Act 1911 (WA)*; <https://www.childrenbychoice.org.au/factsandfigures/australianabortionlawandpractice>; personal communication with family planning leaders in Tasmania and New South Wales (accessibility only). ♦

gathered from SA and WA, where notification and data compilation are legally mandated (the 2017 NT legislation decriminalising abortion also mandates notification and data collection but reports are yet to be published). National birth data show a steady decrease in births to 15–19-year-olds over the past two decades. While also true for Indigenous Australians, the birth rate among Indigenous 15–19-year-olds is around five times higher than that of non-Indigenous Australians.¹ In SA, among 15–19-year-olds, abortions fell from 24.5/1000 in

2002 to 8.3/1000 in 2016, reflecting a decrease in pregnancies to 17.6/1000, the lowest rate since 1970⁷ (pregnancies among those aged under 15 years are uncommon and are included in numerators for 15–19-year-olds). Forty-seven per cent of pregnancies in 15–19-year-olds and 77% of those in under-15-year-olds ended in abortion.⁷ The pattern in WA is similar.⁸ Among 15–19-year-olds, pregnancy, abortion and birth rates have been in decline since 2006, with respective lows of 21.6, 9.1 and 12.4/1000 in 2015. The proportion of pregnancies ending in abortion

was highest in 15–19-year-olds (42.3%). Those in this age group living outside metropolitan areas had substantially higher pregnancy rates (39.9/1000 v 22.3/1000), but comparable rates of abortion (12.3/1000 v 11.3/1000). Although the proportion of pregnancies which were terminated was generally lower for Indigenous than non-Indigenous women (11.2% v 19.9%), Indigenous adolescents were much less likely to end their pregnancies than their non-Indigenous counterparts (11.7% v 52.2%).⁸ These state data reveal substantial variability by age, remoteness and Indigenous status in the proportion of teenage pregnancies which end in abortion, affirming that birth data alone provide an incomplete picture of adolescent pregnancy.

Although many other countries have also experienced recent declines, adolescent pregnancy rates vary widely, ranging from 8/1000 in Switzerland and 14/1000 in the Netherlands, to 57/1000 in the US and 51/1000 in New Zealand.³ The proportion ending in abortion in these countries is similarly variable: 59%, 50%, 26% and 36%, respectively. International comparisons highlight that many different factors contribute to lower rates of adolescent pregnancy and abortion, including access to quality comprehensive sexuality education, access to quality primary health care and subsidised contraception, access to legal abortion without parental consent, and cultural acceptance.⁹

Data can help assess preventive actions

In the United Kingdom, the collection of complete pregnancy outcome data allows calculation of teenage pregnancy rates used to assess prevention programs and contextualise changes in birth and abortion rates locally, regionally and nationally.¹⁰ This comprehensive approach permitted monitoring of the Teenage Pregnancy Strategy (1999–2010), and facilitated regional adjustment at a mid-course review in 2005.¹¹ The strategy was a complex, whole-of-government, multicomponent intervention to prevent adolescent pregnancy and support young parents. A core feature was access to quality comprehensive sexuality education in schools and broad access media campaigns. Between 1999 and 2013, pregnancy in under-18-year-olds halved from 47/1000 to 23/1000. An evaluation using routinely collected area level data and national survey data measured the strategy's impact on participation in education, work and training, and cost benefits.¹⁰ These data made a strong case that the fall in teenage pregnancies was attributable to the strategy, and that its greatest impact was in areas of highest disadvantage where pregnancy rates were highest.

Importantly, teenage conceptions decreased during the strategy — births and abortions fell steeply from 2006.

With earlier onset of puberty, technological changes (eg, online pornography) and dynamic behavioural norms, comprehensive sexuality education needs to start in primary school, and like other education must be tailored to age and development. This includes addressing challenges disproportionately experienced by LGBTQI youth, including discrimination, interpersonal violence and mental health disorders, which increase unplanned pregnancy risk. As recognised by the CDC and the Teenage Pregnancy Strategy, complete pregnancy outcome data are required for objective evaluation and continued improvement of comprehensive sexuality education.

