

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

Report prepared for the Australian Government Department of Health

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Authors: Loxton D, Byles J, Tooth L, Barnes I, Byrnes E, Cavenagh D, Chung H-F, Egan N, Forder P, Harris M, Hockey R, Moss K, Townsend N & Mishra G.

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6. SHORT AND LONG TERM USE OF THE OCP

Authors: Julie Byles, Dominic Cavenagh, Isabelle Barnes, Melissa Harris

6.1 Key findings

- For women born 1989-95 and 1973-78, around 50% of OCP use periods involved a single script. Women may have switched to another OCP not listed on the PBS, or may have transitioned to another form of contraception (e.g., LARC), or ceased using contraception.
- One third (35%) of women born 1989-95 only used OCPs for short periods of time (150 days or less).
- Women born 1989-95 who used an OCP in the short-term were more likely to have a certificate/diploma (although similar numbers had a university degree), to be partnered, and to have previously been in a violent relationship than women who used an OCP in the long-term (>150 days).
- Compared to women born 1989-95 who used an OCP in the long-term (>150 days), those who used an OCP in the short-term were more likely to be psychologically distressed, to have poor to fair general health, to report a chronic condition, and to have had a previous miscarriage or termination.
- Women born 1989-95 who used an OCP for a short period of time were more likely to smoke tobacco, be non-drinkers, and have a slightly higher BMI than women who used OCP for a long period of time (>150 days).
- In the 1973-78 cohort, 38% of women only used OCPs in the short-term (150 days or less).
- Where women used the OCP for longer than 150 days (long-term use), the median length of OCP use was 503 days for women in the 1989-95 cohort, and 575 days for women in the 1973-78 cohort.
- Among women in the 1989-95 cohort who used an OCP in the long-term, duration of OCP use was shorter for women who were older, had a higher BMI, or who smoked or used illicit drugs.

- Among women in the 1973-78 cohort who used an OCP in the long-term, duration of use of OCP was shorter for women who had poorer mental health, did not live in outer regional or remote areas, had been in a violent relationship, or had endometriosis or PCOS.
- PBS data may underestimate OCP use, since not all OCPs are covered by the PBS. However, the difference in OCP users identified through the PBS and those who report OCP use in the ALSWH surveys with no PBS records for OCP use are small. The main differences appear to be that the PBS OCP data may slightly over-represent women who have more children and more socio-economic disadvantage.

6.2 Introduction

This chapter examines the long-term use of oral contraceptives, and compares trends in use over time for two different cohorts of women born 1989-95 and 1973-78. The use of oral contraceptives was determined from claims made to the PBS. However, these data may underestimate OCP use if women are using medications which do not attract a PBS benefit. For this reason, the chapter also includes a comparison between PBS data and self-reported OCP use captured by the ALSWH surveys ([Section 6.4.1](#)).

The prevalence of self-reported use of the OCP has been presented in [Chapter 2](#). The results presented in this chapter may vary from the self-reported prevalence since there may be some underestimation of OCP use in the PBS data, because the analysis is restricted to women who are eligible for linkage to PBS and to women who meet eligibility criteria for the time to event analyses that have been applied in the current chapter.

The purpose of the current chapter is to examine how long women remain on the OCP and what factors are associated with longer duration of use. Following a summary of previous relevant ALSWH publications, analyses of ALSWH survey and linked PBS data are reported.

6.3 Previous ALSWH OCP research

Duration of OCP use has previously been examined among the 1973-78 cohort. These women have provided data on current and past OCP use at multiple surveys. Khan et al. (2005) investigated duration of OCP use among 9,582 women from the 1973-78 cohort. Nearly half of the women (48%) reported OCP use of five years or more. Longer OCP use was associated with higher odds of genital herpes and genital warts, compared to those who had used the OCP for less than one year. Duke et al. (2007) explored the relationship between OCP use and depressive symptoms among 9,081-9,688 women from the same cohort. Approximately 62% of women reported using the OCP when aged 22-27 at Survey 2 (2000) and 56% when aged 25-30 at Survey 3 (2003). Results showed an inverse relationship between depressive symptoms and number of years of OCP use, however, there was no independent effect after adjusting for confounders (Duke et al., 2007).

More recently, Tu et al. (2014) examined the relationship between endometriosis and prior OCP use. Data from 9,585 women from the 1973-78 cohort were examined between 1996 and 2006. By age 28-33, 95% of women with endometriosis reported having ever used the OCP, compared to 91% of those who did not have endometriosis. After adjusting for confounders, OCP use duration was shown to be associated with endometriosis, with effect modification for parity. OCP use for more than five years resulted in a higher risk of endometriosis among nulliparous women, and a lower risk among parous women (Tu et al., 2014).

6.4 PBS data and ALSWH survey data on oral contraceptives

Prior to July 2012, the PBS did not include data on scripts that fell below the co-payment threshold, and so prescriptions for oral contraceptives prior to July 2012 may be underestimated in the PBS data. Given this potential under-representation of oral contraceptive use prior to 2012 (see [Appendix 11.5.1](#)), analyses included in this chapter were restricted to data collected after June 2012 (until mid-2019). It should also be noted that even after 2012, not all OCPs are listed on the PBS, resulting in some underestimation of OCP use. For more information on the PBS item numbers

for oral contraceptives, see [Appendix 11.5.2](#). The ALSWH survey items used to collect data on OCP use are included in [Appendix 11.5.3](#).

6.4.1 Agreement between PBS data on OCP use and women's self-report of OCP use.

To estimate the potential for PBS data to under-estimate OCP use, we compared women's self-reported use of oral contraception from their surveys to the use of OCP as ascertained from the PBS records.

We estimated upwards of 30% of women who reported using an OCP in an ALSWH survey did not have their prescription supplied through the PBS ([Appendix 11.5.4](#)). Also, 25-30% of women who were supplied an OCP script through the PBS in the year prior to survey completion did not report it as the contraception they were currently using (1973-78 cohort) or had used the last time they had vaginal sex (1989-95 cohort) ([Appendix 11.5.5](#)). This resulted in an overall percentage agreement between self-report (survey) and PBS data of 72-75% for the 1989-95 cohort and 85-92% for the 1973-78 cohort, depending on the survey wave (see [Appendix 11.5.6](#)).

The disparity between reporting of oral contraceptive use in the ALSWH surveys and PBS data may be due to a time lag between having a script supplied through the PBS and completing the ALSWH survey; having a script supplied but not actually taking the medication; or using an oral contraceptive that is not listed on the PBS. Any analysis of PBS data relating to oral contraceptive use may therefore under or overestimate oral contraceptive use. Despite this limitation, analysis of PBS data for OCP has a great advantage in providing information on duration of use. Further, we have also been able to quantify and describe the characteristics of women who may be more likely to be under-represented in the PBS data. These comparisons are described below, and show a small difference with the effect that PBS data may slightly over-represent women who have more children and less socio-economic advantage.

