Australian women's experiences of the subdermal contraceptive implant: A qualitative perspective

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Recommended Citation
Inoue, Kumiyo; Kelly, Marguerite; Barratt, Alexandra; Bateson, Deborah; Rutherford, Alison; Black, Kirsten I.; Stewart, Mary; and Richters, Juliet, "Australian women's experiences of the subdermal contraceptive implant: A qualitative perspective" (2016). *Faculty of Science, Medicine and Health - Papers: part A*. 4477. [https://ro.uow.edu.au/smhpapers/4477](https://ro.uow.edu.au/smhpapers/4477)

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Abstract
Background The number of prescriptions for contraceptive implants has steadily increased in Australia, but implant use is still low. Objectives The objectives of the study were to describe women's nuanced responses, and characterise their multidimensional and complex reasons for (dis)continuing use of the contraceptive implant. Method A descriptive qualitative approach was used for this study. A larger qualitative study using in-depth, open-ended interviews, conducted in New South Wales between 2012 and 2013 with 94 women aged 16-49 years who had used contraception, included 10 interviews containing accounts of implant use. The 10 interviews were analysed thematically in the present study. Results The three main themes analysed from the 10 interviews were perceived benefits, undesirable experiences and perseverance. Discussion The participants were well informed about the benefits of the implant. Many persevered with it for a significant period of time before discontinuing it, despite experiencing side effects such as bleeding or mood changes. A decision to discontinue was often only made after an accumulation of multiple side effects.

Keywords
subdermal, perspective, experiences, qualitative, women's, australian, implant, contraceptive

Disciplines
Medicine and Health Sciences | Social and Behavioral Sciences

Publication Details

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This journal article is available at Research Online: https://ro.uow.edu.au/smhpapers/4477
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Background

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The objectives of the study were to describe women’s nuanced responses, and characterise their multidimensional and complex reasons for (dis)continuing use of the contraceptive implant.

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A descriptive qualitative approach was used for this study. A larger qualitative study using in-depth, open-ended interviews, conducted in New South Wales between 2012 and 2013 with 94 women aged 16–49 years who had used contraception, included 10 interviews containing accounts of implant use. The 10 interviews were analysed thematically in the present study.

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The three main themes analysed from the 10 interviews were perceived benefits, undesirable experiences and perseverance.

Discussion

The participants were well informed about the benefits of the implant. Many persevered with it for a significant period of time before discontinuing it, despite experiencing side effects such as bleeding or mood changes. A decision to discontinue was often only made after an accumulation of multiple side effects.

Long-acting reversible contraceptives (LARCs), including the subdermal implant (etonogestrel, sold in Australia under the brand name Implanon), are highly effective and safe, and are thus recommended by health professionals as suitable for women of all ages.\(^1\)\(^2\) The prescription rate of the implant has increased steadily in Australia,\(^3\) but its use is still lower than in other comparable countries.\(^1\)

Approximately half of the women who commenced using the implant in Australia\(^4\)\(^5\) and the UK\(^6\) discontinued it within two years. Major reasons for discontinuation are discontent with bleeding patterns,\(^7\) abnormal bleeding\(^8\)\(^9\) and mood changes.\(^4\) However, women report a wider range of reasons for discontinuation that are not always captured by side-effect data in clinical studies.\(^9\)

This is not surprising because contraceptive research often uses outcome variables that may mask women's points of view by categorising responses seen as clinically irrelevant as 'other'.\(^10\) For this reason, a qualitative approach is recommended to gain an accurate understanding of women's views.\(^9\)\(^10\) A qualitative study\(^11\) of young women aged 16–22 years in the UK acknowledged the complexities involved in the decision to discontinue the implant. Furthermore, a recent Australian study identified that 40% of women changed contraceptive method for non-contraceptive reasons.\(^12\) Examination of clinical side effects alone fails to adequately engage with women's actual experiences and the subtle nuances that 'tip' them into a discontinuation decision.

