

The prevalence and variations in unintended pregnancy by socio-demographic and health-related factors in a population-based cohort of young Australian women

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Abstract

Objective: The aim of this study is to estimate the prevalence of unintended pregnancy and associated socio-demographic and health-related factors among a national cohort of young Australian women.

Methods: Secondary analysis of three waves (2013–2015) of the Australian Longitudinal Study on Women's Health new young cohort. Women born between 1989 and 1995 were recruited through internet and traditional media, and peer referral. Respondents completed a baseline web-based survey in 2013 (n=17,010) on their health and healthcare use and were followed up annually. This analysis uses data from women reporting ever having vaginal sex in waves 2 (n=9,726/11,344) and 3 (n=6,848/8,961). We assessed correlates of lifetime and recent unintended pregnancy using multivariable regression models.

Results: At wave 2, among women aged 19–24, lifetime prevalence of unintended pregnancy was 12.6%, rising to 81.0% among ever pregnant women. Pregnancy outcomes among women with a history of unintended pregnancy differed by geographical residence. Disparities in odds of unintended pregnancy were seen by relationship and educational status, contraceptive use, sexual coercion and risky alcohol use.

Conclusions: Unintended pregnancy among young Australians is disproportionately experienced by women with structural disadvantages and exposure to sexual coercion.

Public health implications: Service improvements to achieve equitable distribution of contraception and abortion services must be integrated with initiatives responding to sexual coercion.

Keywords: unintended pregnancy, Australia, rural, young adults

Introduction

Unintended pregnancy is a population-level indicator of reproductive health.^{1–3} The ability to decide whether, when, and under what circumstances to have a child is globally recognised as a fundamental human right, and levels of unintended

pregnancy provide one measure (albeit a blunt one) of gaps remaining towards its realisation.⁴ Separately, the association of unintended pregnancy with poor maternal and neonatal outcomes, and the broader socio-economic impacts of unwanted childbearing on women and their families has also motivated its inclusion in health policy and advocacy for improvements in contraception and abortion

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services.^{5,6} Recent modelling of data for Australia suggests that unintended pregnancy rates have declined modestly from 42 to 37 unintended pregnancies per 1000 women of reproductive age between the periods of 1990–1994 and 2015–2019.^{1,3} This reduction can be attributed, at least in part, to increases in contraceptive use and improvements in access to more effective methods.^{7,8}

Aggregate reductions in unintended pregnancy, while important, can also mask stark inequities along social and demographic dimensions. Examining which population subgroups have higher exposure to unintended pregnancies and understanding why is critical to guide public health responses that are designed to pay special attention to those with greatest need. Studies have documented differences in estimates of unintended pregnancy by age, geographic location (urban vs. rural), and socio-economic factors,^{9,10} reflecting the continuing challenges of attaining good sexual and reproductive health for populations experiencing barriers imposed by the structural environment. While improvements in the geographical reach and accessibility of sexual and reproductive healthcare can alleviate some of these challenges, there is growing acknowledgement of the need for and value in more upstream investments to improve the material and social circumstances of disadvantaged populations to help better their life prospects.¹¹ For instance, in the UK, the use of multisectoral approaches that also leveraged structural drivers of health through expansion of educational, skill and income-building opportunities, in addition to comprehensive sexuality education and youth-friendly sexual health services, has contributed to population-level reductions in teenage fertility.¹²

In Australia, the absence of regularly measured and robust nationally representative reproductive health data (that can be disaggregated) has contributed to the difficulty of monitoring the prevalence, incidence, and trends over time of unintended pregnancy and other reproductive health outcomes. This has necessitated a reliance on one-time survey-based prevalence measures. The most recent data come from a 2014–2015 national survey of reproductive aged women^a that found just over one-quarter (26%) of ever pregnant women had an unintended pregnancy in the previous 10 years.¹³ A contemporaneous survey of women and men aged 18–51, skewed to older respondents, reported a higher lifetime prevalence (40%).⁹ These estimates offer a snapshot of the population's reproductive health.

