

GUEST EDITORIAL

Introduction of the contraceptive implant in South Africa: Successes, challenges and the way forward

In 2014, the contraceptive implant was introduced into public sector facilities in South Africa (SA). Several thousand healthcare workers were trained, and demand was generated for the method, achieving high uptake. Use of the implant has since declined, but currently accounts for ~7% of all contraceptive use – a not insignificant achievement for a ‘new’ method.^[1,2] In this edition of *SAMJ*, three articles^[3-5] take stock of the early years of implant provision in SA. The articles, based on research in 2016, capture women’s motivations for using the implant and their perspectives towards the method; and healthcare providers’ competencies and experiences with service provision. Insights may be generalisable to family planning services more broadly, but are also relevant to the introduction of other new technologies, especially those related to HIV.

Counselling and choice

As the implant was a ‘new’ method in the public health sector, one would have expected providers to give women detailed information about the benefits, potential side-effects and steps to follow should problems arise. This was not always the case, as pointed out by Pillay *et al.*^[3] in this issue of *SAMJ*. For example, only about half of the clients interviewed in Johannesburg and the North West Province recalled being warned about side-effects, the principal cause of implant discontinuation. Moreover, only about a quarter remembered being informed about the method’s remarkable contraceptive effectiveness, the attribute that takes centre-place in family-planning counselling in many other countries.^[6,7] Models, leaflets and flip charts can be used to facilitate such discussions.^[8] In many settings, information about contraceptive methods is simply presented verbally – from most to least effective, beginning with the implant.^[6,7]

Among women who experience heavy or prolonged bleeding while using the implant, the decision to continue the method seems contingent on the dynamics of their relationship with their partner and the level of sexual activity. These issues need to be foregrounded in counselling for this group of women.^[9,10] Encouragingly, Pillay *et al.*^[3] found that many women had negotiated implant insertion, and indeed removal, with their partners. Others chose clandestine use, allowing them to use the implant without knowledge of their partners. Providers could raise this as an option, but then must inform women to consider the possibility of conflict with their partner, even violence, should the device be discovered.

Clearly, providers’ confidence and competence to deliver a new contraceptive are critical to its success, as discussed by Adeagbo *et al.*^[4] in a study of nurses in this edition of *SAMJ*. They found that providers generally felt inadequately prepared to carry out counselling, offer follow-up support and undertake removals. They ascribed these gaps mostly to deficiencies in training and, in particular, to the use of ‘cascade’ training methods. Even though the study did not directly examine providers’ willingness to offer the implant and changes in attitudes over time, reluctance to provide the contraceptive appears to be growing in the public sector, as negative experiences with the implant accrue.

The promotion of specific methods over others is often justifiable, especially when a method holds compelling advantages for certain groups. In many settings, the implant is considered as ‘first-line’ for women within 48 hours of childbirth or after an abortion, as well as

for adolescents and young women.^[6,11-13] The study by Pillay *et al.*^[3] however, found no evidence that the youth were being targeted; only ~15% of participants were aged 18 - 24 years, the age group with the highest unmet need for contraception.^[11,14] Targeted implant provision is needed and creative approaches are called for. One possibility is to integrate implant provision into She Conquers,^[15] a national campaign recently launched to address high rates of HIV, teen pregnancy, gender violence and school attrition among adolescent girls and young women in SA. Care must be taken to ensure that targeting does not occur simply on the basis of socioeconomic class, though. There is some evidence that such profiling is already occurring, with the income and educational levels of women who use the implant being considerably higher than those of the average woman in SA. This raises the question of whether providers are encouraging implant use among women of higher socioeconomic status, but favouring injectable contraceptives when counselling poorer clients.^[14,16]

Misconceptions and demand creation

It is worth considering why instances of side-effects and implant removals spurred negative attention and press in SA, even though these seem similar to incidence rates elsewhere. Much of this may be related to the care and support provided to women who complain of side-effects, who are often told to persevere or wait for symptoms to settle, rather than being actively managed.^[17] Both the women and nurses interviewed noted gaps in services for women who experienced side-effects. Providers need to be better equipped to precounsel women about anticipating side-effects, particularly bleeding changes. The highly variable treatment of problematic or intolerable bleeding by providers is a direct reflection of the lack of a standardised, evidence-based guideline on the medical management of these symptoms. In other settings, providers follow a clinical algorithm, laying out the counselling, treatment options and follow-up strategies for side-effects.^[18,19] Bleeding in conjunction with other side-effects is particularly problematic, and needs to be addressed proactively.^[20,21]

Women who tolerate a significant amount of discomfort and inconvenience on the basis of advice from providers, may become justifiably angry about the care received and antagonistic towards the method itself. Other women who learn of these experiences understandably form negative impressions of the implant.^[22] Equally, the voices of satisfied clients, who comprise the large majority of women who insert the implant, must be allowed to shape the public discourse about the method.^[23]

Even though few women cited pamphlets, television or social media as direct sources of information about the implant, these media could play an important role in reinforcing the testimonies of women who are satisfied with the method, and in counteracting negative perceptions and rumours before these become entrenched. Demand-creation efforts around the time of introducing the implant in SA, successfully generated positive impressions of the method. These efforts need to be redoubled, drawing on lessons from these early years.