An in-depth qualitative approach to understanding the experiences of Australian women who have used the implant is lacking in research to date. This article describes the lived experiences of 10 Australian women who have used the implant, some multiple times. The study illuminates women's nuanced responses, and characterises their multidimensional and complex reasons for discontinuing the implant.
**Methods**

A descriptive qualitative methodology was used for this study. We sought to keep as close to the data as possible and report in-depth, direct descriptions of the participants’ experiences. The analysis specific to this article was a subset of a data analysis (n = 10) from a larger qualitative study into Australian women’s contraceptive understandings and experiences (CUE study, https://research.unsw.edu.au/projects/contraception-understandings-and-experiences-australian-women). Detailed information about methods and procedures, including recruitment, ethical consideration and data analysis/management can be found in our published companion paper.

The prepared interview prompts that are specific to the implant are presented in Box 1. These were rarely needed in the interviews with implant users, in which participants responded to general open-ended questions. The de-identified transcripts were thematically analysed by the first and second authors using the procedure reported by Braun and Clarke.

Three themes were saturated in this subset (n = 10) of data.

The project was approved by the Human Research Ethics Committee of the University of New South Wales (reference HC11504).

**Results**

The women often used the term ‘rod’, or the brand name ‘Implanon’, to describe the implant. In this paper, we refer to participants who have used a subdermal implant at any time (n = 10) as ‘implant users’, and those who were using an implant at the time of the interview as ‘current users’. Demographic information on the participants in this study is shown in Table 1. Of the 10 participants, two were still using the implant. The remaining eight gave reasons for discontinuation that are similar to those reported in the literature, such as bleeding and mood-related issues, but the interviews illuminate the complex interplay of multiple factors.

Women sometimes tolerated the side effects from the implants for many years before they discontinued the method. The eight women who had discontinued using the implant had done so after different periods of time and for various reasons, and were not necessarily dissatisfied with it overall. Indeed, some of these women were satisfied with the implant for a period of time. The three saturated themes discussed in this paper are: perceived benefits, undesirable experiences and perseverance.

**Perceived benefits**

All of the participants interviewed were well informed about the benefits of the implant that are often referred to in educational material, such as the low cost (specified by holders of a healthcare concession card), convenience (no daily action required), long-term effectiveness and possibility of managing heavy bleeding. Quite often, the prospect of multiple periods, or the absence of bleeding, was viewed positively by participants, and they enjoyed the convenience of this and realising that they saved on the cost of sanitary products. However, the impact of the implant on bleeding was not uniform between participants and varied for individual participants with each different implant used.

The recognition of benefits is not necessarily shared between participants and health practitioners. One current user expressed a very positive attitude towards the implant. She described her experience as ‘eye-opening’ and ‘life-changing’. However, she said that it was a long time before she encountered a doctor who took her history of migraines into account and suggested that the implant, which did not contain oestrogen, would be the best option for her. The participant spoke of the improvements the implant brought to her life and disclosed her unsatisfactory experiences with previous doctors whom she reported had prescribed the contraceptive pill without thoroughly taking her medical history into account.

**Undesirable experiences**

General comments such as ‘the implant did not agree with me’ or ‘I did not like it’ were often used to summarise multiple bodily changes that led to discontinuation of the contraceptive implant. For some participants, the implant brought unpleasant experiences, including painful insertion and removal, and changes in mood and bleeding patterns. Similarly to the results of existing studies, constant or irregular bleeding was described as problematic and was given as a reason for removal of the implant by most of the participants who discontinued using it.

All of the implant users in our study were aware of the absence of bleeding as a possible result of implant use. In line with the study by Darney et al., a lack of bleeding was considered by some to be a non-contraceptive benefit and by others to be ‘unnatural’ but tolerable. The nature of the vaginal bleeding itself was, for some participants, a measure of the bodily effects of the implant.