Exposure to unintended pregnancy, however, varies over the life course, and globally, studies have reliably found that young adult women are at particularly high risk.^{6,10,14–17} Young adulthood is a period when high biological fecundity coincides with transitions into intimate relationships, continuing higher education, workforce participation, and financial independence. In this phase of life, pregnancy may not be desired or a conscious choice. Thus, having the means to estimate the prevalence of unintended pregnancy among young adult Australian women, and the ability to examine variations across social and demographic sub-groups, can yield important health policy and program-relevant information to inform strategies needed to maintain good reproductive health. Using several waves of data

from the Australian Longitudinal Study on Women's Health “new young cohort,” the primary aim of this study is to estimate the prevalence of unintended pregnancy among young adult women and across key social and demographic subgroups within this population. Secondary aims include examining (a) pregnancy outcomes among women with a history of unintended pregnancy by urban and rural residence and (b) factors associated with recent experience of unintended pregnancy in the previous year.

Methods

2.1. Data Source and Analytical Sample

Data for this analysis are drawn from a national cohort of young women aged 18–23 years at recruitment in 2013 from the Australian Longitudinal Study on Women's Health (ALSWH). Women born between 1989 and 1995 were invited to participate through internet-based and traditional media, and peer referral. Consenting participants completed a baseline web-based survey in English in 2013 (n=17,010) and have been followed up annually or biennially until 2019. At each time point, they were surveyed online about their physical, reproductive and mental health, social and demographic characteristics, and their healthcare use. Details of the sampling methodology and cohort profile have been described previously.¹⁸

Our analysis uses the first three survey rounds (Figure 1). The primary analytical sample includes 9726 young women, resident in Australia, who reported “ever having had vaginal sex” and who participated in the first follow-up (survey/wave 2, 2014) at ages 19–24, which is when data on unintended pregnancy—the outcome of interest—were first collected. The secondary sample includes 6848 women who met the same criteria of ever having had vaginal sex and participated in the second follow-up (survey/wave 3, 2015) at ages 20–25 allowing assessment of recent (in the past 12 months) experience of unintended pregnancy. Data on unintended pregnancy were not collected in subsequent surveys.

Measures

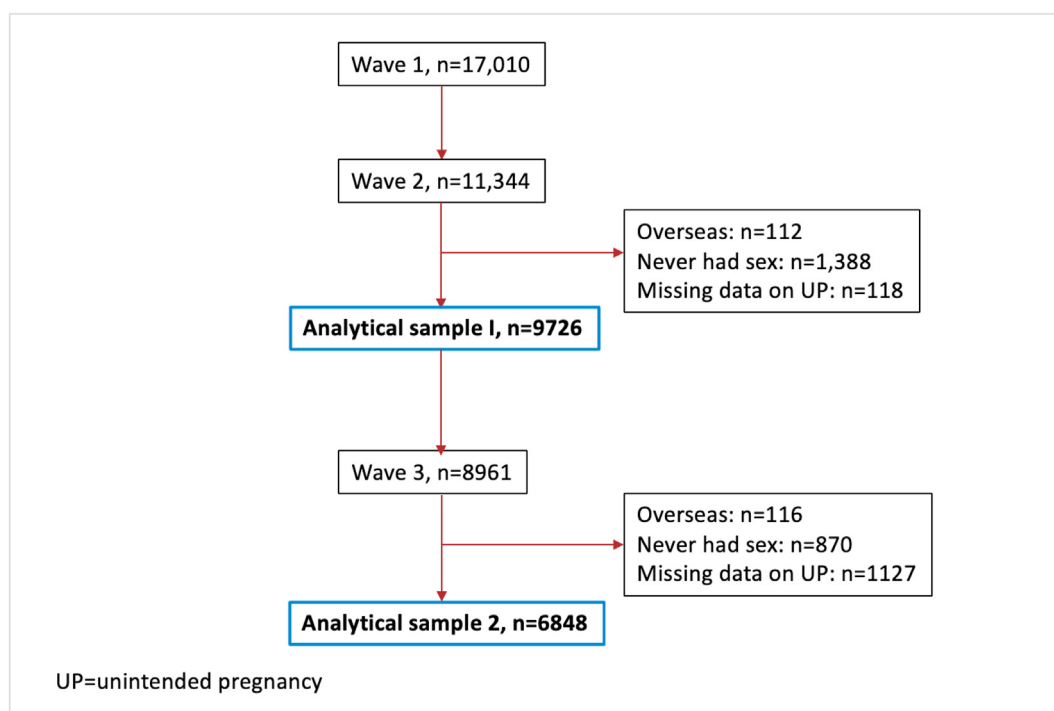
Unintended pregnancy: In surveys 2 and 3, participants were asked a single question: *Have you ever become pregnant by accident?* for which they answered *yes*, *no*, or *I prefer not to answer*. Responses to this item comprise our outcome of interest—experience of unintended pregnancy. Data from women who preferred not to answer (n=68, 0.7%) were removed from analyses. Among women who answered surveys 2 and 3, we also evaluated previous year experience of unintended pregnancy using change in responses to the same question over the two timepoints. Women who answered no to the question in survey 2 and yes in survey 3 were categorised as having a recent unintended pregnancy.

