



Australian women's experience with Implanon

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AIM

To describe Australian women's experiences and acceptability of etonogestrel releasing subdermal contraceptive implant (Implanon).

METHODS

Six hundred and fifty-one women were recruited at the time of implant insertion and asked to complete a self administered questionnaire immediately after insertion and at 3, 6 and 12 months after insertion.

RESULTS

Four hundred and seventy-five women aged 15–50 years responded at least once. Forty-one women had the device removed before 3 months, 48 between 3–6 months, and 75 between 6–12 months. Removal was mainly because of side effects, especially frequent or prolonged vaginal bleeding which was the reason for significantly more women to have their device removed (18% at 3, and 37% at 12 months) compared to women with no or infrequent bleeding. Most rated the implant as 'good to excellent', including 56/164 of those who discontinued its use in the first 12 months.

DISCUSSION

Implanon is acceptable contraception to women in all reproductive age groups. Change in bleeding patterns was the main cause for dissatisfaction. Providing women with detailed information before insertion of the implant is important.

The etonogestrel releasing subdermal contraceptive implant (Implanon [Organon]) is a single rod releasing progestogen at a constant low rate over 3 years. Its estimated method failure rate in Australia is 1.25 per 1000 women per year. In the 2 years following its Australian introduction in May 2001, about 10 000 doctors, mainly general practitioners, were trained in its insertion and removal; 160 000 rods were inserted. Unexpectedly there were unintended pregnancies – almost 100 in the first 18 months after release – the reasons often not clear, but included possibly failing to insert the implant at the right time (of the menstrual cycle) or place, and implant failure (sometimes because of interactions with other medications).¹

The major side effect of progestogen only contraceptive methods is disruption to the menstrual pattern.² Australian women generally tolerate this with depot medroxyprogesterone acetate injections, perhaps because as least 50% develop amenorrhoea after 12 months.³ However, as tolerance to bleeding pattern disturbances with Implanon was unknown, we set out to study this.

Methods

General practitioners and family planning doctors were invited, at Organon training sessions for Implanon trainers, to recruit women into the study at the time of

insertion. Consenting women completed a simple, self administered questionnaire immediately after insertion, and at 3, 6 and 12 months after insertion, providing informed, written consent. The number of questions was limited to fit onto a single, double sided sheet to encourage participation. Issues covered included age, last method of contraception, number of methods used in the past, reason for stopping the last method, reason for choosing the implant, bleeding patterns, side effects, removal and reasons for removal, as well as satisfaction and comparison with the last method used. Internal validity was tested by repeating the questions about last method used and previous methods used at 3, 6 and 12 months. Ethical approval was provided by the FPA Health Ethics Committee.

Women from Queensland, New South Wales and South Australia made up the 651 patients enrolled between 1 September 2001 and 30 June 2002. Recruitment was dependant on the doctor's choice, so it may not have been representative, and there is no information on the percentage of women approached to join the study or who refused to take part. The women were aged 15–50 years with a mean age of 29.2 years and a median age of 29 years. Data were analysed by chi-square or Fishers exact test.

Results

Out of 651 women recruited, 474 (73%) responded at 3 months, 323 (73%) at 6, and 309 (58%) at 12 months (Figure 1). Among the nonrespondents, 62 (9.5%) were no longer at the same address. For internal

