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Reproductive health: Contraception, conception and change of life - Findings from the Australian Longitudinal Study on Women's Health

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2. PREVALENCE OF CONTRACEPTIVE USE ACROSS THE REPRODUCTIVE LIFESPAN

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2.1 Key points

- The OCP (including the combined OCP and mini-pill) and condoms are the most common forms of contraception used among women born 1989-95.
- Use of the OCP and condoms is highest when women are in their late teens and early twenties, then declines as they enter their mid- to late twenties.
- Use of the LARC implant, is reported by around 10% of young women, while use of the hormonal IUD increases as women enter their mid- to late twenties.
- There was a reduction in use of contraception as women entered their mid- to late twenties, most likely reflecting the desire to have children.
- Simple prevalence figures on contraception use by women born 1989-95 do not reflect the highly transitional nature of contraception use. Knowing what contraception a woman may be using at a certain age does not mean it is easy to predict which method of contraception she may be using one, two or three years later. Ensuring choices are available for women is essential.
- In the generation of women born 1973-78, the OCP and condoms were the most prevalent contraception used.
- Use of LARC methods (defined as non-daily methods such as the hormonal IUD, copper IUD, implant, injection and vaginal ring) more than doubles as women age, increasing from 10% when first asked (when women were 28 to 33 years) to 24% (when they were 40 to 45 years).

2.2 Introduction

This chapter reports on the prevalence of each contraceptive method across the reproductive life by women in the 1989-95 and 1973-78 cohorts. It further shows transitions in use of contraceptive methods by women in the 1989-95 cohort. The chapter concludes with a summary of relevant previously published research that used ALSWH data.

Table 2-1 summarises the contraceptive methods captured in the ALSWH surveys for the two cohorts. Details of the questions used and their measurement are included in Appendix 11.2.1. In this chapter, a LARC is defined as any non-daily method of contraception (i.e., the hormonal IUD, copper IUD, implant, injection and vaginal ring) for the 1973-78 cohort and as the implant and hormonal IUD for the 1989-95 cohort.

Table 2-1 Contraceptive methods asked in surveys of the 1989-95 and 1973-78 cohorts.

1989-95 cohort	1973-78 cohort
The pill Condoms Implant (e.g. Implanon) Hormonal IUD (e.g. Mirena) Other contraceptive None	OCP (OCP and mini pill) Condoms Withdrawal LARCs: • Injection • Hormonal and copper IUDs • Vaginal ring • Implant Safe (fertility awareness) period method Emergency contraception None

2.3 Use of contraceptive methods by women in the 1989-95 cohort

As described above and in Appendix 11.2.1, the questions asked of the 1989-95 cohort at each survey are in relation to the contraception method used the last time the women had vaginal sex (defined as penis in vagina sex). Figure 2-1 shows the prevalence of use of different contraceptive methods across surveys. The graph

excludes data where women had a tubal sterilisation, were unable to get pregnant, were currently pregnant, had a hysterectomy, or their partner had a vasectomy (see Appendix 11.2.1 for more information). The most common methods of contraception used by women aged from 18 to 30 years were the OCP and condoms. Use of the OCP decreased from 60% to 34%, and use of condoms decreased from 45% to 31% of women, over the five surveys. It is important to note that condoms can be used for either pregnancy prevention, STI protection, or both. The prevalence of use of the implant across the surveys was constant at around 10%, while use of the hormonal IUD increased from 2% of women at Survey 1 to 13% at Survey 6. When the women were aged between 18 to 23 years, 9% reported they did not use contraception. This percentage rose to around 21% by the time the women were aged 24 to 30 years. Prevalence of use of other contraceptives remained steady at between 3% to 5% across surveys.