Pregnancy outcomes: Prior to obtaining information on pregnancy outcomes, participants were asked *how many times have you been pregnant?* We classified women as gravida 1 or gravida 2 (excluding women of higher gravida due to small numbers) to compare pregnancy outcomes among participants reporting an accidental pregnancy by their geographical location. Pregnancy outcomes were classified as miscarriage, induced abortion, live birth, and currently pregnant.

Socio-demographic and health characteristics: We included several variables reflecting the socio-economic, individual, and behavioural factors hypothesised to be associated with the experience of an unintended pregnancy. The choice of variables was based on extant

^a We recognise that pregnancy capable people include individuals who identify as girls or women, trans men and non-binary people, all of whom can and do experience barriers to accessing quality sexual and reproductive health care. We use the term women in this paper as extant data and literature on unintended pregnancy come from studies conducted with women and extrapolating this data to apply to all pregnancy capable people can lead to inaccurate conclusions.

Figure 1: Participant flow of the primary and secondary analytical samples of the present study using data from the new young cohort of the Australian Longitudinal Study on Women's Health.



literature and data availability in the sample. We accounted for participant age and included five categories of completed education and four categories for relationship status as indicated in Table 1. We combined individual geographical residence categories into three groupings—major cities, inner regional areas, and outer regional/remote areas—on the basis of differences in accessibility to healthcare services. We incorporated information on whether participants were healthcare card holders (yes/no)—entitling them to access healthcare services and medications at no or subsidised cost based on certain eligibility criteria set by the Australian government—as an indicator of socio-economic disadvantage. Among health-related characteristics, we examined contraceptive use at last sex (yes/no), coercion into unwanted sex by partner and/or someone else (in previous 12 months, more than 12 months ago, and never), and risky alcohol use (yes/no). For the latter variable, we re-categorised a constructed variable using National Health and Medical Research Council alcohol consumption guidelines already present in the dataset.

Statistical analyses

First, we examined the socio-demographic and health-related characteristics of women in our primary (wave 2) and secondary analytical samples (wave 3). Next, we calculated the proportion of women who reported an unintended pregnancy overall and by characteristics of interest using unadjusted bivariate logistic regression models with marginal means for specified values of each characteristic. Among gravida 1 and gravida 2 women who reported an unintended pregnancy, we separately assessed the distribution of pregnancy outcomes by geographical residence. We assessed homogeneity in proportions based on p-values associated with a design-based F statistic, which is a modified Pearson χ^2 statistic that

accounts for the complex survey design. We then fitted unadjusted and adjusted multivariable logistic regression models to evaluate cross-sectional associations at survey 2 between variables of interest and ever having experienced an unintended pregnancy. Similarly, we used logistic regression to assess factors associated with having a recent unintended pregnancy in the period between surveys 2 and 3, with predictor variables measured at survey 2.

