

Patients' perspectives about why they have their contraceptive Implanon NXT device removed early

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Background

Women with long-acting, reversible contraceptive devices inserted may choose to remove them prior to their planned expiry dates.

Objective

The objective of this study was to explore Australian women's experiences with the etonogestrel subdermal contraceptive implant (Implanon NXT) and why they had it removed early.

Method

Semi-structured interviews were conducted with 18 women between June 2013 and January 2014. Transcriptions of the audio-taped interviews were analysed using a constant comparative analysis framework.

Results

Two core themes of participants' responses that were identified in this study were influences on choice of contraception, which included convenience and information sources; and influences on removal of contraception, which included side effects and their negative impacts on relationships and financial costs.

Discussion

This study highlights that women's experiences with side effects contribute to the early removal of long-acting contraceptive devices such as Implanon NXT. This study emphasises the importance of general practitioners (GPs) in providing comprehensive information about the benefits and potential side effects associated with using these implants.

General practitioners (GPs) are expected to provide education and advice about contraceptive options to their female patients who are of reproductive age. They are responsible for improving women's awareness about different contraceptive options, including long-acting, reversible contraceptives,¹⁻⁴ and for educating women about the potential side effects of these contraceptive options.⁵ GPs are also more likely to prescribe a new medication at the request of a patient⁶ if they believe the patient has a clear understanding of the risks associated with taking the new medication.⁷

Implanon NXT, introduced in Australia in 2001, is an implantable long-acting, reversible contraceptive rod containing etonogestrel that provides contraception for up to three years.⁵ Implanon NXT becomes effective immediately after insertion, typically by a GP, into the medial upper arm of female patients. Its contraceptive effects cease shortly after removal.⁵ Despite the advantages of rapid onset and cessation of action of this implant, it appears that irregular and heavy bleeding are among the main reasons for early removal.⁸⁻¹²

The limited literature regarding women's experiences with long-acting, reversible contraceptive devices in Australia, such as Implanon NXT, include a quantitative retrospective audit of 976 patient charts from two family planning clinics in Queensland,¹³ and surveys completed by more than 700 women who had used Implanon NXT from two different studies.^{14,15} Overall, the findings suggest that unacceptable bleeding primarily contributes to patients' dissatisfaction and the early removal of the implant. However, the studies do not elaborate on the patients' perspectives about the early removal of the implants.

The aim of this Australian qualitative study was to explore women's experiences from the viewpoint of those who had discontinued their long-acting, reversible contraceptive device, Implanon NXT, prior to its planned expiry.

Methods

Human ethics approval was obtained from the University of Wollongong (reference HE13/012). The study drew upon qualitative data derived from semi-structured interviews between June 2013 and January 2014. The interviews were conducted with women aged 18 years or older who met the inclusion criteria (Table 1) and attended one of five purposively selected general practice training practices in regional or rural New South Wales. These training practices (four regional and one rural), which are members of the Illawarra Southern Practice Research Network (ISPRN), were approached directly by the investigators. The nurses within the participating practices were given the responsibility of screening their electronic medical record databases to identify potential participants.

In total, 66 potential participants were identified and sent a letter of invitation to take part in the research. Eligible patients who consented to participate in the study were interviewed for approximately 15–20 minutes by one of two researchers (MF or XC) using a semi-structured interview guide. The interview guide included questions regarding the participant's general demographics, why they chose to use Implanon NXT, their sources of information, concerns (if any) about Implanon NXT, reason(s) for removal of the device, and their overall experience with the device and its impact on themselves and their relationships.

The interviews were audio-recorded, transcribed verbatim and analysed using a constant comparative analysis framework. The first transcript was independently coded by three researchers (MF, XC and BDH). These initial codes were then discussed and revised until agreement about their appropriateness was reached by the research team. These codes were applied to several transcripts, and this was then discussed and compared by the research team. Any differences in coding were discussed until a consensus was reached. The emerging coding frame was

applied to the remaining transcripts by a single researcher (MF). Themes were compared across participants and within individual accounts.

Results

Eighteen patients consented to being interviewed (response rate 27%). Participants were aged 18–39 years (average 24.5 years of age) and were in current relationships with a male partner. For the majority of participants (n = 15), it was their first experience with Implanon NXT; for the remaining three participants, it was their second experience with Implanon NXT. Table 2 shows that the majority of the participants had fewer than two children and Table 3 highlights that bleeding and mood changes were the main reasons for Implanon NXT removal.

Two core domains identified from the qualitative data were influences on choice of contraception and influences on removal of contraception.

Influences on choice of contraception

Convenience and sources of information about Implanon NXT were the main factors that influenced participants to have the devices initially implanted.

Convenience

It was just convenient ... ease of it ... did not have to remember anything.

Not having to take anything and we were basically good to go at any time.

– Participant 12, 18 years of age

It just seemed simpler and more practical for my lifestyle.

– Participant 2, 20 years of age

Most participants were especially pleased about having the convenience of long-term cover without having to remember to take an oral contraceptive pill every day.