6.5 Cross-sectional comparison of women who do and do not use oral contraceptives supplied through the PBS

Both the 1989-95 and 1973-78 cohorts were surveyed in 2015 (Survey 3 for the 1989-95 cohort, and Survey 7 for the 1973-78 cohort). Using information regarding contraceptive use from these surveys, and linked PBS data for the previous year, women were classified into three categories:

1. Women who were supplied an OCP through the PBS in the year prior to survey completion, regardless of what they reported in the ALSWH survey (PBS users).
2. Women who were not supplied an OCP through the PBS in the year prior to survey completion, but had indicated OCP use in the ALSWH survey (survey users).
3. Women who were not supplied an OCP through the PBS in the year prior to survey completion and had not indicated OCP use in the ALSWH survey (non-users).

In the 1989-95 cohort, 43% of women were supplied an OCP through the PBS in the year prior to survey completion (PBS users); 16% were not supplied an OCP through the PBS in the year prior to survey completion, but had indicated OCP use in the ALSWH survey (survey users); and 41% did not use an OCP (non-users). In the 1973-78 cohort, 21% of women were supplied an OCP through the PBS in the year prior to survey completion (PBS users); 6% were not supplied an OCP through the PBS in the year prior to survey completion, but had indicated OCP use in the ALSWH survey (survey users), and 73% did not use an OCP (non-users). Demographic characteristics and health behaviours were compared between the three groups for both cohorts. All results are reported in [Appendix 11.5.7](#), with significant results reported here in Table 6-1 and Table 6-2.

As shown in Table 6-1, in the 1989-95 cohort at Survey 3 (2015) women who were not supplied an OCP through the PBS in the year prior to survey completion, but had

indicated OCP use in the ALSWH survey (survey users) had the lowest mean K10¹³ score, the lowest proportion of women from outer regional/remote areas, the lowest percentage of women with fair/poor self-rated general health, the highest percentage of never smokers, the lowest percentage of non-drinkers, highest percentage of women with a university degree, lowest percentage of partnered women, the highest percentage of women who found managing on their available income easy/not too bad, the lowest percentage of women who had been in a violent relationship, and the lowest percentage of previous terminations and miscarriages across the three OCP user groups. While these differences are statistically significant, due to the large number of women in the cohort, few of these differences are large. The main differences appear to be that the PBS data may slightly over-represent women who have more children and less socio-economic advantage.

In addition to differences in socio-economic factors for women who were supplied an OCP through the PBS in the year prior to survey completion (PBS user), and women who identified OCP use only in the ALSWH survey (survey user), there were also many differences between women using the OCP (either PBS user or survey user) and those women who had not been supplied with a PBS script or reported OCP in the survey (non-users). Non-users tended to have more children, have a higher BMI, smoke more tobacco, have less education, be more likely to come from a non-English speaking background, and be more likely to have experienced violence, miscarriage, or termination.

¹³ The K-10, or Kessler Psychological Distress Scale, indicates a higher degree of psychological distress with higher scores. Therefore, the lowest score reported here indicates that this group, on average, reported the lowest level of psychological distress.

Table 6-1 Significant demographic, health behaviour and health risk factors by OCP use for the 1989-95 cohort at Survey 3 (2015)

1989-95 cohort	Type of OCP user		
	PBS user	Survey user	Non-user
	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>
Age	22.9	23.1	23.1
Number of children	0.1	0.03	0.2
Kessler psychological distress scale score	21.5	21.0	22.1
BMI	24.9	24.0	25.4
Physical activity (metabolic minutes in previous week)	1,450.2	1,480.2	1,477.3
Area of Residence (ARIA+)	%	%	%
<i>Major City</i>	72.8	78.1	72.8
<i>Inner regional</i>	18.9	13.9	16.7
<i>Outer regional/remote</i>	7.6	6.2	8.7
Self-rated general health			
<i>Excellent/Good</i>	83.0	86.3	81.9
<i>Fair/poor</i>	17.0	13.7	18.1
Smoking status			
<i>Never smoker</i>	73.8	78.3	71.0
<i>Ex-smoker</i>	8.4	7.9	9.3
<i>Current smoker</i>	17.3	13.8	19.0
Pattern of alcohol consumption			
<i>Low long-term risk, drinks at short-term risk less than weekly</i>	82.5	84.1	77.7
<i>Non-drinker</i>	5.5	4.7	11.5
<i>Low long-term risk, drinks at short-term risk weekly or more</i>	9.0	9.0	7.1
<i>Risky/high risk drinker</i>	2.5	2.2	2.9
Illicit drug use in the past 12 months			
Yes	33.7	34.2	32.0
Education level			
<i>School based qualification or below</i>	30.5	25.7	30.1
<i>Certificate or Diploma</i>	29.2	22.9	31.5
<i>University degree</i>	37.3	48.5	35.0
Partnered			
Yes	32.8	28.6	30.7

1989-95 cohort	Type of OCP user		
	PBS user	Survey user	Non-user
Ability to manage on income			
<i>Impossible/difficult</i>	54.0	48.2	53.9
<i>Easy/not too bad</i>	43.1	48.9	42.6
Country of birth*			
<i>Australia</i>	83.5	79.5	78.6
<i>Other English-speaking country</i>	3.6	5.6	4.3
<i>Non-English-speaking country</i>	1.5	2.5	3.3
Ever been in a violent relationship			
Yes	12.1	9.7	14.5
Previous termination			
Yes	5.4	5.1	9.4
Previous miscarriage			
Yes	5.8	3.9	8.5

Note: Percentages do not add to 100 as missing data are not displayed.

Figure 6-1 compares the chronic conditions reported by women according to the three groups of women (PBS users, survey users, and non-users). Non-users had the highest prevalence of all of the chronic conditions.