Programme monitoring

Having actionable data is especially important when a new contraceptive method is introduced. A method’s long-term success is often determined in these first years – indeed, delays in detecting

and rectifying problems in the past have resulted in many other methods being discarded.^[24] An article by Pillay *et al.*,^[5] published in this edition of *SAMJ*, examines the data-monitoring systems used in facilities, noting considerable gaps. A range of tools were being used to record insertions, while data were seldom captured on removals, and pharmacovigilance data not at all. Providers had developed their own registers, while the National Department of Health tools had been used in some facilities, but not in others, or different versions of the same tool were being used. Consequently, the actual numbers of insertions, incidence of complications, rates of removal and reasons for removal are largely unknown. Encouragingly, since the evaluation, many of these gaps in monitoring are being actively addressed.

Conclusion

Action is needed to ensure that the considerable gains made in the introductory phase of the implant translate into sustained uptake of the method in the long run. The potential of the implant to make a major contribution to reducing unintended pregnancies in SA is beginning to be realised, but gains could be substantially extended.

Although commendable efforts were made to train healthcare workers with regard to implant use when it was first introduced in 2014, refresher training is currently required. Key topics that have to be emphasised are counselling on the method's effectiveness and side-effects, specific groups to target, management of side-effects and removal skills. Providers require clarity on implant use in women taking efavirenz. Even though levels of etonogestrel and therefore the contraceptive effectiveness of the implant are lowered in these women, they still have lower rates of pregnancy than women using other contraceptives, such as injectables.^[25] Also, healthcare workers need to be reminded that the women they consult at clinics are those who have side-effects, and that the majority are highly satisfied with the method and do not return to the clinic. This predominance of visits for side-effects may well account for negative perceptions among providers towards the implant.

It is worth investing in demand generation; the implant offers 3 years of highly effective protection against pregnancy, making it very cost effective. Targeting men is also important, given that many women consulted their partners prior to use and men held considerable influence over continuation. Data collected in one standardised tool, capturing a limited number of carefully selected variables, could guide improvements in the post-introductory phase. Robust monitoring data could trigger support for areas with low uptake, or training regarding management of side-effects in areas with high discontinuation rates.

A sense of urgency is required to implement the recommended actions. The worst-case scenario – withdrawal of the implant from the method mix owing to dwindling uptake – is not as implausible as it might seem. Difficulties with new methods, when left unaddressed, often lead to their discontinuation.^[24] Moreover, the possibility that depot medroxyprogesterone acetate will be withdrawn from the method mix owing to its association with HIV acquisition, provides a particularly compelling reason for shoring up the performance of implant provision.^[15] Importantly, the findings in this series pose searching questions about the performance of the family-planning programme in general. It is time to consider the inclusion of contraception in the package of services available in the postpartum ward, HIV clinics and several other clinical settings. The traditional approach of restricting the provision of contraception to family-planning clinics may well be responsible for the slow progress made in reducing unintended pregnancies in the country.