We weighted all analyses using sample weights provided in the ALSWH datasets. These weights adjust the sample age distribution to reflect the 18–23 age distribution in the 2011 Census and account for oversampling in rural and remote areas. Results are reported as statistically significant for p-values ≤ 0.05 and/or when 95% confidence intervals (CI) for estimates do not include the null. All analyses were conducted in Stata/SE version 15.1.

Results

Demographic and health characteristics of the study samples

Women in our primary analytical sample (wave 2) were, on average, 21.5 years (Table 1). Over half (58.8%) had completed secondary school (year 12), 30.4% were single, and three quarters (74.8%) lived in major cities. In comparison, our secondary analytical sample (wave 3) had a higher proportion who had completed tertiary education (41.8% vs. 30.2%) and a smaller proportion (27.6% vs. 30.4%) of single women. The majority in both samples were in a relationship but not cohabiting.

Most women in both samples used contraception at last sex (87.6% and 88.3%), and approximately 16% reported ever being pregnant in both samples. One in five women (24.9%) in the primary sample reported history of coercion into unwanted sex by a partner or non-

Table 1: Socio-demographic and health-related characteristics¹ of women who ever had vaginal sex in waves 2 (19–24 years) and 3 (20–25 years) of the new young cohort of the Australian Longitudinal Study on Women's Health.

N	Wave 2 analytical sample ²		Wave 3 analytical sample ³	
	9,726		6,848	
	N	%	n	%
Socio-demographic characteristics				
Mean age in years (SD)	21.5 (1.75)		22.6 (1.75)	
Highest level of education completed				
Year 11 or less	492	5.2	239	3.7
Year 12 or equivalent	3485	36.0	1784	26.5
Diploma or Certificate I-IV	2740	28.6	1872	28.1
Tertiary education	2890	30.2	2797	41.8
Relationship status				
Single	2920	30.4	1853	27.6
In a relationship (not cohabiting)	3314	34.2	2093	31.1
In a relationship (cohabiting)	2285	23.9	1770	26.5
Married/engaged	1083	11.5	974	14.8
Healthcare card holder	3100	31.7	1877	27.3
Residence				
Major cities	7335	74.8	5128	74.4
Inner regional	1655	16.5	1168	16.7
Outer regional/remote	734	8.7	547	8.9
Health-related characteristics				
Ever been pregnant	1496	15.7	1063	15.8
Contraceptive use at last sex	8464	87.6	6054	88.3
History of live births ⁴	617	41.7	460	43.7
History of abortion ⁴	596	39.7	409	38.4
History of miscarriage ⁴	405	26.8	266	24.8
Ever coerced into unwanted sex ⁵	2382	24.9	990	14.7

¹Ns across multiple categories of a characteristic that do not sum to total N is a result of missingness.

²Wave 2 analytical sample includes participants who were residing in Australia at the time of participation, reported ever having vaginal sex and are not missing data on unplanned pregnancy.

³Wave 3 analytical sample includes participants with observations in waves 1, 2 and 3 of the survey who were residing in Australia at the time of participation in wave 3, reported ever having vaginal sex and are not missing data on unplanned pregnancy for waves 2 and 3.

⁴Calculated as a percentage of ever pregnant women.

⁵The question regarding unwanted sexual activity was asked in reference to a partner and non-partner in wave 2, but only in reference to a partner in wave 3.

partner. In the secondary (wave 3) sample, the question was asked only in relation to a partner, to which 14.7% reported a partner's sexually coercive behaviour. Among ever pregnant women in the primary sample, 41.7% reported a history of live birth(s) and 39.7% history of abortion(s); results were similar for our secondary sample.