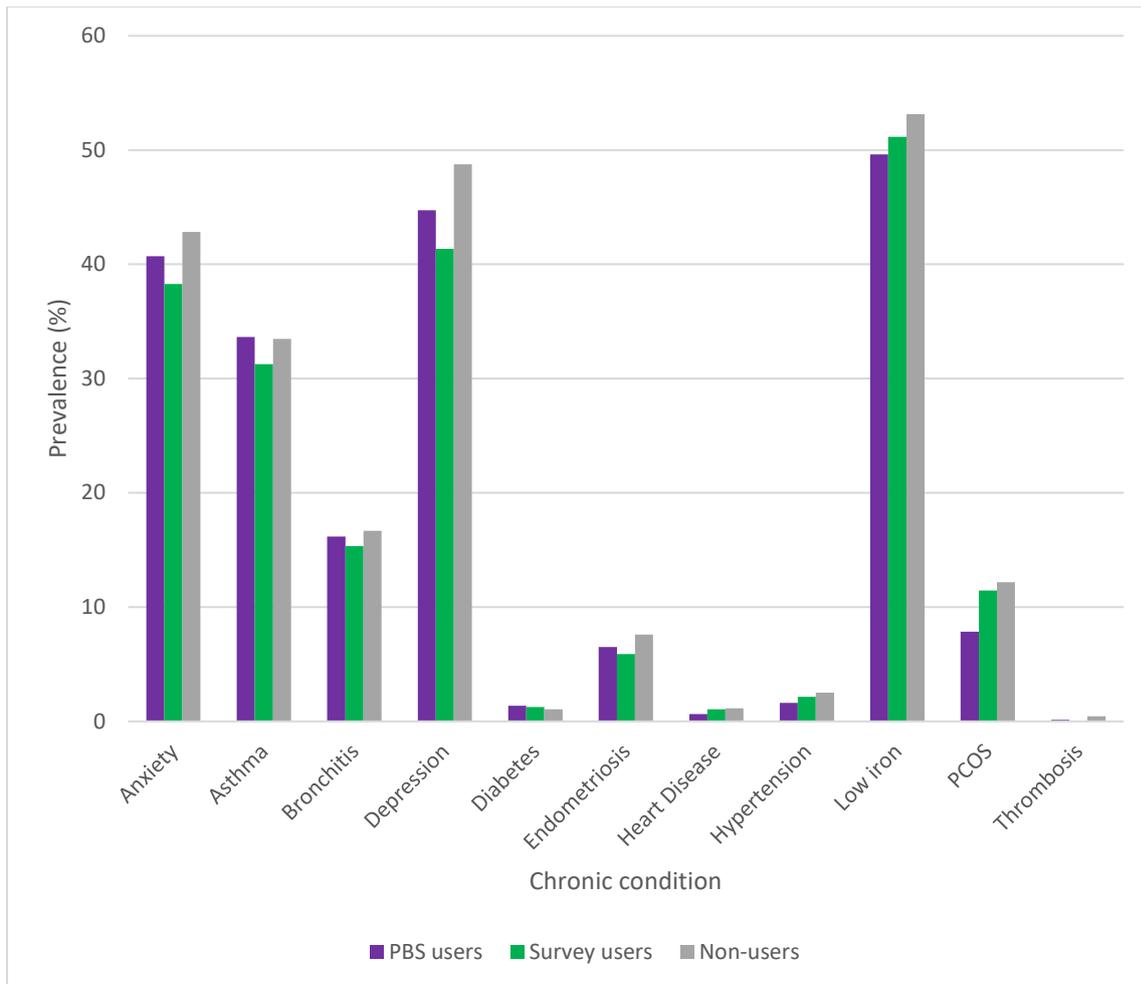


Figure 6-1 Prevalence of chronic conditions by OCP use for the 1989-95 cohort at Survey 3 (2015).

The significant differences for the 1973-78 cohort are shown in Table 6-2. As with the 1989-95 cohort, the size of the differences is small. However, the differences do show greater disadvantage among women who were supplied an OCP through the PBS in the year prior to survey completion (PBS users) when compared to women who were not supplied an OCP through the PBS but had indicated OCP use in the ALSWH survey (survey users).

Survey users had the lowest average number of children, lowest proportion of women from outer regional/remote areas, lowest percentage of women with fair or poor self-rated general health, lowest percentage of current smokers, lowest percentage of non-drinkers, highest percentage of university educated women, lowest percentage of partnered women, highest percentage of women that found it easy/not too bad to

manage on the income they had available, the lowest percentage of women who had been in a violent relationship and the lowest percentage of previous miscarriages, when compared with PBS users and those who did not use an OCP (non-users).

Table 6-2 Significant demographic, health behaviour and health risk factors by OCP use for the 1973-78 cohort at Survey 7 (2015)

1973-78 cohort	Type of OCP user		
	PBS user 21.2%	Survey user 5.4%	Non-user 73.4%
Mean Age	39.5	39.3	39.7
Physical Activity (Mean METMIN)	1,039.03	1,260.03	1,052.13
Number of children	1.74	1.43	1.84
Area of Residence (ARIA+)	%	%	%
<i>Major City</i>	54.89	58.02	55.95
<i>Inner regional</i>	26.25	24.06	26.49
<i>Outer regional/remote</i>	18.26	10.14	14.26
Self-rated general health			
<i>Excellent/Good</i>	86.87	91.75	89.08
<i>Fair/poor</i>	12.77	8.25	10.63
Smoking status			
<i>Never smoker</i>	58.89	67.92	58.15
<i>Ex-smoker</i>	27.21	25.47	27.54
<i>Current smoker</i>	10.62	5.9	10.83
Pattern of alcohol consumption			
<i>Low long-term risk, drinks at short-term risk less than weekly</i>	76.13	77.83	74.72
<i>Non-drinker</i>	8.23	7.78	10.9
<i>Low long-term risk, drinks at short-term risk weekly or more</i>	4.47	8.02	4.77
<i>Risky/high risk drinker</i>	7.94	6.13	6.16
Education level			
<i>School based qualification or below</i>	13.31	10.14	11.09
<i>Certificate or Diploma</i>	35.8	23.35	31.08
<i>University degree</i>	50.89	66.51	57.83
Ability to manage on income			
<i>Impossible/difficult</i>	43.91	35.38	40.85
<i>Easy/not too bad</i>	51.79	63.21	53.52

1973-78 cohort	Type of OCP user		
	PBS user 21.2%	Survey user 5.4%	Non-user 73.4%
Country of birth			
<i>Australia</i>	95.53	93.87	91.84
<i>Other English-speaking country</i>	2.39	2.36	4.06
<i>Non-English-speaking country</i>	1.61	2.36	3.51
Partnered			
Yes	74.88	72.41	75.67
Ever been in a violent relationship			
Yes	15.57	12.03	13.91
Previous miscarriage			
Yes	32.88	25.24	35.47

Note: Percentages do not add to 100 as missing data are not displayed.

Figure 6-2 compares the chronic conditions reported by women across the OCP user groups. PBS users were more likely to have hypertension, low-iron and PCOS compared to the other two groups (survey users and non-users).

