Discontinuation of Implanon NXT® among users at public health facilities in South Africa

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Source: MIMS (n.d.)
Overview

1. Background
2. Aim & Objectives
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4. Results/Discussion
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Background

- Single-rod subdermal implant
- 68mg Etonogestrel
- Effect for 3 years

Early User Discontinuation

HIC ± 25%

India & Brazil: 0-29%

Africa: 13.5%-65%

Increase in reports in SA

Main reason: adverse drug reactions (ADR)

Background

Complete range of FP methods

- SA Pledge 2012
- Updated Contraception policies 2013
- Roll out of Implanon NXT
- Early User Discontinuation
- Poor monitoring & Lack of PV
- Addition of contraceptive implants
  - In public health facilities: Feb 2014
  - ↑ no. of removals
  - Change in prescription guidelines
  - True extent of discontinuation unknown.

Aim & Objectives

To evaluate discontinuation of Implanon NXT® among users at public health facilities in SA

1. To determine extent of user discontinuation
2. To determine reasons for discontinuation
3. To evaluate factors associated with discontinuation
Methodology

Secondary data analysis

Gatekeeper & Ethics: National Pharmacovigilance Centre (NPC)
UKZN (BE266/17)

NPC national data: April 2015–Sep 2017

Sample N=3743

Data Extraction: Demographics & discontinuation

Analysis:
- Tests of association
- Univariable & Multivariable Analysis
- Descriptive
Results/Discussion

Age of Discontinuers n=2260

Discontinuation Cases per health facility n=2366

Provincially Tertiary Hosp n=44
National Central Hosp n=55
Regional Hosp n=175
CHC n=438
District Hosp n=528
PHC n=1004

(Tadesse et al., 2017a) Asaye et al. (2018) (Mrwebi et al., 2018b)
Results/Discussion

Discontinuation n=1492

- Early discontinuation; 1210; 81%
- Discontinuation upon expiry; 282; 19%

Time period of cases discontinuing n=1492

- ≥36 months: 282 cases
- ≥24 months to <36 months: 283 cases
- ≥12 months to <24 months: 534 cases
- ≥6 months to <12 months: 193 cases
- <6 months: 200 cases

References:
## Results/Discussion

### Univariable & Multivariable Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Univariable model</th>
<th>Multivariable model</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Odds Ratio</td>
<td>CI</td>
</tr>
<tr>
<td>Cases reporting ADR/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>4.62</td>
<td>3.93-5.45</td>
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(Asaye MM et al., 2018, Birhane et al., 2015, Siyoun et al., 2017)(Aziz et al., 2018).
## Results/Discussion

**Top 10 Reasons for discontinuation (n=2124)**

<table>
<thead>
<tr>
<th>Reason</th>
<th>No. of Cases</th>
<th>%</th>
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<tbody>
<tr>
<td>Menorrhagia</td>
<td>728</td>
<td>34.27</td>
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<tr>
<td>Expiry</td>
<td>628</td>
<td>29.57</td>
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<tr>
<td>Headache</td>
<td>218</td>
<td>10.26</td>
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<tr>
<td>Desire to conceive</td>
<td>126</td>
<td>5.93</td>
</tr>
<tr>
<td>Dizziness</td>
<td>106</td>
<td>4.99</td>
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<tr>
<td>Irregular menstruation</td>
<td>76</td>
<td>3.58</td>
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<tr>
<td>Painful arm</td>
<td>72</td>
<td>3.39</td>
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<tr>
<td>Weight gain</td>
<td>67</td>
<td>3.15</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>65</td>
<td>3.06</td>
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<tr>
<td>Weight loss</td>
<td>63</td>
<td>2.97</td>
</tr>
</tbody>
</table>

Conclusion

- Younger women are discontinuing Implanon NXT

- Extent of early discontinuation of Implanon NXT® appeared high

- Adverse drug reactions associated with Implanon NXT® discontinuation

Half of users who reported adverse drug reactions to a health practitioner discontinued on the same day.

Recommendations

1. Rigorous monitoring

2. Counselling & management

3. Design: Follow-up protocol & treatment algorithm
References


PILLAY, Y. 2014. Circular: Changes in the prescription of progestin subdermal implants (Implanon) in women who are taking enzyme inducing drugs such as Efavirenz for HIV, Rifampicin for TB and certain drugs for Epilepsy(carbamazepine, phenytoin and phenobarbital). In: HEALTH (ed.). Republic of South Africa Department of Health.


REPRODUCTIVE HEALTH SUPPLIES COALITION 2013. Contraceptive Implants.