... because I was getting a bit forgetful with the pill and I had a lot on having our kids, I just wanted to not have to worry about having to remember to take my pill every day.

– Participant 16, 39 years of age

Having it put in and not having to worry about it again until the three years or whatever it was.

– Participant 9, 31 years of age

The advantages were that I didn't have to take the pill every day. It was just one less thing that I had to worry about really and that was really it.

– Participant 6, 31 years of age

The idea that they may not experience menstrual periods during the three years of active implant time was seen as another convenience and advantage of the contraceptive device.

I thought that it would be wonderful to not have a period ... for the three-year period ... I thought that sounded great. That was what appealed to me.

– Participant 1, 20 years of age

In addition, postpartum women believed that Implanon NXT was a convenient and safe option while breastfeeding.

I could still breastfeed. I didn't want to take the mini pill.

– Participant 8, 26 years of age

I just wanted to make sure obviously that it was safe, but other than that ... I could use it breastfeeding.

– Participant 5, 30 years of age

Information sources

Prior to their GP appointments, some participants had sought information about the implant from other sources, including friends, family and the internet. It appeared that access to this other information prompted the participants to make a GP appointment with the purpose of requesting Implanon NXT as a contraceptive device.

I did listen to what [XXX] said, but that still sounded like the easiest option for me. I don't think it was because I've had this information that I'm definitely doing it. It was ... why I wanted to do it.

– Participant 5, 30 years of age

For participants who were unsure about what type of long-term contraception to use, the discussion and information they received from their GP was important. The provision of written information from their GP was also influential in their decision making.

[The GP] ... gave me a run through of what was going on and I'm sure she printed me out an information sheet on it and then we talked it through together as well. – **Participant 5**, 30 years of age

Other participants recalled that their GP provided them with information about insertion and removal of the device, as well as the potential side effects associated with using the device.

My GP told me that it was a device that was going to be inserted in my arm ... that I might get a bit of spotting initially, but there wouldn't be any ongoing periods usually ... so I thought

that sounded really good and that it would be changed after three years.

– **Participant 1**, 20 years of age ... education pamphlet from the doctors, just talking to the doctor about it about what's involved getting it and what might be expected from it.
– **Participant 10**, 39 years of age Just the bleeding really, it was all we really talked about.

– **Participant 2**, 20 years of age There were mixed feelings among the participants about whether their GP provided information about other contraception options.

To be honest, I don't remember that they did ... I'm sure that they would have, but I just don't remember specifically, no.

– **Participant 14**, 22 years of age I talked to the doctor and she said that there were the two long-term options that she would recommend. It was that or one that was internal, and that didn't sound very nice. So I was just going with the Implanon NXT and it looked a bit less painful.
– **Participant 14**, 22 years of age

Influence on removal of contraception

Side effects, such as bleeding, mood swings, weight gain and cosmetic side effects, were the main contributors identified by the participants for having the Implanon NXT devices removed prior to the three-year expiration period. The negative impact of these side effects on their relationships and finances also contributed to the participants opting to have their implants removed early.

Side effects

Bleeding was the main side effect that prompted the participants' requests to have the contraceptive device removed.

There wasn't really any gap where I didn't have the spotting and that's the main reason I did get it taken out ...

– **Participant 4**, 28 years of age

Two of the three participants who tried Implanon NXT for the second time explained that they had no problems with their first Implanon NXT, but had experienced bleeding side effects with the subsequent one. One participant reported:

The first time ... I had no problems. I had a period maybe three times in those seven months and I got it taken out because I wanted to try for our second baby. Then when I got the second one put in, I had it in a lot longer and nearing the end of that 18 months, that's when I started bleeding a lot. A lot of spotting,

Table 1. Eligible study patient criteria

Topics	Questions
Inclusion criteria	Screening of electronic databases for the following terms: 'removal of Implanon NXT' or 'Implanon NXT' <ul style="list-style-type: none"> • In the past five years • Females aged 18–50 years
Exclusion criteria	<ul style="list-style-type: none"> • Women who clearly indicated removal of the implant was because they intended to conceive • Patients whom the GP considered were not able to give informed consent for the study, were not able to speak English or were known to be in distress from any cause

Table 2. Study participants' number of children

Number of children	Number of study participants
0	6
1	4
2	5
3	1
unknown	2

Table 3. Reason for Implanon NXT removal

Reason (may be more than one per participant)	Number of participants
Bleeding	8
Mood changes	6
Pain, including painful intercourse	2
Low libido	1
Weight gain and re-establish normal periods; future pregnancy planning	1

periods were coming every ten days ... and that's when I decided to get it taken out.

– **Participant 8**, 31 years of age

Mood swings and weight gain were also important side effects that contributed to requests for removal of the contraceptive device.

I've put on a bit of weight too, but that didn't really bother me ... Feeling really short ... short fuse at my husband and kids all the time, which isn't healthy.