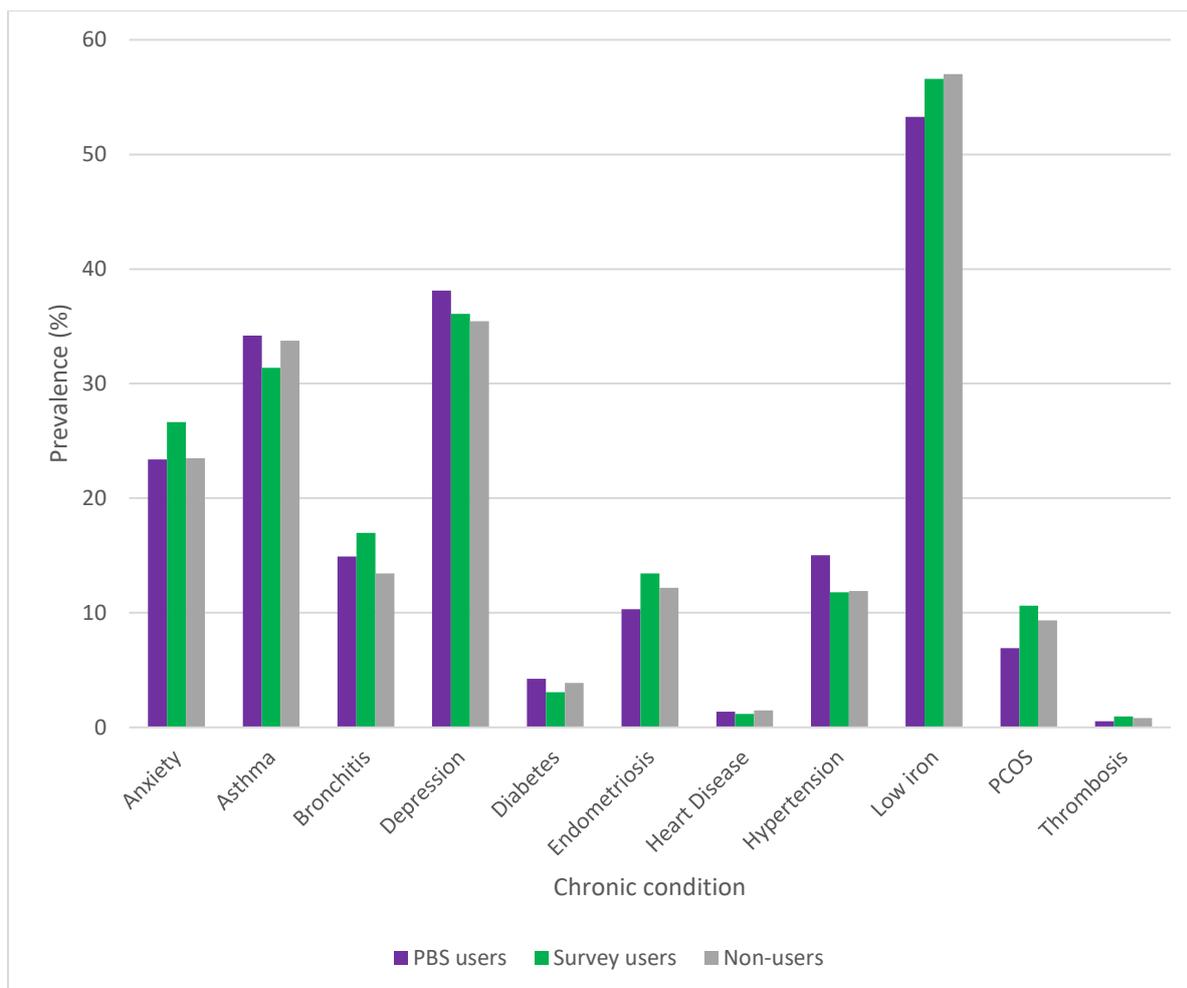


Figure 6-2 Prevalence of chronic conditions by OCP use for the 1973-78 cohort at survey 7 (2015).

6.6 Comparison of women who use oral contraceptives in the long- and short-term

The remainder of this chapter will focus on women’s use of the OCP as identified in the PBS data. The methods used to determine periods of OCP use are described in [Appendix 11.5.8](#). More than 99% of the OCP scripts supplied to women from 1 July 2012 to 30 June 2019 contained 112 pills (four 28 pill packs), which is sufficient supply for 80% of 140 days. Therefore, short-term OCP use was defined as 150 days or less, or equivalent to less than 6-months of use, and this usually represented a single script.

Out of the 7,275 unique OCP users in the 1989-95 cohort, 2,521 (34.7%) only ever used OCP for a short-term. Out of the 1,696 unique OCP users in the 1973-78 cohort,

651 (38.4%) only ever used OCP for a short-term. To compare the women who only ever used an OCP for a short-term with those that had used an OCP for a long-term at least once, demographic characteristics, health behaviours, health risk factors and chronic conditions were taken from the ALSWH survey that preceded (within three years) either the first period of use longer than 150 days (if women had used an OCP for a long-term), or their first period of OCP use (if women had only used OCP for a short-term).

6.6.1 1989-95 Cohort

In the 1989-95 cohort, 65.4% of women used an OCP for a long-term, and 34.7% used an OCP for a short-term. Women who used OCP for a short-term reported higher psychological distress, higher BMI, more children, and commenced using an OCP later than women who used OCP for a long-term. Women who used an OCP for a short-term were more likely to have poor health, not drink alcohol, smoke tobacco, have a certificate/diploma (although similar numbers with a university degree), be partnered, have experienced a violent relationship, miscarriage and termination (Significant results Table 6-3; all results [Appendix 11.5.9](#)).

Table 6-3 Significant demographic, health behaviour and health risk factors for the 1989-95 cohort OCP PBS users by long and short-term OCP use

	Long-term user 65.4%	Short-term user 34.7%
Mean age at start of period of use	22.7 years	23.1 years
Kessler psychological distress scale score	22.4	23.3
BMI	24.3	25.3
Number of children	0.1	0.1
Survey (survey which the information was taken)		
<i>1 (2013)</i>	44.1	43.5
<i>2 (2014)</i>	26.0	20.7
<i>3 (2015)</i>	13.4	11.6
<i>4 (2016)</i>	8.7	10.5
<i>5 (2017)</i>	7.7	13.7
Self-rated general health		
<i>Excellent/Good</i>	84.4	80.1
<i>Fair/poor</i>	15.4	19.9
Pattern of alcohol consumption		
<i>Low long-term risk, drinks at short-term risk less than weekly</i>	77.0	76.7
<i>Non-drinker</i>	6.7	9.3
<i>Low long-term risk, drinks at short-term risk weekly or more</i>	11.9	9.0
<i>Risky/high risk drinker</i>	3.8	3.9
Smoking status		
<i>Never smoker</i>	66.6	61.7
<i>Ex-smoker</i>	12.8	13.8
<i>Current smoker</i>	20.0	23.6
Education level		
<i>School based qualification or below</i>	41.7	37.8
<i>Certificate or Diploma</i>	28.2	33.5
<i>University degree</i>	29.9	28.4
Partnered		
<i>No</i>	73.1	67.1
<i>Yes</i>	24.9	30.4
Ever been in a violent relationship		
<i>No</i>	86.0	79.7

	Long-term user 65.4%	Short-term user 34.7%
Yes	11.8	17.9
Previous miscarriage		
No	94.9	91.5
Yes	5.1	8.5
Previous termination		
No	94.2	90.5
Yes	5.8	9.5

Note: Percentages do not add to 100 as missing data are not displayed.

In terms of the prevalence of chronic conditions, short term OCP use was associated with a higher prevalence of hypertension, low-iron, endometriosis, PCOS, depression, and anxiety relative to long-term OCP use (Figure 6-3).