> I had an Implanon for three years – the first one was three years, got it changed. No dramas at all. I had very...
few bleeds. But always felt kind of bloated and a bit tired. And then maybe halfway through the second one ... I'd bleed for six weeks non-stop and then I'd have two weeks off. And it got really kind of intense and very painful. And the consistency got really quite dark and really heavy, and very sort of old and nasty, I guess. – Mia (20s)

The impression from our data, that bleeding and mood-related side effects are the two main triggers for discontinuation of the implant, is consistent with other studies.4,7

The participants also described a variety of other reactions to the implant, such as headaches, pain (at various sites), nausea, bloating, tiredness, and dramatic mood changes and swings. Some concerns were not clearly articulated in terms of clinical symptoms. Statements such as 'I found it difficult to lose weight', ‘I was emotional’, ‘I was cranky’, ‘I was mean’, ‘I felt angry’ and ‘I was depressed’ were used by participants to describe how they felt when they were using the implant.

Table 1. Demographic information of the 10 women

<table>
<thead>
<tr>
<th>Pseudonym and age group</th>
<th>Ethnicity/ Location*</th>
<th>Number of children; relationship status</th>
<th>Current contraception and history of implant use (number of times)</th>
<th>Reasons for discontinuation, if discontinued (or scheduled to do so)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zara (40s)</td>
<td>Anglo-Celtic, Urban</td>
<td>No children; in a relationship</td>
<td>Implant (1)</td>
<td>N/A</td>
</tr>
<tr>
<td>Grace (40s)</td>
<td>Anglo-Celtic, Regional</td>
<td>Three children; in a live-in relationship</td>
<td>Implant (3)</td>
<td>N/A</td>
</tr>
<tr>
<td>Ella (20s)</td>
<td>Aboriginal and Torres Strait Islander, Rural</td>
<td>Two children; in a live-in relationship</td>
<td>Implant (3)</td>
<td>Continuous bleeding</td>
</tr>
<tr>
<td>Naomi (30s)</td>
<td>Anglo-Celtic, Urban</td>
<td>Two children; not in a relationship</td>
<td>Safe period (checking ovulation); used implant for four years (2)</td>
<td>Perception that hormones and chemicals are not good for health</td>
</tr>
<tr>
<td>Charlotte (30s)</td>
<td>Aboriginal and Torres Strait Islander, Regional</td>
<td>Two children; in a live-in relationship</td>
<td>Tubal ligation; used implant for ‘a few’ years (1)</td>
<td>Mood changes pointed out by others</td>
</tr>
<tr>
<td>Mia (20s)</td>
<td>Anglo-Celtic, Regional</td>
<td>No children; not in a relationship</td>
<td>Condoms (no more hormonal contraception); used implant for about 4.5 years (2)</td>
<td>Bleeding irregularity</td>
</tr>
<tr>
<td>Chloe (30s)</td>
<td>Anglo-Celtic, Regional</td>
<td>No children; in a live-in relationship</td>
<td>Hormonal IUD; used implant for nine years (3)</td>
<td>Bleeding problems</td>
</tr>
<tr>
<td>Ruby (30s)</td>
<td>Anglo-Celtic, Urban</td>
<td>Four children; not in a relationship</td>
<td>Withdrawal; used implant for &lt;1 year (1)</td>
<td>Constant bleeding</td>
</tr>
<tr>
<td>Sylvia (20s)</td>
<td>Anglo-Celtic, Rural</td>
<td>Two children; in a live-in relationship</td>
<td>Not taking contraceptives (pregnant); used implant for about six months (1)</td>
<td>Intermittent bleeding and mental health effects (anxiety and depression)</td>
</tr>
<tr>
<td>Hannah (20s)</td>
<td>Anglo-Celtic/ Aboriginal and Torres Strait Islander, Rural</td>
<td>No children; in a live-in relationship</td>
<td>Contraceptive pill; length of time each implant was used is unknown (3)</td>
<td>Three different side effects each time (bleeding, extreme mood changes, asthma)</td>
</tr>
</tbody>
</table>

*Ethnicity was disclosed by women themselves
†‘Urban’ refers to the state capital, Sydney; ‘regional’ refers to other large towns and cities; ‘rural’ refers to smaller rural towns and localities
IUD, intrauterine device
Quite often, participants were unsure whether their experience resulted from the implant or something else. Hoggart et al. found that women did not necessarily consider specific changes in their body or emotions to be directly connected with the implant.