– **Participant 5**, 30 years of age

Although the majority of participants felt that not having menstrual periods for a three-year period was one of the device's benefits, some did not seem comfortable with the idea of not having a period for this extended period of time.

I just felt like it was abnormal for a young girl to just not be getting her periods at all.

– **Participant 13**, 22 years of age

Cosmetic side effects, such as scarring and acne, also contributed to some of the participants' decision to have the device removed.

I have a scar on my arm and that type of thing.

– **Participant 1**, 20 years of age.

I didn't like the idea they were going to cut my arm. When it was in, too, at the gym sometimes I felt like it was sticking in my muscle ...

– **Participant 17**, 25 years of age

Yeah, that my skin had declined. It was not looking very nice anymore.

– **Participant 11**, 18 years of age

Relationships

Unpredictable bleeding, changes in mood and painful intercourse were perceived by some participants to have a negative impact on their relationship with their partner.

I would say it affected it negatively. It was obviously a bit hard with all the periods and things like that with my hormones being a bit erratic.

– **Participant 5**, 30 years of age

To a degree, yes because my partner and I are sexually active and the

constant bleeding ... because we just didn't like the idea of being sexually active while I was bleeding, so it did impact on the relationship.

– **Participant 2**, 20 years of age

Financial costs

Some participants mentioned they were happy with the one-off cost for Implanon NXT, which would then last for three years. However, a few were not happy with the added costs for sanitary pads and tampons.

Tampons aren't the cheapest to keep buying.

– **Participant 18**, 25 years of age

Obviously the added cost of ... sanitary towels all the time and ... bleeding so heavy I'd have to change quite often and go to the night-time pads to absorb a lot of the bleeding.

– **Participant 5**, 30 years of age

Discussion

The findings of this qualitative study highlight that even though women view long-acting, reversible contraceptive implants (eg Implanon NXT) as convenient, some may choose to have them removed early because of personal 'costs' related to side effects. These personal costs included physical, psychological, relational and financial issues. Overall, this study provides a unique patient perspective about the early removal of a long-acting, reversible contraceptive device.

The participants in this study decided to use Implanon NXT because they perceived it to be convenient and long acting, with the added bonus of potentially not having menstrual periods for an extended period of time. In addition, the one-off intervention every three years made Implanon NXT an attractive contraceptive choice for participants in our study. It was also seen to be a safer option for participants who were breastfeeding. Potentially, women's perceptions about the convenience of the implant, as documented in this and another Australian study,¹⁶ are contributing to the rise in prescription rates of the long-acting, reversible contraceptive device in Australia.

The side effect of bleeding was the major contributor to participants in this study having their Implanon NXT removed early. This finding supports that of Weisberg and Fraser,¹⁴ who found that prolonged vaginal bleeding significantly contributed to Australian women having their contraceptive implant removed at three and 12 months, compared with women with no or infrequent bleeding. Our study findings are also supported by those of an international study that found 45% of the 991 women discontinued Implanon NXT use early because of bleeding problems.¹⁷ Given that bleeding and other side effects, including mood swings, skin changes and weight gain, ultimately led to early removal of the implant, GPs need to recognise the importance of counselling their patients about these potential side effects.

Shared decision making is an important aspect in the patient-centred approach to consultations, particularly around prescribing medications.¹⁸ This study highlights that GPs play an important role in educating their female patients about contraceptive choices, irrespective of whether their patients already have information gathered from other sources, such as family, friends and/or the internet. Furthermore, it is important for GPs to inform their patients about the advantages and disadvantages associated with short-term and long-term contraceptive options. This includes information about potential side effects, which may include bleeding, mood swings, weight gain and cosmetic effects. GPs also need to be mindful of the influence they have on this decision-making process for women, especially if they find it challenging to adhere to the shared decision-making model.¹⁹

Limitations

It is possible our recruitment method resulted in a sample of participants who differed systematically in their views from the study population.²⁰ Given the voluntary nature of the interviews, it was difficult to follow up non-responders.

Conclusion

This study highlights that although women consider long-acting, contraceptive devices (eg Implanon NXT) to be convenient, their experiences with side effects contribute to early removal of the device. Therefore, it is important for GPs to provide comprehensive information to their patients about the benefits and drawbacks associated with using these implants. Our findings also suggest there is still work to be done to achieve shared decision making regarding the use of long-acting, reversible contraceptive devices. Further research into this area is required.

Implications for general practice

- GPs can play a major part in educating patients about the benefits and potential side effects associated with use of long-acting, reversible contraceptive devices such as Implanon NXT.
- Personal 'costs' related to side effects are major contributors to having Implanon NXT removed prior to the three-year expiration period.
- Future research needs to focus on improving shared decision making about the use of Implanon NXT and in reducing the premature removal of these devices.

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Competing interests: None.

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

Acknowledgements

The authors would like to thank the practices and participants for their involvement, Ms Alyssa Horgan for her support with the research project, and Coast City Country GP Training (CCCGBT) for their \$5000 contribution in funding this project.

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