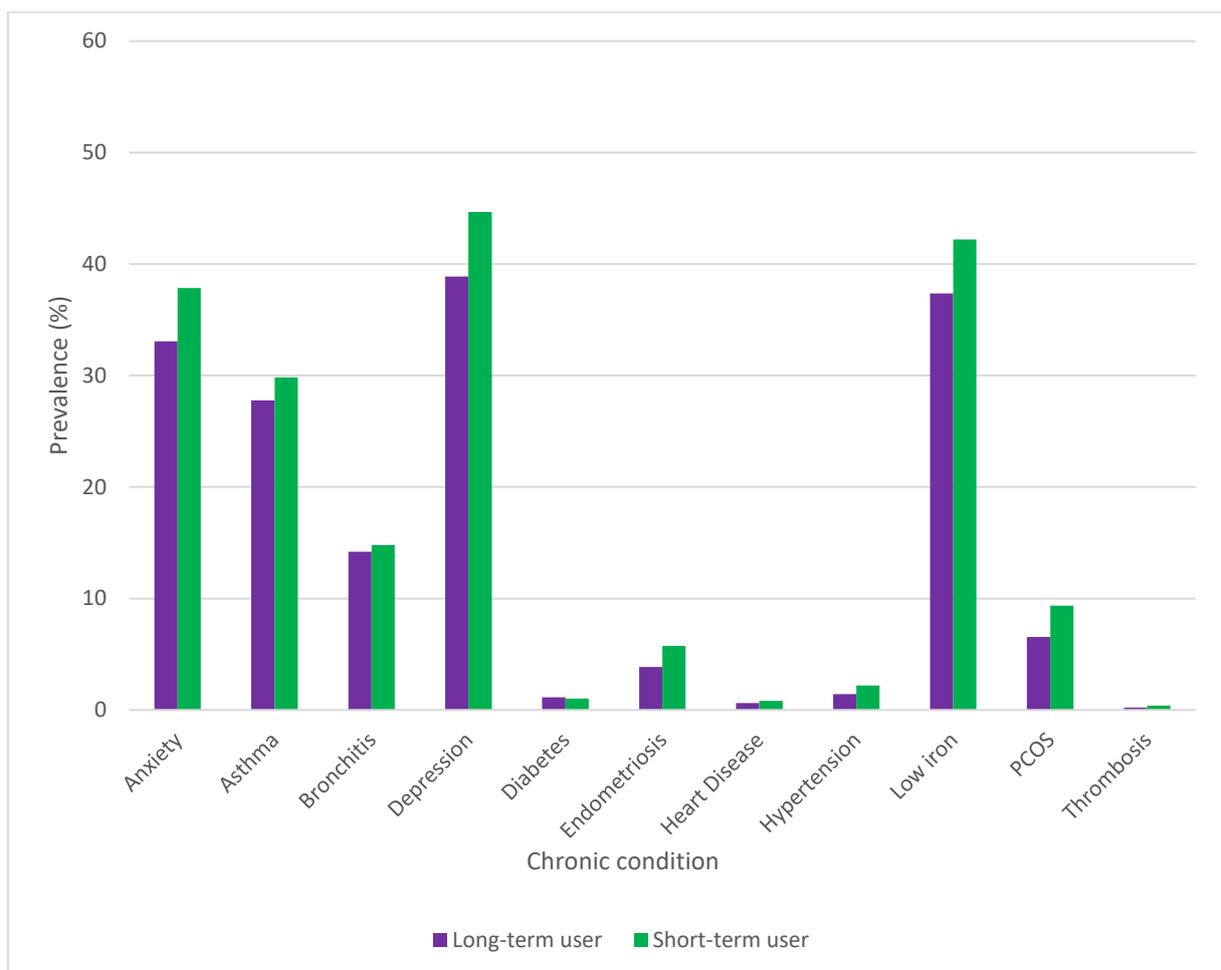


Figure 6-3 Prevalence of chronic health conditions in the 1989-95 cohort among OCP PBS long-term and short-term users.

6.6.2 1973-78 Cohort

In the 1973-78 cohort, 61.6% of women had used an OCP for a long-term, and 38.4% had used an OCP for a short-term. There were no statistically significant differences in demographic and health risk factors between women who had used an OCP for a short-term and those who used an OCP in the long-term ([Appendix 11.5.9](#)). Women who used an OCP for a short-term were more likely to commence OCP use later than women who used OCP for a long-term (Survey 8; Table 6-4).

Table 6-4 Significant factors for the 1973-78 cohort OCP PBS users by short and long-term OCP use

	Long-term user (61.6%)	Short-term user (38.4%)
Mean age at start of period of use Survey (from which the information was taken)	39.0	39.5
6 (2012)	64.6	56.1
7 (2015)	31.7	34.0
8 (2018)	3.7	10.0

Note: Percentages do not add to 100 as missing data are not displayed.

Women born 1973-78 who used an OCP for a short-term tended to have a higher prevalence of some chronic conditions, including heart disease, PCOS, and a lower prevalence of hypertension, compared to women who used an OCP long-term (Figure 6-4).

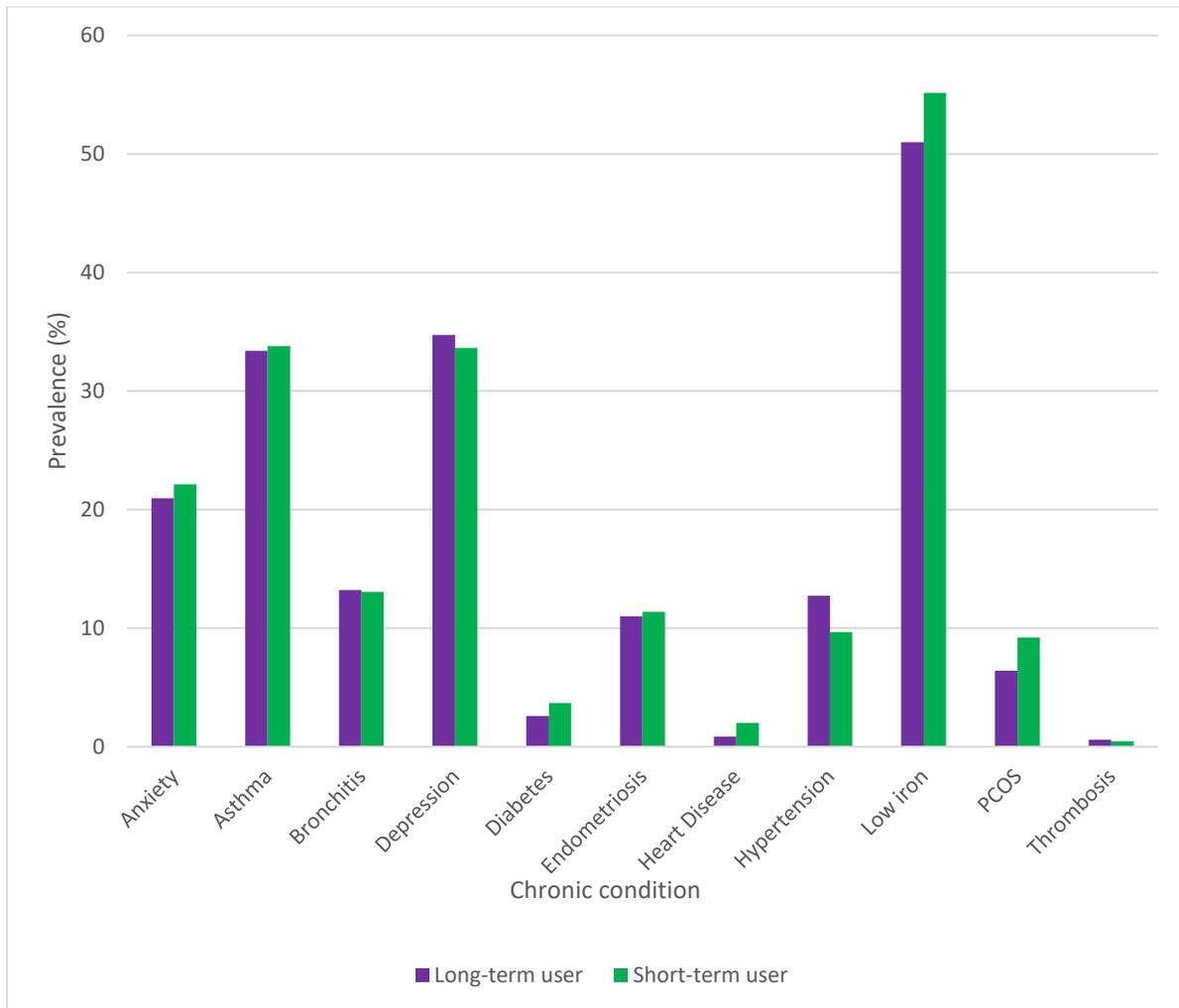


Figure 6-4 Prevalence of chronic health conditions in the 1973-78 cohort among OCP PBS long-term and short-term users.