Unintended pregnancy

Among all women in the sample aged 19–24, 11.0% reported ever having an unintended pregnancy. In our primary sample, among women who

Table 2: Percentage of 19- to 24-year-old women who ever had vaginal sex reporting an unintended pregnancy (UP) in wave 2 overall and by sub-groups of select characteristics (n=9726)¹.

Characteristic	N	Percentage reporting an UP by sub-group N (%) ²	95% CI	
All women	9726	1218 (12.6)	12.0	13.3
Among ever pregnant women	1496	1218 (81.0)	79.0	83.1
Age group				
19–20	3140	316 (10.1)	9.0	11.1
21–22	3341	388 (11.8)	10.6	12.9
23–24	3245	514 (15.9)	14.6	17.2
Highest level of education completed				
Year 11 or less	492	193 (39.7)	35.3	44.1
Year 12 or equivalent	3485	341 (9.8)	8.9	10.8
Diploma or Certificate I-IV	2740	482 (17.6)	16.2	19.1
Tertiary education	2890	182 (6.3)	5.4	7.2
Relationship status				
Single	2920	288 (9.9)	8.8	11.0
In a relationship (not cohabiting)	3314	276 (8.4)	7.5	9.4
In a relationship (cohabiting)	2285	366 (16.0)	14.5	17.5
Married/engaged	1083	267 (24.7)	22.1	27.3
Healthcare card holder				
Yes	3100	525 (17.0)	15.7	18.4
No	6624	693 (10.6)	9.8	11.3
Residence				
Major cities	7335	844 (11.5)	10.8	12.3
Inner regional	1655	252 (15.2)	13.5	17.0
Outer regional/remote	734	122 (16.9)	14.1	19.7
Contraceptive use at last sex				
Yes	8464	880 (10.5)	9.8	11.1
No	1182	338 (28.6)	26.0	31.2
Ever been coerced into unwanted sex				
Yes	2382	544 (22.9)	21.2	24.6
No	7200	651 (9.1)	8.5	9.8
Risky alcohol use				
Yes	310	46 (14.8)	10.8	18.8
No	9403	1169 (12.5)	11.9	13.2

¹Ns across categories of a characteristic that do not sum to total N is a result of missingness.

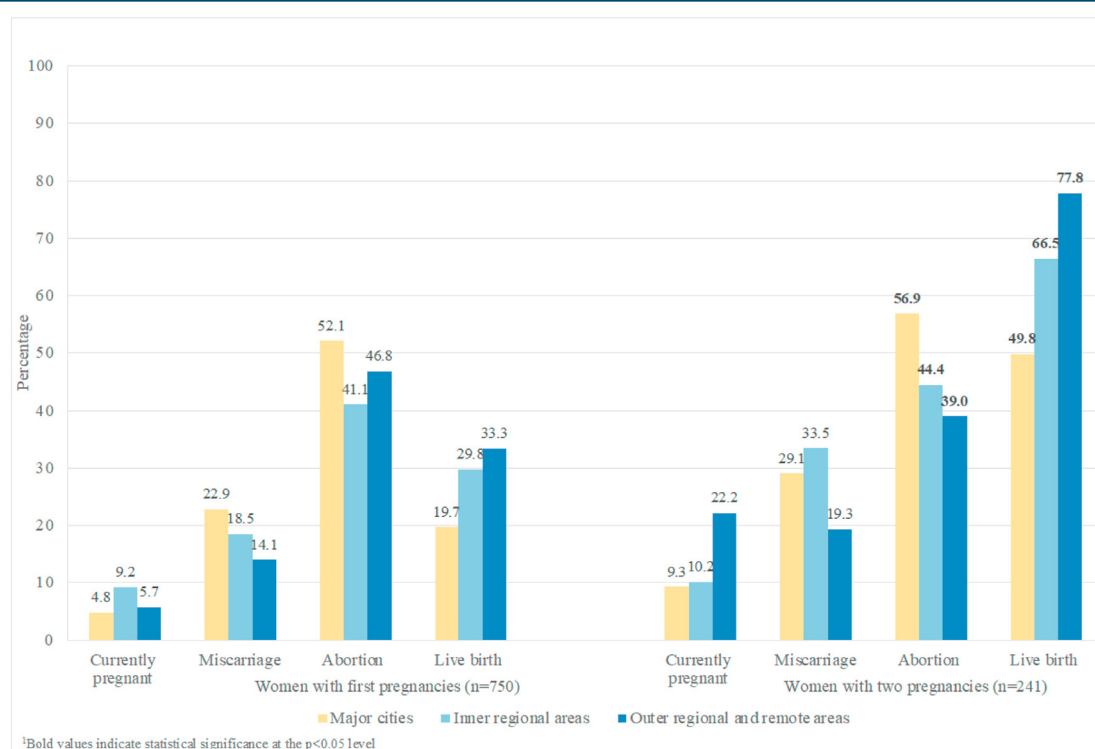
²Unweighted Ns and weighted percentages.