With broad access to comprehensive sexuality education and reliable contraception, safe abortion should be accessible, legally available and uncommonly required. Given highly variable access to abortion, reliable data collection is required in all states and territories, with national data integration and analysis. The unheralded but longstanding success of SA and WA in monitoring medical and surgical abortion provides models for a national public health surveillance system. More consistent laws would promote equity of access to medical and surgical abortion and telehealth consultations. Publicly funded abortion clinics are needed in all states and territories, with a feasible plan for access for people living in remote areas, including adolescents. Notwithstanding the recent same-sex marriage decision, the defunding of various sexuality education programs suggests we live in an era of growing sexual conservatism. In this context, it is important to remember that access to sexual and reproductive health services for the young constitutes part of their right to health as well as being their human right. Health professionals are uniquely positioned to advocate for these measures.

Acknowledgements: Jennifer Marino is supported by National Health and Medical Research Council Centre of Research Excellence in Adolescent Health grant 1134894 and project grant 1161145. We thank Dr Deborah Bateson (Family Planning Victoria), Ms Sarah Gafforini and Dr Philip Goldstone (Marie Stopes Australia), Dr Cedric Manen (Family Planning Tasmania) and Prof Rachel Skinner (University of Sydney and Children's Hospital Westmead) for enlightening conversations about this topic and comments on the manuscript.

Competing interests: No relevant disclosures.

Provenance: Not commissioned; externally peer reviewed. ■

© 2019 AMPCo Pty Ltd

References are available online.

- 1 Australian Bureau of Statistics. 3301.0 – Births, Australia, 2017. Canberra: ABS, 2018. <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3301.0> (viewed Feb 2019).
- 2 Marino JL, Lewis LN, Bateson D, et al. Teenage mothers. *Aust Fam Phys* 2016; 45: 712–717.
- 3 Sedgh G, Finer LB, Bankole A, et al. Adolescent pregnancy, birth, and abortion rates across countries: levels and recent trends. *J Adolescent Health* 2015; 56: 223–230.
- 4 Singh S, Remez L, Sedgh G, et al. Abortion worldwide 2017: uneven progress and unequal access. New York: Guttmacher Institute, 2018. https://www.guttmacher.org/sites/default/files/report_pdf/abortion-worldwide-2017.pdf (viewed Sept 2018).
- 5 Centers for Disease Control and Prevention. CDCs abortion surveillance system FAQs. Atlanta, GA: CDC, 2017. https://www.cdc.gov/reproductivehealth/data_stats/abortion.htm (viewed Sept 2018).
- 6 Sanci LA, Sawyer SM, Kang MS, et al. Confidential health care for adolescents: reconciling clinical evidence with family values. *Med J Aust* 2005; 183: 410–414. <https://www.mja.com.au/journal/2005/183/8/confidential-health-care-adolescents-reconciling-clinical-evidence-family-values>
- 7 Pregnancy Outcome Unit. Pregnancy outcome in South Australia 2016. Adelaide: SA Health, Government of South Australia, 2018. <https://www.sahealth.sa.gov.au/wps/wcm/connect/4ccbba85-14c6-4b39-a19e-4e8cd54e9ea1/Pregnancy+Outcome+in+South+Australia+2016.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-4ccbba85-14c6-4b39-a19e-4e8cd54e9ea1-mxUFP3N> (viewed Feb 2019).
- 8 Hutchinson M, Ballesteras T. Induced abortions in Western Australia 2013–2015: fifth report of the Western Australian Abortion Notification System.
- 9 Perth: Department of Health, Western Australia, 2018. <https://ww2.health.wa.gov.au/-/media/Files/Corporate/general%20documents/Data%20collection/PDF/Induced-Abortion-Report-2013-15.pdf> (viewed Sept 2018).
- 10 Part K, Moreau C, Donati S, et al. Teenage pregnancies in the European Union in the context of legislation and youth sexual and reproductive health services. *Acta Obstet Gynecol Scand* 2013; 92: 1395–1406.
- 11 Wellings K, Palmer MJ, Geary RS, et al. Changes in conceptions in women younger than 18 years and the circumstances of young mothers in England in 2000–12: an observational study. *Lancet* 2016; 388: 586–595.
- 12 Hadley A, Ingham R, Chandra-Mouli V. Implementing the United Kingdom's ten-year teenage pregnancy strategy for England (1999–2010): how was this done and what did it achieve? *Reprod Health* 2016; 13: 139. ■