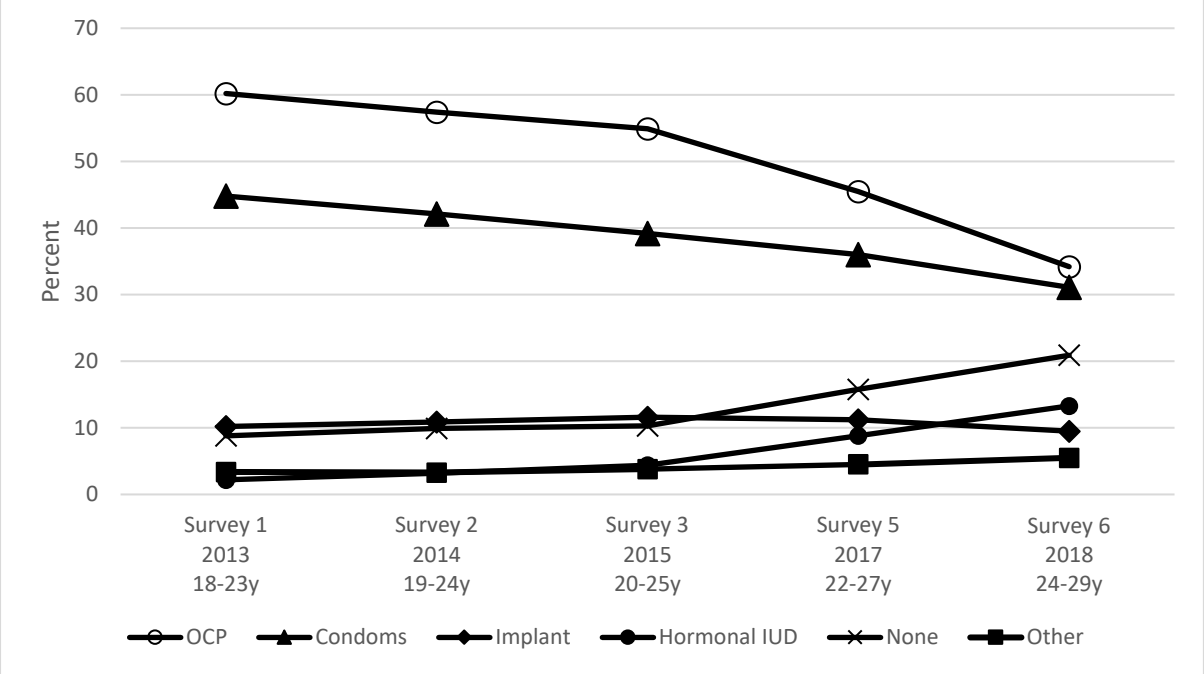

Figure 2-1 Prevalence of contraception methods used by women in the 1989-95 cohort from Survey 1 to Survey 6.

The transition plot in Figure 2-2 shows the changeable nature of contraceptive method use by women early in their reproductive lifespan (between the ages of 18 and 30).

This first column shows the percentage of women using each of the different types of contraception at Survey 1. For example, women using no contraception are represented by the band at the very bottom. The subsequent bands further up the column represent women using the OCP, condoms, long acting methods, and other forms of contraception. The column percentages do not exactly equal those presented in Figure 2-1 because the transition plot uses a discreet category at each time point (if the women reported using more than one type of contraception, only one was selected at each time point). By Survey 2 changes in the type of contraception used are evident. For example, some women who were using the OCP at Survey 1 had changed to condoms or long acting methods at Survey 2. Over the next three surveys, many more transitions occurred. It is apparent from this data that women frequently change the type of contraception they use over time, and that a range of contraception options need to be available.