ever had vaginal sex, 12.6% reported an unintended pregnancy (Table 2). When restricting only to ever-pregnant women, the proportion rose exponentially to 81.0%. Among subgroups, women aged 23–25, those with lower levels of education, married, or engaged women, healthcare card holders and regional and remote residents had higher levels of unintended pregnancy, as did women who did not use contraception at last sex and women who had ever been coerced into unwanted sex.

Pregnancy outcomes among 19- to 24-year-old women reporting unintended pregnancy by area of residence

Figure 2 depicts the pregnancy outcomes of women with a history of unintended pregnancy by area of residence and disaggregated by

Figure 2: Comparison of outcomes among 19- to 24-year-old women who reported ever having an unintended pregnancy by area of residence (n=991)¹.



whether they had been pregnant once or twice. Among women with a history of unintended pregnancy who had been pregnant twice, city residents were significantly more likely to report an abortion (56.9%), compared with residents in regional or remote areas (44.4% and 39.0%), while remote and regional residents reported a higher percentage of live births (77.8% and 66.5%) compared to city residents (49.8%). Among women with a history of unintended pregnancy who had been pregnant once, any differences in pregnancy outcomes by residence were statistically insignificant.

Adjusted associations between socio-demographic and health characteristics and unintended pregnancy

In multivariable analyses of our wave 2 analytic sample (Table 3), women with less than a secondary school education had over three times the odds of an unintended pregnancy (aOR: 3.56, 95% CI: 2.80-4.52) compared with women who completed secondary school. Cohabiting (aOR: 1.41, 95% CI 1.18-1.69) and married women (aOR: 2.01, 95% CI: 1.62-2.48) had significantly higher odds than single women. Differences by geographical residence were rendered insignificant in the adjusted model. Women who did not use contraception at last sex, and women with lifetime and recent experiences of sexual coercion had significantly increased odds of an unintended pregnancy, in the latter instance by nearly three times (aOR: 2.73, 95% CI: 2.10-3.55).

Association between residence, socio-demographic and other characteristics, and the odds of reporting an unintended pregnancy in the previous year

In the multivariable analyses of wave 3, we assessed the associations of recent (previous year) unintended pregnancy with socio-demographic and health circumstances in wave 2 (Table 3). We found

that cohabiting women had significantly higher odds (aOR: 1.69, 95% CI: 1.05–2.70) of reporting a recent unintended pregnancy, compared with single women, as did women who did not use contraception at last sex (aOR: 3.72, 95% CI: 2.51-5.51). Additionally, women with risky alcohol use in wave 2 (3+ drinks daily) had over twice the odds of reporting a recent unintended pregnancy in wave 3 (aOR: 2.48, 95% CI: 1.25-4.91), compared to women with low risk/non-use of alcohol. All other variables that had been significant in unadjusted analyses (poorer education and sexual coercion) were not significant in adjusted models.