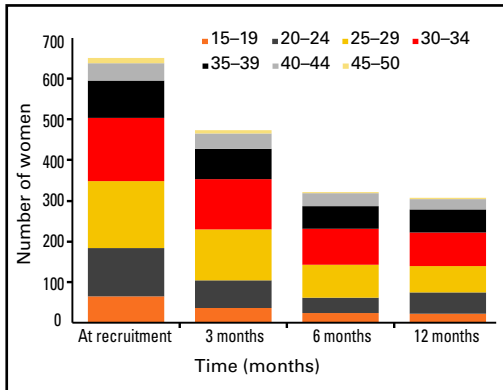


Figure 1. Number of women responders by age group and time

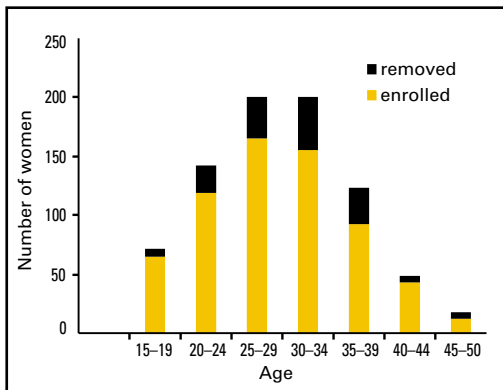


Figure 2. Number of removals compared to number of enrolments, by age

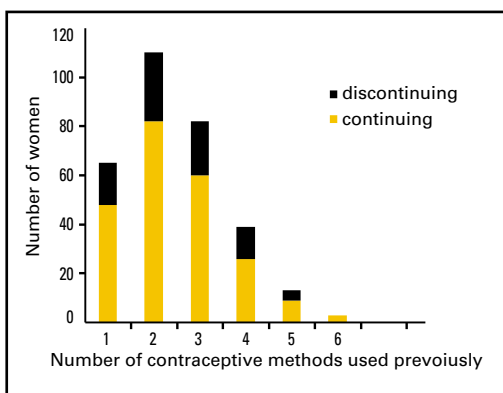


Figure 3. Number of women continuing and discontinuing Implanon at 12 months according to previous contraceptive methods used

validity, tested by asking the same question several times about the last contraceptive used, the answers were not significantly different over the four questionnaires ($p=0.18$), although numbers were low.

Most women gave more than one reason for choosing the implant, 68% for its convenience, 67% for its long duration of use, and 59% because there was 'nothing to remember'. Half (50%) gave high efficacy as a reason for choosing the implant, while only few women gave low cost as a reason. Most women felt the implant was much better than the most recent method they had used, a view that did not change with duration of use (Table 1). Before changing to Implanon, 55% of women had used a hormonal method (37.5% combined pill, 6.9% progestogen only pill, 10.5% depot medroxyprogesterone acetate injections), 31% condoms, 5.8% withdrawal, 2.9% an intrauterine device, 2.3% the diaphragm, and 1.5% 'natural' methods of contraception. About half the women changed because of dislike of (42%), or side effects from (7%) their previous contraception.

One-third (164/475) of women had the implant removed within 12 months of insertion: 41 within 3, 48 between 3–6, and 75 between 6–12 months, especially in the age groups 30–34 and 35–39 years (30.3% and 33.7% respectively), but were also the largest groups of responders at each time interval (Figure 2). For most (88%) women who had the implant removed, this was because of side effects (mainly bleeding problems, but also mood swings and breast tenderness). There was no correlation

between the last contraceptive method used and the likelihood of having the implant removed, but the more methods a woman had used in the past, the more likely she was to have the device removed ($p<0.0001$) (Figure 3).

Reasons women gave for liking Implanon did not differ greatly over the reporting periods and included: convenience, nothing to remember, and its 3 year lifespan (Table 2). Effectiveness was given as a reason for liking the method by almost two-thirds of respondents, while about 40% liked the little or no bleeding they experienced.

The percentage of women experiencing the various bleeding patterns associated with Implanon did not change over time ($p=0.44$) (Figure 4). Amenorrhoea and infrequent bleeding were the commonest patterns. Women who experienced frequent and/or prolonged bleeding episodes were significantly more likely to have their device removed (18% at 3, and 37% at 12 months) than women with no or infrequent bleeding (3% at 3 and 12% at 12 months) ($p<0.0001$ for both) (Figure 5). There were few other reported side effects: mood swings (10%), increase in acne (7%), decreased libido (4%), weight gain (3%), and sore breasts (3%).

Of the women prematurely discontinuing the implant, 56 (34%) rated it as 'good to excellent', although those who discontinued use within the first 12 months rated it significantly less favourably than those who continued ($p<0.001$). Out of 226 women still using the implant at 12 months, 201 (90%) rated it as 'excellent or good', 16 (7%) 'okay', 7 (3%) 'fair', and none 'poor';

Table 1. Women's satisfaction with Implanon compared to the last method of contraception, by time

| Comparison | 3 months | (%) | 6 months | (%) | 12 months | (%) |
|--------------------------|------------|------|------------|------|------------|--------|
| Excellent, good | 392 | (85) | 258 | (79) | 225 | (75.5) |
| Okay | 44 | (9) | 24 | (8) | 30 | (10) |
| Fair | 14 | (3) | 21 | (7) | 22 | (7) |
| Poor | 15 | (3) | 11 | (4) | 20 | (7) |
| Total respondents | 466 | | 314 | | 198 | |