Sometimes, mood swings were recognised by the implant users themselves, but not always. Charlotte (30s), who described the implant positively as an ‘easy and secure method’, eventually decided to stop using it because her mother and others pointed out mood changes that she had never recognised herself. She stated:

‘I personally thought it was okay, but others around me thought that my moods had … just mood swings, you know, and they just thought, ’You’re not right’ … especially my mum.’

– Charlotte (30s)

Negative attitudes towards the implant only came about retrospectively for one participant, who spoke of the pain she experienced when it was removed and her subsequent struggle with infertility. Another participant, who had positive attitudes, described not feeling entirely herself and having subtle concerns that she was unable to pinpoint, saying ‘I always felt something, but I did not know how to describe it’.

Bleeding and emotional problems affected participants personally, as well as affecting their relationships and sex lives. Some participants explained that they ‘lost [their] sex life’ because of constant bleeding while using the implant. They described a reduced desire for sex as a result of physical and emotional changes, and instability of mood.

‘So I left it in for a year, and I’d say out of that year, I probably had one month of not bleeding. That was a very tough year ’cause I was with a partner then and he kept getting very, very cranky because I was always bleeding. Just always. Even if it was just a little bit. Sometimes it was heavy, sometimes it wasn’t. It just, it was just not working … that was awful. It didn’t make me feel anything – like I didn’t feel sick or anything – but just the whole sex life and the fact that I was always having to wear pads, and yeah, just yuck. I just couldn’t do anything. I … couldn’t go swimming. I couldn’t just enjoy myself. So then I had it taken out. – Ruby (30s)

It is not clear from this extract whether Ruby lacked interest in sex while she was bleeding, or whether she and/or her partner assumed that sex during menstruation was not acceptable or preferable. Women’s beliefs about sexual intercourse during bleeding are influenced by complex social, physical, psychological and interpersonal constraints, and behavioural expectations. The literature suggests that bleeding can affect the sexual behaviour of a woman and her partner. It is also possible that irregular bleeding is easier for women to discuss in a medical consultation rather than any sexual issues associated with it.

Perseverance

Some participants persevered with one or more implants, tolerating several physical and emotional changes. Their decision to discontinue the use of the implant was often triggered by intolerable bleeding or mood changes, but was often the culmination of many undesirable side effects.

Sylvia (20s) persevered through multiple side effects, but reported that it was intermittent bleeding that eventually prompted her to discontinue the implant. As the interview progressed, she spoke of changes in her cycle as well as psychological, openly expressing her fear about the bodily effects of the implant. Sylvia claimed that she would never use the implant again or recommend it to anyone. She described the implant as:

‘An evil little bar sending negativity … a cranky little bar in my arm … the Implanon. Because it affected so much that I sort of got a bit worried about what it was actually doing to my body.’

– Sylvia (20s)

Sylvia mentioned that the mental health issues she experienced while using the implant became clearer after its removal:

‘It affected my head as well … I sort of got to the point where I couldn’t wait to actually get it taken out. … and then I found that, after I got it taken out, sort of a lot of things started levelling back out again.’

– Sylvia (20s)

Ella (20s) disclosed that she was planning to have her third implant removed early because of bleeding. She continued with the first and second implants despite recognising emotional changes such as feeling cranky, angry and sad. Her third implant was inserted after a break to ‘clean’ her body from hormones, even though she was not convinced that it was suitable for her, given the mood changes from the first two. Five months of ‘constant bleeding’, nausea, feeling overly emotional and gaining weight while using her third implant triggered her decision to have the implant removed.

One participant persisted with three implants before deciding that it was not a suitable method of contraception for her. Hannah reported her reasons for prematurely discontinuing each of her three implants. She recounted her experiences of continuous bleeding for six months with her first implant, extreme mood changes with her second and asthma with the third. Hannah was adamant that all of these experiences were associated with the implants and explained that she was able to confirm the differences between what was normal and abnormal each time the implant was removed. Eventually, she came to the conclusion that the design of the implant itself was the problem.

‘To have it go wrong in so many different ways three different times is, it just makes you think well maybe it needs redesigning, rethinking.’