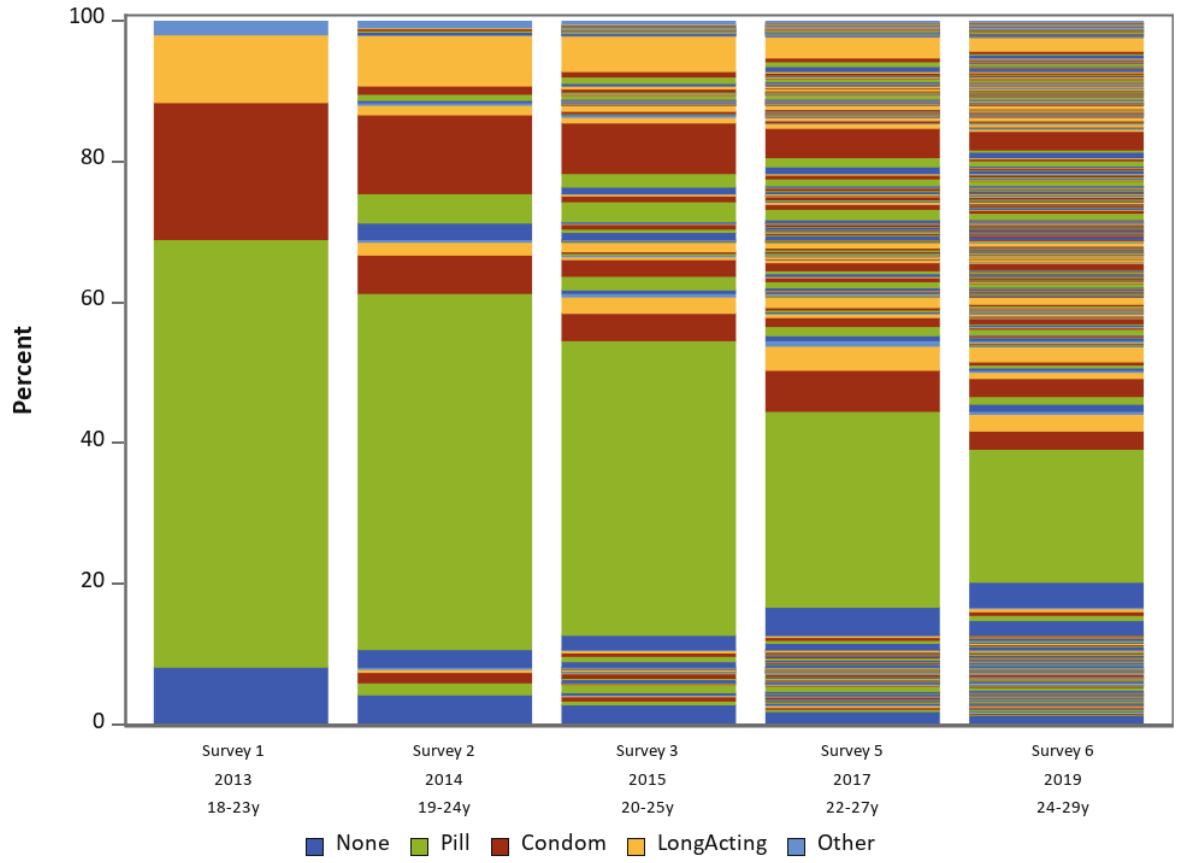

Figure 2-2 Transition plot of use of contraception used by women in the 1989-95 cohort between Survey 1 and 6.

2.4 Use of contraceptive methods by women in the 1973-78 cohort

Figure 2-3 shows the prevalence of the use of different contraceptive methods across surveys for women in the 1973-78 cohort (see Appendix 11.2.1 for more information). The graph excludes data where women had a tubal sterilisation, were unable to get pregnant, were currently pregnant, had a hysterectomy, or where their partner had a vasectomy. In the 1973-78 cohort, the OCP and condoms were the most prevalent types of contraception used when women were aged from their late teens to mid-thirties. Use of OCP peaked when women were in their mid- to late twenties, when this method was used by around 55% of women, which was more than double the prevalence of condom use. As women aged, prevalence of OCP use dropped more sharply than the use of condoms, with the prevalence of both reaching around 20% as women reached their late thirties to mid-forties. The percentage of women reporting no contraception use was around 30% when women were in their late teens and early twenties, but this prevalence decreased to around 20% until women were in their early thirties, and then increased to around 27% when they were aged 40 to 45 years. Use of LARCs was 11% at Survey 5, when the women were aged 31 to 36 years. This was the first time this cohort was asked about LARC use. Over the next three surveys (covering a period of approximately 10 years), LARC use doubled to 24%. Use of the withdrawal method remained steady between the ages of 28 to 33 and 40 to 45, at around 11% (this method was not asked about in earlier surveys). Use of the emergency OCP (<1.4%) and fertility awareness period method (<6%) were the least reported methods of contraception at all ages where this was included in survey items.