6.7 Women who stop using the OCP

Periods of short-term OCP use identified through the PBS (as above) were common in both cohorts. In the 1989-95 cohort, there were 5,052 short-term periods of OCP use (less than 150 days) that ended prior to 30 June 2019 (when PBS data were available) across 3,730 women, and 4,340 long-term periods of OCP use across 3,756 women. Similarly, in the 1973-78 cohort, there were 1,100 short-term periods of OCP use across 862 women, and 935 long-term periods of OCP use across 802 women. Note that since women can have multiple periods of use, they can have both long- and short-term periods of use.

Data were analysed to identify which of the following events were first reported in the three years after OCP use ceased:

- Childbirth (self-reported through an ALSWH survey)
- LARC use (reported in the MBS or PBS data)
- LARC use (self-reported through an ALSWH survey)
- OCP use (reported in the PBS data)
- OCP use (self-reported through an ALSWH survey)
- None of these events

The majority of the OCP periods of use in the 1989-95 cohort were followed by a return to OCP use identified through the PBS, or by none of the events (Figure 6-5). Short-term periods of use were more likely to be followed by a return to OCP use identified through the PBS (43.3%), compared to long-term periods of use (32.1%). More than 1 in 10 periods of use were followed by LARC use (identified through MBS/PBS data) for both the long-term (11%) and short-term (11.7%) periods of OCP use. This is in addition to LARC use identified through ALSWH surveys (3.7% short-term use, 3.2% long-term use).

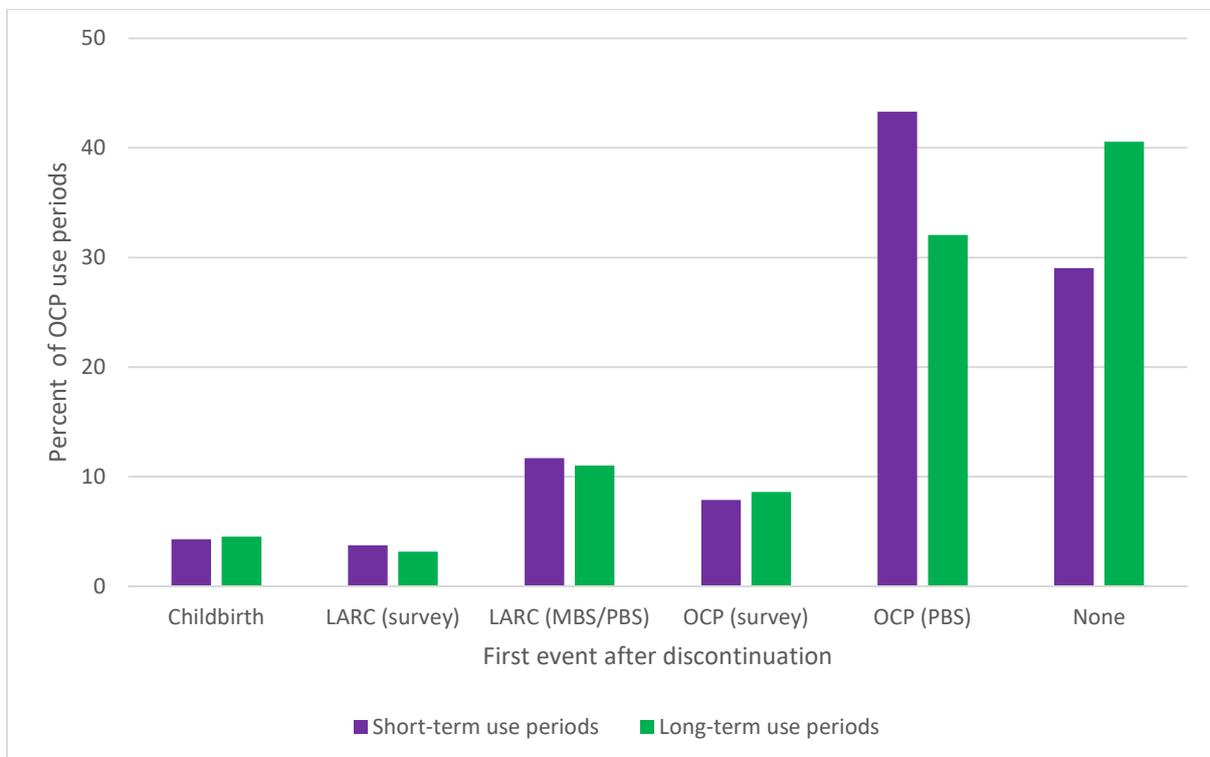


Figure 6-5 First event after discontinuation of OCP use by length of use (1989-95 cohort).

The majority of the OCP periods of use in the 1973-78 cohort were followed by a return to OCP use identified through the PBS, or none of the included events (Figure 6-6). A higher proportion of short-term use periods (37.6%) were followed by a return to OCP use identified in the PBS, compared to long-term periods of use (27.7%). Less than 10% of both the long-term and short-term OCP users had any of the four other outcomes (childbirth, LARC survey or LARC MBS/PBS, or OCP survey) as the first event.