Table 2. Reasons women liked Implanon, by time

| Reason | 3 months | (%) | 6 months | (%) | 12 months | (%) |
|--------------------------|------------|-------|------------|--------|------------|--------|
| Convenience | 407 | (87) | 266 | (86) | 249 | (86) |
| Nothing to remember | 375 | (80) | 245 | (79) | 236 | (81) |
| Effectiveness | 293 | (62) | 192 | (62) | 187 | (65) |
| Past 3 years | 327 | (70) | 242 | (78) | 216 | (75) |
| No side effects | 316 | (68) | 86 | (28) | 56 | (19) |
| Little or no bleeding | 203 | (43) | 125 | (41) | 115 | (40) |
| Other | 48 | (10) | 23 | (7) | 7 | (2) |
| Total respondents | 467 | | 322 | | 320 | |
| Removals | 41 | (8.6) | 48 | (14.9) | 75 | (23.4) |

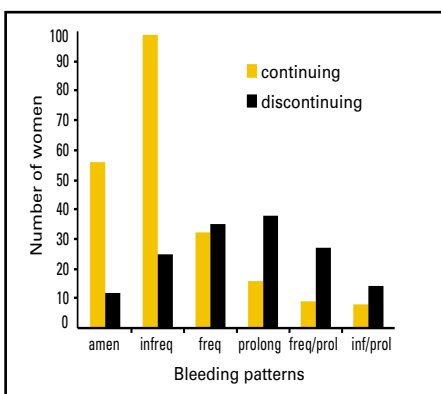


Figure 4. Number of women continuing and discontinuing Implanon at 12 months according to bleeding patterns

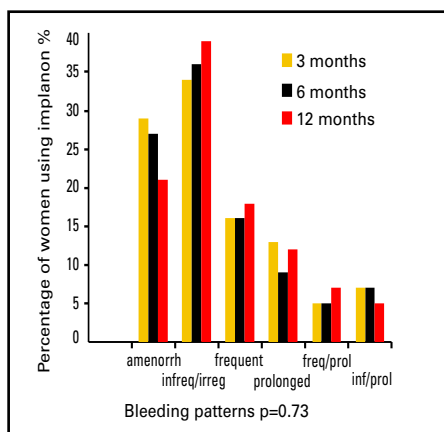


Figure 5. Bleeding patterns of women using Implanon 3, 6 and 12 months after insertion

213 (94%) would recommend it to a friend (of those who discontinued, 35/72 [49%], $p < 0.001$).

Discussion

There were some weaknesses of the

study method. Selection of women depended on unknown selection biases of the recruiting doctors, and also that of women's willingness to participate. The response rate was poor, and many women did not complete all data fields. Moreover, we relied on self report by women about their subjective experiences, which raises questions of the validity of the data.

Nevertheless, the data throw some light on the questions. Long acting methods require little or no maintenance on the part of the user, which was a major reason for satisfaction with implants, confirming a previous satisfaction study in British women.⁷ Probably this was coupled with the enthusiasm of doctors for the implant, the subsidy from the Pharmaceuticals Benefits Scheme listing, and reassurance that it could be removed easily if found to be unsatisfactory.

Progestogen only contraception causes changes in menstrual pattern. We found bleeding disturbance was the commonest reason for removal of the implant. Interestingly, the proportion of women who experienced frequent or prolonged bleeding did not change over time, and that tolerance to it varied greatly with younger women appearing to accept the pattern or persevere for longer before requesting removal. Most women found amenorrhoea or oligomenorrhoea acceptable, although a few had the implant removed because they needed the reassurance of a regular bleed to confirm they were not pregnant.

It is difficult to be sure of implant removal rates because of the high loss to follow up at 12 months. We calculate 27–35%, higher than the previously published rates of 11% at 1 year,⁵ and compared to 30% at 2 years.⁸ Women may have been unprepared for the realities of changes in bleeding patterns.

Conflict of interest: none declared.

Acknowledgment

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