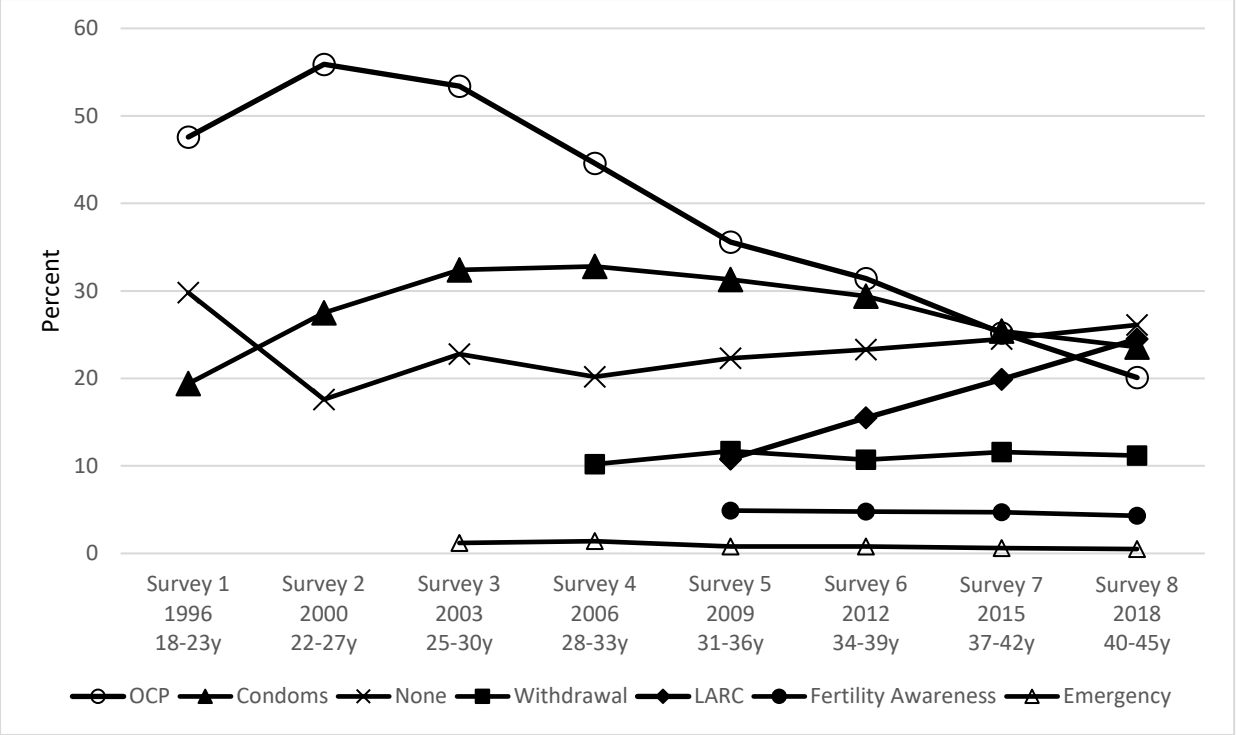

Figure 2-3 Prevalence of contraception methods used by women in the 1973-78 cohort from Survey 1 to Survey 8.

2.5 An overview of previously published ALSWH research examining prevalence of contraception use

Several authors have examined contraceptive use by women in the ALSWH 1973-78 cohort. A brief summary of the key findings from studies over the past 10 years and their implications for policy is presented here.

In a 2018 paper, Steel et al. examined whether women's use of complementary medicine interventions or consultations with complementary medicine practitioners were associated with their choice of contraceptive method. The study used survey data from 7,299 women in the 1973-78 cohort, when they were aged between 34 and 39 years. The authors found no consistent pattern between use of complementary medicine and contraceptive use. Women who consulted a naturopath or herbalist were less likely to use implant contraceptives (OR 0.56; 95%CI 0.33; 0.95), and women consulting a chiropractor (OR 1.54; 95%CI 1.05; 2.25) or an osteopath (OR 2.16; 95% CI 1.32; 3.54) were more likely to use natural contraception. The authors concluded

that there is a need for policy makers to better understand the approach of complementary medicine practitioners, and to ensure the family planning advice they provide is evidence-based.

2.6 Women's experiences in obtaining and using contraception

Free text comments written by women in the 1973-78 cohort about their experiences in obtaining and using contraception over five surveys were analysed by Dixon and colleagues (2014). The 289 women in this analysis were aged between 18 and 36. Five major themes were identified as relating to the women's experiences of barriers to access and optimal contraceptive use. The first and most commonly reported theme was side effects (either experienced or perceived), affecting both physical (e.g., weight gain and heavy periods) and mental health (e.g., depression and mood swings). Women reported being upset they were not warned about these potential side effects and that experiencing them influenced their willingness to continue using hormonal contraception. The second theme, predominantly expressed by younger women, was lack of information about contraception. Examples included women not being told use of the OCP could lead to depression, or the amount of time it might take for the effects of hormonal implants to wear off after removal. The third theme encompassed negative experiences with health services, for example women feeling they were being judged and not offered access to their preferred contraceptive. Another common issue was women feeling uncomfortable dealing with male health providers regarding contraception and gynaecological issues. The fourth theme concerned women's lack of confidence that the contraceptive method would work and actual contraceptive failure (leading to unintended pregnancy and termination). The final theme was difficulty with access to contraception, which was a consistent theme across all ages. Women wrote about not being given a contraceptive script unless they agreed to have a pap smear, of difficulty finding bulk billing doctors and the cost. The authors recommended that health practitioners inform women about side effects, monitor women more effectively, routinely provide information packs, and be aware of how their professional manner may affect women and their choices.