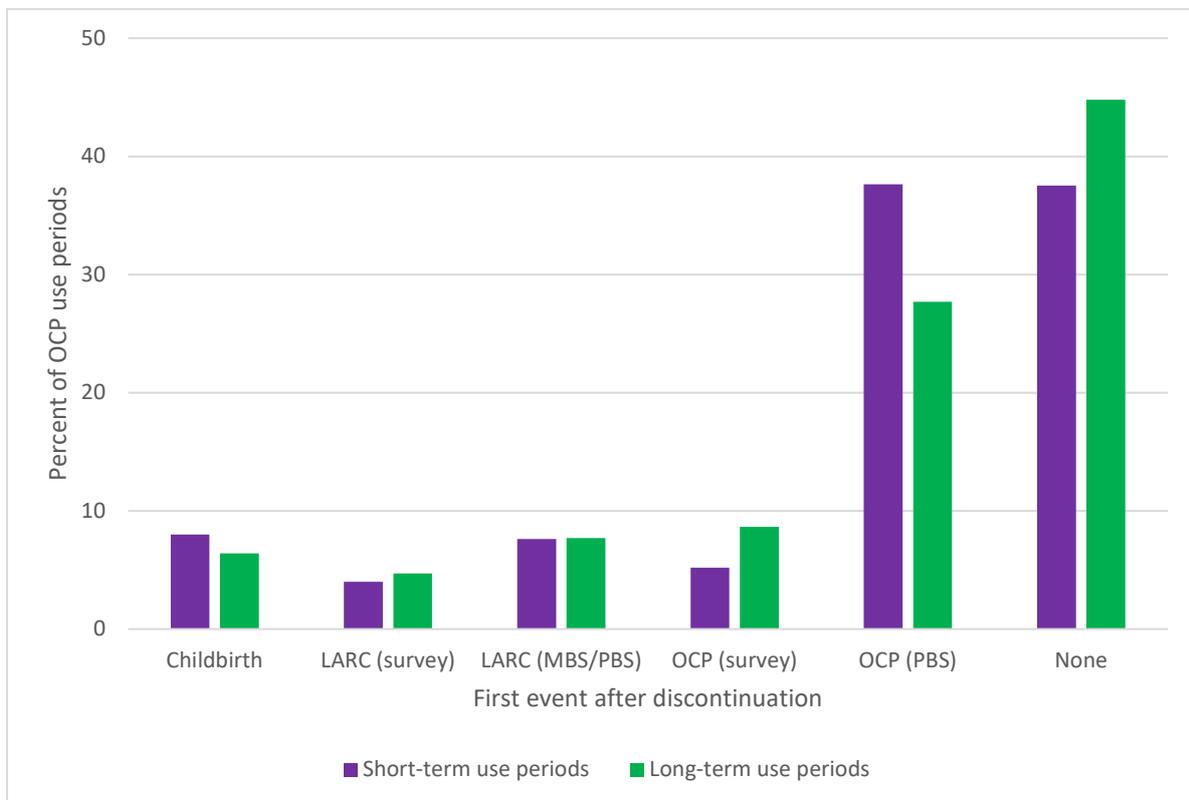


Figure 6-6 First event after discontinuation of OCP use by length of use, identified through the PBS for the 1973-78 cohort.

6.8 Factors affecting length of continual use of an OCP in long-term periods of use

We analysed the length of time from first script supply to discontinuation of OCP use for the first long-term period of OCP use (>150 days). There were 4,754 women with at least one period of long-term use in the 1989-95 cohort and 1,045 women in the 1973-78 cohort with at least one period of long-term use. Based on our definition of long-term use, women were followed from their 150th day of OCP use until discontinuation.

The median time to discontinuation of OCP use was 353 days for women in the 1989-95 cohort, and 425 days for women in the 1973-78 cohort (Table 6-5). As these estimates do not include the 150 days of use that occurred in order for them to be classified as long-term periods of use, for the women in these groups the median time is actually 503 (353+150) days for women in the 1989-95 cohort and 575 (425+150) days for women in the 1973-78 cohort.

Table 6-5 Median, 25th and 75th percentile time to OCP discontinuation for long-term users

Cohort	Median days to OCP discontinuation	25th Percentile days to OCP discontinuation	75th Percentile days to OCP discontinuation
1989-95	353	131	1,019
1973-78	425	164	1,133

Note: This follow-up time does NOT include the 150 days of use that defined the period of use as long-term.

In the 1989-95 cohort fully adjusted model, four factors were found to have a significant effect on the time to discontinuation of OCP use amongst long-term users (Figure 6-7). Each year increase in age at the start of the period of OCP use had a significant effect on discontinuation of OCP use (HR = 1.032 95%; CI = 1.013, 1.051), where older women were more likely to discontinue use. Each single point increase in BMI had a significant effect on time to OCP use (HR = 1.008; 95% CI = 1.002, 1.015), with higher BMI scores indicating increased likelihood of discontinuation of OCP use. Women who

were current smokers were more likely to discontinue OCP use (HR = 1.111; 95% CI = 1.009, 1.225) compared to women who had never smoked. Women who had used an illicit drug in the 12 months before survey completion were more likely to discontinue OCP use (HR = 1.116; 95% CI = 1.032, 1.207), compared to those who had not used an illicit drug in the previous 12 months. Therefore, duration of use of OCP was shorter for women in the 1989-95 cohort if they were older, had a higher BMI, smoked, or used illicit drugs.

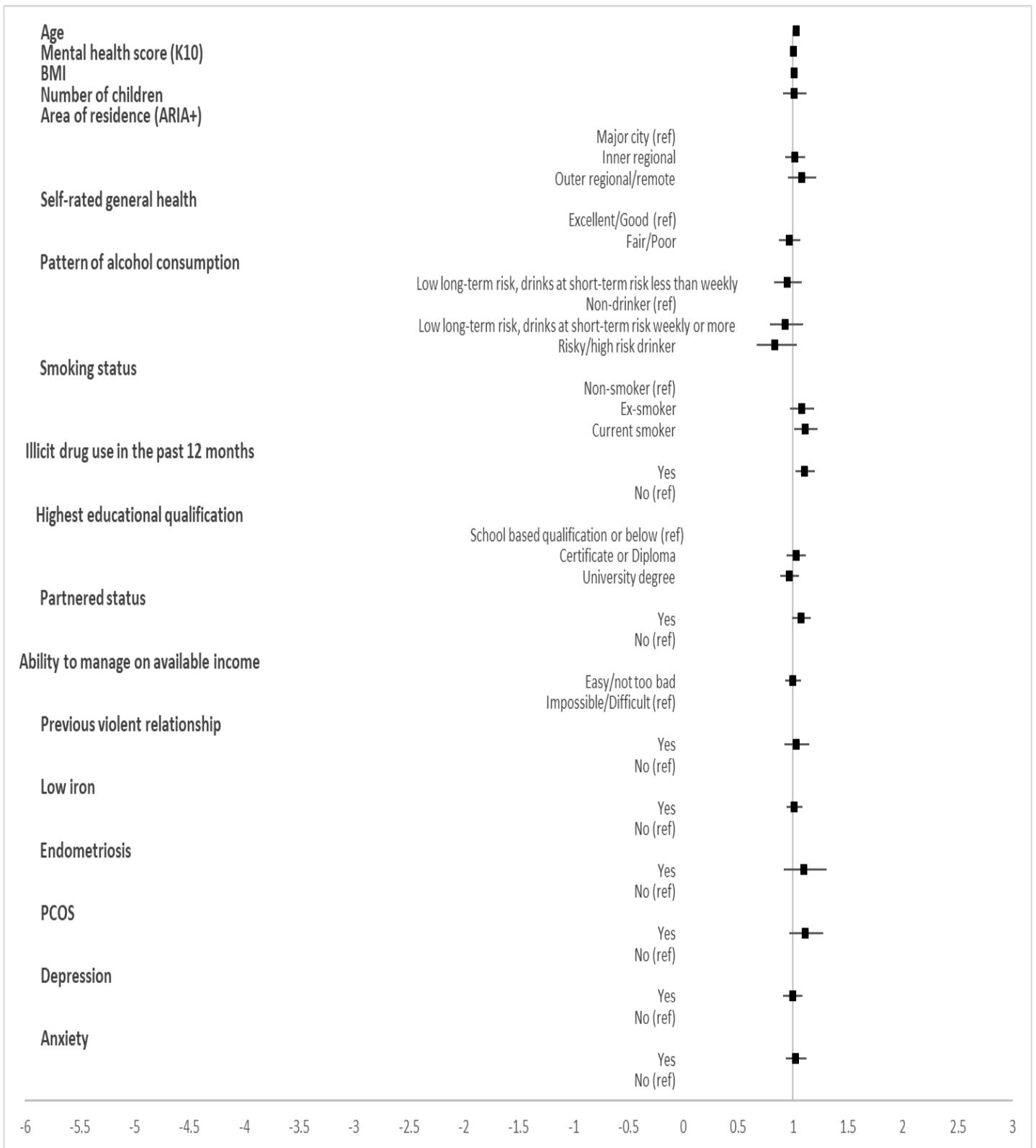


Figure 6-7 HR estimates for factors affecting time to discontinuation of OCP use for long-term OCP users in the 1989-95 cohort.