Discussion

This study reports the prevalence and associated disparities in unintended pregnancy among young Australian women. Over one in 10 women aged 19–24 years who ever had vaginal sex experienced an unintended pregnancy, and among those ever-pregnant in this age group, three out of four reported this experience. Findings suggest disparities in young women's likelihood of experiencing unintended pregnancy by contraceptive behaviours, risky alcohol consumption, exposure to sexual coercion, educational level, and relationship status.

Notably, we did not detect significant rural–urban differences in the experience of unintended pregnancy after adjustment for other factors. A plausible explanation for this null finding is linked to the hypothesised mechanisms through which rurality is associated with unintended pregnancy, namely through social disadvantage and reduced availability and access to reproductive healthcare.^{19,20} For instance, young women residing in rural areas with fewer higher educational prospects or opportunities may be less inclined to intentionally delay pregnancy and more likely to become sexually

Table 3: Odds ratios of associations between socio-demographic and health characteristics and (a) lifetime experience of unintended pregnancy among 19- to 24-year-old women (n=9726) and (b) previous-year experience of unintended pregnancy (UP) among 20 to 25-year-old women (n=6848).

Characteristic	Adjusted Odds Ratio (lifetime UP experience)	95% CI		Adjusted Odds Ratio (previous year UP experience)	95% CI	
Age group (at wave 2)						
19–20	0.79	0.67	0.95	1.08	0.71	1.64
21–22	REF	-	-	REF	-	-
23–24	1.60	1.36	1.88	0.91	0.59	1.40
Highest level of education completed						
Year 11 or less	3.56	2.80	4.52	1.77	0.94	3.33
Year 12 or equivalent	REF	-	-	REF	-	-
Diploma or Certificate I-IV	1.34	1.13	1.58	1.34	0.90	1.98
Tertiary education	0.48	0.39	0.59	0.50	0.28	0.87
Relationship status						
Single	REF	-	-	REF	-	-
In a relationship (not cohabiting)	0.91	0.76	1.09	0.99	0.61	1.61
In a relationship (cohabiting)	1.41	1.18	1.69	1.69	1.05	2.70
Married/engaged	2.01	1.62	2.48	1.34	0.73	2.47
Healthcare card holder						
Yes	1.55	1.36	1.78	1.14	0.80	1.63
No	REF	-	-	REF	-	-
Residence						
Major cities	REF	-	-	REF	-	-
Inner regional	1.13	0.95	1.33	0.79	0.49	1.27
Outer regional/remote	1.09	0.85	1.39	0.85	0.45	1.62
Contraceptive use at last sex						
Yes	REF	-	-	REF	-	-
No	2.18	1.85	2.58	3.72	2.51	5.51
Ever been coerced into unwanted sex						
Yes - in previous 12 months	2.73	2.10	3.55	1.73	0.92	3.28
Yes more than 12 months ago	2.25	1.95	2.60	1.27	0.85	1.88
Never/NA	REF	-	-	REF	-	-
Risky alcohol use						
Yes	1.08	0.76	1.54	2.48	1.25	4.91
No	REF	-	-	REF	-	-

¹Bold values indicate statistical significance at the $p < 0.05$ level.

active earlier and/or less likely to access or use contraception once sexually active, placing them at a higher risk of unintended conception than women seeking higher educational qualifications. In our model, we accounted for these mediating factors by inclusion of variables such as level of education and contraceptive use, which were significantly associated with the outcome, rendering the primary association of rurality and unintended pregnancy insignificant.

Importantly, pregnancy outcomes did differ among women with a history of unintended pregnancy, with a higher proportion of rural versus urban residents reporting a live birth, and vice-versa in the case of abortion. These differential outcomes are likely linked to

several factors; for instance, emotional orientations towards unintended pregnancy may systematically differ for young urban and rural women linked to opportunities for further study or career advancement, cost of living, dynamics of intimate partnership, and extended familial support for childbearing.^{21,22} Separately, these differences may also be an outcome of constrained reproductive choices available to young women in rural and regional settings where geographical access to abortion services is limited^{23–25} or concerns regarding privacy and confidentiality prevent them from accessing care locally. Canadian and US studies have found similar findings and hypothesised the cause to be reduced rural access to services.^{26–30} Moving forward, our ability to disentangle the individual contributions of preferences, emotions, and healthcare access to how unintended pregnancies get resolved is dependent on improvements in measurement of childbearing preferences and desires, and the ability to act upon them.