A number of researchers have used ALSWH data to examine contraceptive use associated with other reproductive events or health issues.

Joham et al. (2014) found that women from the 1973-78 cohort aged 28-33 with PCOS were less likely to be using contraception (61% versus 79%) and more likely to be trying to conceive (56% versus 45%), compared with women not reporting PCOS. The authors suggested that women reporting PCOS may be aware that PCOS can impact fertility, hence their low use of contraception. However, they also argued that for women with PCOS who do not intend to conceive yet and who are not using contraception - perhaps because of a belief that they have low fertility - that education informing them of their chances of conception is required.

Research by Tu and colleagues (2014) examined whether prior oral contraceptive use was associated with future diagnosis of endometriosis. The study used data from 9,585 women aged 18 to 23 at baseline who were followed up for nine years. The association between oral contraceptive use and endometriosis was found to be influenced by parity – the number of times a woman has given birth.

- Of women who had never had a child, those who used oral contraceptives had almost twice the risk of being diagnosed with endometriosis compared with women who had never used oral contraceptives, with the risk slightly higher the longer they had used the oral contraceptives. One explanation may be that OCP is frequently prescribed for the management of symptoms of endometriosis (Donnez & Dolmans, 2021).
- In contrast, for women who had had at least one child and used oral contraceptives, the risk of being diagnosed with endometriosis was reduced by over 50% (compared with the risk in women who had never used oral contraceptives). This may reflect that women experiencing difficulty in falling pregnant may undergo fertility investigations and hence increase their chance of being diagnosed with endometriosis.

Lucke and colleagues (2011) examined changes in contraception use after reproductive events such as birth, miscarriage or termination, among 5,631 Australian women aged between 18 and 36, of the 1973-78 cohort. The aim was to identify potential opportunities to increase the effectiveness of contraceptive information and service provision. The analyses assessed the associations between reproductive events (birth only, birth and miscarriage, miscarriage only, termination only, other

multiple events, and no new event) and subsequent changes in contraceptive use (start using, stop using, switch method), compared with women who continued to use the same method of contraception. Lucke et al. found women were more likely to start using contraception only after experiencing a birth, or a birth and a miscarriage, whereas, women who experienced miscarriages were more likely to stop using contraception. Women who experienced terminations were more likely to switch contraception methods. There was a significant interaction between reproductive events and time, indicating more changes in contraceptive use as women reach their mid-thirties. The authors concluded that contraceptive use increasing after the birth of a child, but decreasing after miscarriage indicates the intention for family formation and spacing between children. Switching contraceptive methods after termination suggests these pregnancies were unintended and possibly due to contraceptive failure. Women's contact with health professionals around the time of reproductive events provides an opportunity for health care providers to provide best practice contraceptive services, review contraceptive needs, and discuss new or emerging contraceptive technologies.

2.7 Summary

This chapter presented the prevalence of different types of contraception by women in Australia. Data came from two cohorts: those born 1989-95, who were surveyed annually from 2013 to 2019, and who were aged between 18 and 30 years over the course of the surveys; and those born 1973-78, who were surveyed eight times between 1996 and 2018, and who were aged from 18 to 45 years across the surveys. In young women of both generations, OCP and condoms were the most prevalent type of contraception used until women entered their mid- to late twenties, where the proportion of women reporting they were not using contraception started to increase, likely reflecting pregnancy and pregnancy planning. The data showed that the use of LARC is more prevalent in women from the most recent generation (1989-95 cohort), but that LARC use in women increases rapidly as women enter their late thirties and forties. LARC use is examined in detail in Chapter 5 which includes an analysis of LARC use among women born 1989-95 and 1973-78 using linked PBS data.

2.8 References

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