Notes: Measures were taken from the most recent survey prior to the beginning of the period of OCP use (to a maximum of 3 years). Chronic conditions were treated as enduring, based on every survey completed before beginning of OCP use, i.e. chronic conditions are taken as a “Yes” if the participant had ever reported the condition previously, else “No”.

In the 1973-78 cohort, four factors that were found to have a significant effect on the time to discontinuation of OCP use amongst long-term users (Figure 6-8). SF36 mental health scores (HR = 0.995; 95% CI = 0.99, 0.999) were found to have a small effect per unit change (note: scale is 0-100), where women with better self-reported mental health were less likely to discontinue use. Women who lived in outer regional/remote areas were less likely to discontinue OCP use (HR = 0.759; 95% CI = 0.604, 0.955), compared to women living in major cities. Women who had been in a previous violent relationship were more likely to discontinue use than women who had never been in a violent relationship (HR = 1.299; 95% CI = 1.052, 1.604). Women with endometriosis had a borderline significant increase in likelihood of discontinuation (HR = 1.242; 95% CI = 0.993, 1.555), compared to women without endometriosis. Women with PCOS were more likely to discontinue OCP use (HR = 1.362; 95% CI = 1.018, 1.823) than women without PCOS. Note the large CIs around some of the health behaviours are due to the relatively small number of women in these groups. Therefore, duration of use of OCP was shorter for women in the 1973-78 cohort if they had worse mental health, did not live in outer regional or remote areas, had been in a violent relationship, or had endometriosis or PCOS.

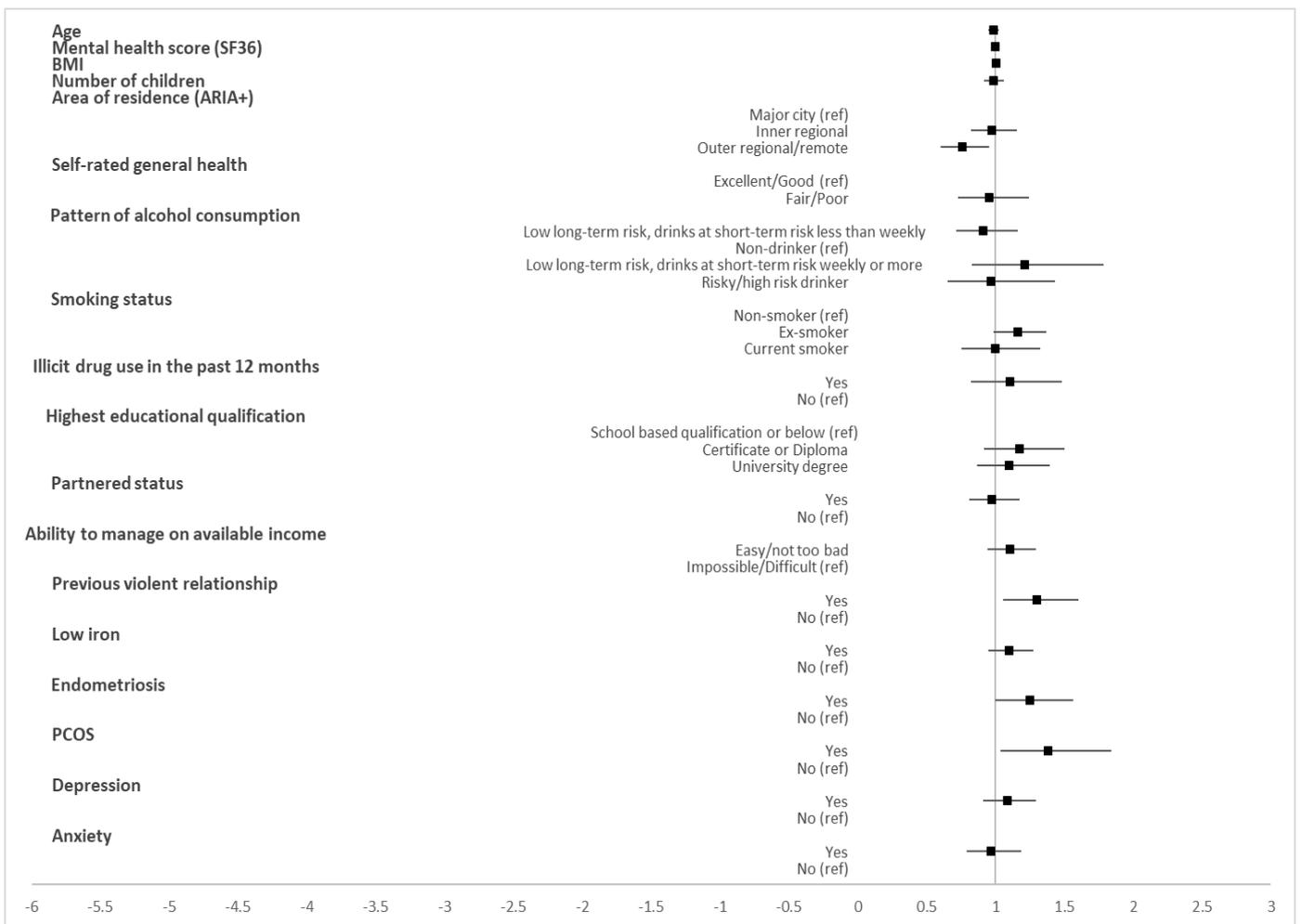


Figure 6-8 HR estimates for factors affecting time to discontinuation of OCP use for long-term OCP users in the 1973-78 cohort.

Notes: Measures were taken from the most recent survey prior to the beginning of the period of OCP use (to a maximum of 3 years). Chronic conditions were treated as enduring, based on every survey completed before beginning of OCP use, i.e. chronic conditions are taken as a “Yes” if the participant had ever reported the condition previously, else “No”.

6.9 Discussion

This chapter has examined the duration of use of the OCP as ascertained through the PBS data. Many of the periods of use equated to one script. However, when we assessed selected reproductive events that occurred after these short periods, most women returned to the OCP. Longer periods of use had a mean duration of around 500-575 days (around 1.5 years), with few factors associated with how long women remained on the OCP. The factors that were identified suggest that poor health and health risks may be associated with stopping OCP earlier, including smoking and higher BMI, use of illicit drugs, being in a violent relationship, having endometriosis or PCOS. In the 1989-95 cohort, women had shorter durations of OCP use if they were older when the period of OCP use commenced. This effect may be consistent with women going off the pill to start a family.

We note that not all women who use the OCP are represented in this chapter, as not all OCPs are listed on PBS. We estimate that upwards of 30% of women who reported OCP use on the survey were not having their prescription supplied through the PBS. However, comparisons of ALSWH data for women reporting OCP use according to whether they were identified in PBS or not revealed few differences, except that PBS OCP data may slightly over-represent women who have more children and more socio-economic disadvantage. Despite this limitation, analysis of PBS data for OCP has a great advantage in providing information on duration of use of this form of contraception for a majority of women.

6.10 References

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