Concerningly, in our primary analytical sample, one in five young women reported a history of sexual coercion. The proportion reporting this experience reduced in wave 3 (secondary analytical sample), a finding that readers should view with caution as we hypothesise the reduction is linked to two reasons: First, women reporting sexual coercion were more likely to be lost to follow-up (data not shown), and second, in this wave, the question was only asked in the context of coerced sex with an intimate partner. Consistent with previous literature, the experience of sexual coercion in this sample of young women was significantly associated with unintended pregnancy.⁹ In addition to reiterating the interconnectedness of various components of sexual and reproductive health, this finding also points to the need for integrating interventions that respond to sexual coercion with programs designed to improve reproductive choice. In fact, while contraceptive use is the most proximal behavioural factor associated with unintended pregnancy, our findings suggest that related programming must be underpinned by a comprehensive sexual and reproductive health strategy; one that explicitly recognises and accounts for the broader interpersonal, social, and economic contexts that influence young peoples' ability to exercise control and agency over decisions and actions linked to their health. Such a strategy can lay the foundation for optimising positive sexual and reproductive health trajectories by including, among other aspects, (a) comprehensive sexuality education in all schools and other settings (e.g., youth, vocational and community centres), (b) school- and community-based interventions to promote safety and healthy relationships, (c) adolescent and youth-friendly free and/or subsidised primary sexual and reproductive health care, and (d) coordination and joint action with social policies, including those designed to enhance educational, vocational, and employment opportunities for young people, particularly populations that have historically been left behind.

This analysis has limitations. We used a single question on accidental pregnancy to define the occurrence of unintended pregnancy and factors associated with its occurrence. Globally, the field has made conceptual and measurement advances by considering the dimensions of desire and attitudes towards a pregnancy, accounting for mixed, fluid, and ambivalent feelings, and testing prospective measures of pregnancy intention to overcome concerns of revised recollection of intentions upon a child's birth.^{6,31–35} These nuances are important to capture and accurately determine which structural determinants are associated with women who had strongly wished to avoid pregnancy, compared to those for whom the pregnancy may

have been mistimed or not planned but not unwanted. Public health systems need to incorporate understanding of these distinctions to ensure outreach and prevention facilitation for those in greatest need of contraception care. Moving forward, we recommend testing and inclusion of robust measures of retrospective and prospective measures of pregnancy intention and preferences within population-based surveys in the Australian context to improve measurement. Second, the accidental pregnancy question was only asked in waves 2 and 3; thus, our analytical samples suffer from attrition. Women who were lost to follow-up at wave 2 were more likely to have ever been pregnant and to have not completed high school (data not shown). Our prevalence measure is therefore likely to be an underestimate.

A key strength of this analysis is its use of data from a national population-based sample of young adult women. To our knowledge, ours is the first study to estimate prevalence in this sub-group of reproductive-aged women in Australia. The analysis also benefits from the ALSWH survey's broad focus on health in general, enabling our use of a range of variables regarding socio-demographics, health behaviours, social, and personal characteristics for empirical evaluation of their associations with unintended pregnancy, which have important public health implications.

Conclusion

This study highlights significant factors that could reduce unintended pregnancy among young Australian women, such as prevention of sexual coercion and risky alcohol use. These are not yet included in national strategies to improve sexual and reproductive health. There is also considerable progress that needs to be made to ensure equitable access to contraception and abortion services in Australia, in addition to implementing evidence-based universal comprehensive sexuality education in schools and other settings. Addressing the structural determinants of sexual and reproductive health through programs that offer educational and career opportunities alongside policies and programs promoting gender equity could make Australia a nation leading in excellent sexual and reproductive health.

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Conflict of interest

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