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1. National Department of Health, Statistics South Africa, South African Medical Research Council, and the DHS Program, Inner City Fund. South Africa Demographic and Health Survey 2016: Key Indicators. Pretoria: Stats SA, 2017.
2. Massyn N, Peer N, English R, et al. District Health Barometer 2015/16. Durban: Health Systems Trust, 2016.
3. Pillay D, Chersich MF, Morroni C, et al. User perspectives on Implanon NXT in South Africa: A survey of 12 public-sector facilities. *S Afr Med J* 2017;107(10):815-821. <https://doi.org/10.7196/SAMJ.2017.v107i10.12833>
4. Adeagbo OA, Mullick S, Pillay D, et al. Uptake and early removals of Implanon NXT in South Africa: Perceptions and attitudes of health workers. *S Afr Med J* 2017;107(10):822-826. <https://doi.org/10.7196/SAMJ.2017.v107i10.12821>
5. Pillay D, Morroni C, Pleaner M, et al. Gaps in monitoring systems for Implanon NXT services in South Africa: An assessment of 12 facilities in two districts. *S Afr Med J* 2017;107(10):827-831. <https://doi.org/10.7196/SAMJ.2017.v107i10.12822>
6. Committee on Adolescence. Contraception for adolescents. *Pediatrics* 2014;134(4):e1244-e1256. <https://doi.org/10.1542/peds.2014-2299>
7. Madden T, Mullersman JL, Omvig KJ, Secura GM, Peipert JE. Structured contraceptive counseling provided by the Contraceptive CHOICE Project. *Contraception* 2013;88(2):243-249. <https://doi.org/10.1016/j.contraception.2012.07.015>
8. Modesto W, Bahamondes MV, Silva dos Santos P, Fernandes A, Dal'Ava N, Bahamondes L. Exploratory study of the effect of lifestyle counselling on bone mineral density and body composition in users of the contraceptive depot-medroxyprogesterone acetate. *Eur J Contracept Reprod Health Care* 2014;19(4):244-249. <https://doi.org/10.3109/13625187.2014.924098>
9. Minnis AM, Mavedzenge SN, Luecke E, Dehlendorf C. Provider counseling to young women seeking family planning services. *Perspect Sexual Reprod Health* 2014;46(4):223-231. <https://doi.org/10.1363/46e1414>
10. Rominski SD, Morhe ESK, Maya E, Manu A, Dalton VK. Comparing women's contraceptive preferences with their choices in 5 urban family planning clinics in Ghana. *Glob Health Sci Pract* 2017;5(1):65-74. <https://doi.org/10.9745/GHSP-D-16-00281>
11. Sothornwit J, Werawatakul Y, Kaerudee S, Lumbiganon P, Laopaiboon M. Immediate versus delayed postpartum insertion of contraceptive implant for contraception. *Cochrane Database Syst Rev* 2017;(4):CD011913. <https://doi.org/10.1002/14651858.CD011913.pub2>
12. Secura GM, Allsworth JE, Madden T, Mullersman JL, Peipert JE. The Contraceptive CHOICE Project: Reducing barriers to long-acting reversible contraception. *Am J Obstet Gynecol* 2010;203(2):e1-e7. <https://doi.org/10.1016/j.ajog.2010.04.017>
13. Hognert H, Kopp Kallner H, Cameron S, et al. Immediate versus delayed insertion of an etonogestrel releasing implant at medical abortion – a randomized controlled equivalence trial. *Hum Reprod* 2016;31(11):2484-2490. <https://doi.org/10.1093/humrep/dew238>
14. Chersich MF, Wabiri N, Risher K, et al. Contraception coverage and methods used among women in South Africa: A national household survey. *S Afr Med J* 2017;107(4):307-314. <https://doi.org/10.7196/SAMJ.2017.v107i4.12141>

15. She Conquers. <http://sheconquerssa.co.za/> (accessed 7 September 2017).
16. Volscho T. Racism and disparities in women's use of the Depo-Provera injection in the contemporary USA. *Crit Sociol* 2011;37(5):673-688. <https://doi.org/10.1177/0896920510380948>
17. Obijuru L, Bumpus S, Auinger P, Baldwin CD. Etonogestrel implants in adolescents: Experience, satisfaction, and continuation. *J Adolesc Health* 2016;58(3):284-289. <https://doi.org/10.1016/j.jadohealth.2015.10.254>
18. Faculty of Sexual and Reproductive Healthcare. Problematic Bleeding with Hormonal Contraception. UK: FSRH, 2015.
19. Curtis KM, Jatlaoui TC, Tepper NK, et al. US selected practice recommendations for contraceptive use, 2016. *MMWR Recomm Rep* 2016;65(4):1-66. <https://doi.org/10.15585/mmwr.rr6504a1>
20. Hoggart L, Newton VL. Young women's experiences of side-effects from contraceptive implants: A challenge to bodily control. *Reprod Health Matters* 2013;21(41):196-204. [https://doi.org/10.1016/s0968-8080\(13\)41688-9](https://doi.org/10.1016/s0968-8080(13)41688-9)
21. Hoggart L, Newton VL, Dickson J. 'I think it depends on the body, with mine it didn't work': Explaining young women's contraceptive implant removal. *Contraception* 2013;88(5):636-640. <https://doi.org/10.1016/j.contraception.2013.05.014>
22. Inoue K, Kelly M, Barratt A, et al. Australian women's attitudes towards and understandings of the subdermal contraceptive implant: A qualitative study of never-users. *J Fam Plann Reprod Health Care* 2017;43(2):128-134. <https://doi.org/10.1136/jfprhc-2014-101132>
23. Duvall S, Thurston S, Weinberger M, Nuccio O, Fuchs-Montgomery N. Scaling up delivery of contraceptive implants in sub-Saharan Africa: Operational experiences of Marie Stopes International. *Glob Health: Sci Pract* 2014;2(1):72-92. <https://doi.org/10.9745/ghsp-d-13-00116>
24. Pleaner M, Morroni C, Smit J, et al. Lessons learnt from the introduction of the contraceptive implant in South Africa. *S Afr Med J* 2017;107(11). (Accepted for publication.)
25. Patel RC, Morroni C, Scarsi KK, Sripathana T, Kiarie J, Cohen CR. Concomitant contraceptive implant and efavirenz use in women living with HIV: Perspectives on current evidence and policy implications for family planning and HIV treatment guidelines. *J Int AIDS Soc* 2017;20(1):1-6. <https://doi.org/10.7448/IAS.20.1.21396>

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