– Hannah (20s)

In line with other studies, we found that a single negative experience was unlikely to trigger discontinuation of the implant, and that some women persevered with it despite experiencing ongoing side effects. Our findings address subtle and apparently less significant changes experienced by participants, some of
which were not even recognised by the women themselves. Some participants in our study initially reported one side effect or made a short statement such as ‘I failed with the implant’ or ‘it did not work for me’. However, as the interview progressed, or clarification was sought by the interviewer, they spoke of other changes in their body, and quite often more specific and detailed stories subsequently emerged.

Discussion

This article reports the only study in Australia to date that captures qualitative data about users’ perception of the contraceptive implant, rather than simply outlining reasons for discontinuation. It provides an in-depth qualitatively approached understanding of the experiences of Australian women who have ever used the implant. It also explores the imagery women use to describe their experiences, which may be helpful for doctors seeking to offer information and ongoing support to women using this method.

The negative aspects of the participants’ experiences with the implant were more prominent in their own accounts. However, some participants who were unhappy with their previous choice of contraceptive found the implant to be a suitable method that improved their lives. The accumulation of multiple negative side effects over time led some women to discontinue the implant. Interestingly, these participants often persevered with it for a significant period.

We identified three possible contributors to this finding, which warrants further investigation.

First, women may not have drawn a connection between the perceived changes in their body or emotions and the implant. Second, women were not always able to clearly describe the changes they perceived, either when they were using the implant or after its removal. Third, women could often only be ‘conclusive’ about their impression of the side effects of the implant after discontinuation.

Many of the participants in this study did not raise their issues with a doctor until they had already decided to discontinue the implant. Access to well-informed healthcare professionals, and proactive encouragement at the time of insertion about seeking advice for any unwanted side effects as they arise, may support improved satisfaction for women. Expertly moderated user–provider internet forums on topics related to the implant may also be useful to give women an opportunity to share their experiences, and for clinicians to be aware of issues raised by women using this method of contraception.

Limitations and strengths

This qualitative study does not aim to be representative of all women’s views on the contraceptive implant, but rather to capture themes among users who either continued or discontinued the method. As we did not specifically target women who had used the implant, the number of participants was small. There was also a possibility of negative recall bias among women who had an implant removed, and who may subsequently equate it with symptoms or other changes in their life that may or may not have been associated with its use.

A cohort of current users may provide more positive perspectives. Baumeister et al found that people tend to process negative information more thoroughly than positive information, and that negative events tend to be more memorable. Overall, the negative aspects of the participants’ experiences with the implant were more prominent in their accounts, which may be related to these two current and eight previous users who recounted their experiences retrospectively.

Implications for general practice

This study suggests that GPs need to better understand women’s perceptions about the implant and incorporate these understandings into their contraceptive consultations.

The study also indicates that some women may persevere through multiple perceived side effects from the contraceptive implant before deciding to have it removed. Health professionals need to be aware that women will not necessarily volunteer information about side effects unless specifically asked, particularly if it relates to bleeding interfering with sexual activity.

There are strategies that health professionals can use to assist women with troublesome bleeding associated with the contraceptive implant, and it may be beneficial to discuss these at initiation to potentially circumvent perseverance until the point of discontinuation. Nevertheless, when advising about the potential side effects, health practitioners should reassure women that the method is reversible, and that early removal might be appropriate if troublesome side effects persist. Further research following women using the implant prospectively would be useful in shedding further light on women’s experiences of this important LARC method to best support its informed choice and ongoing use.

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Competing interests: Outside this work, Deborah Bateson has attended advisory committees and presented at educational forums/workshops for MSD. She has not been personally financially remunerated for these services. MSD is the sponsor of the contraceptive implant in Australia. Family Planning NSW receives sponsorship from MSD fees for educational courses.

Provenance and peer review: Not commissioned, externally peer reviewed.

Acknowledgements

The authors would like to thank the women who took part in this research. This project was funded under an Australian Research Council linkage grant (LP110200996). The project was conducted in partnership with Family Planning NSW and the University of Sydney.

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