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Short report

FEMALE GENITAL CUTTING AND OTHER INTRA-VAGINAL PRACTICES: IMPLICATIONS FOR TWODAY METHOD USE

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Summary. This report examines the implications of female genital cutting and other intra-vaginal practices for offering the TwoDay Method® of family planning. This fertility awareness-based method relies on the identification of cervicovaginal secretions to identify the fertile window. Female genital cutting and traditional vaginal practices, such as the use of desiccants, may affect the presence or absence of secretions and therefore the woman's perception of her fertility. These issues and their implications for service delivery of the method are discussed.

Female genital cutting (FGC) is still prevalent in parts of Africa. In some African countries over 90% of women aged 15–49 have undergone FGC (WHO, 2010). Other intravaginal practices, like douching and desiccants, are also prevalent in some settings. This report is concerned with the possible influence of such practices on use of the TwoDay Method® of family planning.

The TwoDay Method is a new, fertility awareness-based family planning method based on the presence or absence of vaginal secretions. Users follow a simple algorithm daily, asking themselves: (1) Did I note secretions of any type today? and (2) Did I note secretions of any type yesterday? If she answers yes to either question, she considers herself fertile on that day, and avoids unprotected intercourse to prevent pregnancy. Only if she answers no to both questions is she unlikely to become pregnant from intercourse on that day (Sinai *et al.*, 1999). An efficacy study in 2002 found a pregnancy rate of 3.5 (per 100 women years) with correct use, and 13.7 with typical use of the method (Arévalo *et al.*, 2002), comparing well with typical use pregnancy rates of other user-directed methods like condoms (typical use pregnancy rate 15 per 100 women years; Hatcher *et al.*, 2009).

Cultural practices that may affect the woman's perception of vaginal secretions can potentially influence the effectiveness and acceptability of the TwoDay Method. Therefore,

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before the method can be offered in settings where such practices are prevalent, their potential effect on TwoDay Method use should be evaluated.

The term FGC encompasses a wide range of practices that surgically alter the female external genitalia for non-medical purposes. The World Health Organization (WHO) has classified FGC into four types, based on the severity of the surgical alteration (WHO, 2008). These procedures are traditionally performed by women in the community with no medical training (Rouzi *et al*., 2001).

Several health consequences of FGC have been documented (Obermeyer, 2005). Of particular interest in the current context is clitoral inclusion cyst formation, the most common long-term complication of FGC, which is inextricably linked to the damage sustained from all types of FGC procedures (Anderson-Mueller *et al*., 2009). Clitoral inclusion cysts may be a concern to TwoDay Method providers and users. Thabet & Thabet (2003) noted that patients with clitoral cysts reported feeling 'aroused' by certain everyday activities such as walking and crossing their legs, leading to a sensation of continuous genital secretions; 17.5% of cases with clitoral cysts also showed a significant association with white vaginal discharge (leucorrhoea).

Studies show that women who have been subjected to FGC are significantly more likely to display signs of reproductive tract infections (Okonofua *et al*., 2002), and are at particular risk for bacterial vaginosis, a condition where the vaginal ecosystem is depleted of several types of protective lactobacilli and replaced with facultative anaerobes (Klebanoff *et al*., 2010). In addition to susceptibility to HIV and potential reproductive health outcomes, like pre-term labour, this infection's most notable symptom is a malodorous discharge (Sobel, 2002).

These adverse health consequences of FGC may result in abnormal vaginal discharge. TwoDay Method users experiencing them may misinterpret pathologic secretions for secretions indicating fertility. While false positives do not imply increased fertility and do not result in reduced method efficacy, longer perceived fertile windows may reduce method acceptability.

Prevalent intra-vaginal practices may have opposite effects. These practices usually involve inserting herbal agents or commercial products into the vagina either routinely or intermittently (Hilber *et al*., 2010). In several African countries (and elsewhere) women employ a host of different substances in an attempt to alter the state of their vaginas. Women in Zimbabwe use Betadine solution, an antiseptic typically used as a microbicidal cleanser (Runganga *et al*., 1992). In South Africa's KwaZulu-Natal province women use traditional medicines like roots, bark, leaves, animal parts and ground minerals, for their drying effects (Scorgie *et al*., 2009). In Kananga, Democratic Republic of Congo, women keep some herbs in their vaginas for up to twelve hours, reporting drying and inflammation as desirable effects (Brown *et al*., 1993).

Motivations for various intra-vaginal practices are as diverse as the communities in which they are prevalent, and include hygiene, perceived curative/preventative purposes, and enhancement of sexual appeal. In some cultures, lubrication or discharge from the vagina is viewed as undesirable and dirty (Runganga *et al*., 1992; Scorgie *et al*., 2009), the consensus being that the vagina should be clean, tight, closed and warm (Hilber *et al*., 2010). Additionally in some communities, men view excessive vaginal secretions as a sign of recent infidelity (*ibid.*).

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These intra-vaginal practices reduce the appearance of secretions or have a drying effect on the vagina. Desiccant use can make accurate identification of fertile days difficult for TwoDay Method users. However, if secretions are no longer present as a result of these practices, sperm may experience decreased viability in the female reproductive tract, impairing fertility potential. There is evidence that use of desiccants is correlated with reduced fertility (Baird *et al*., 1996), but the mechanisms of action require future investigation.

While introducing the TwoDay Method into communities with FGC appears challenging, many countries with high prevalence of FGC also experience low contraceptive use and high rates of unmet need for family planning (Westoff *et al*., 2006). Resource constraints at individual and country levels can result in limited access and availability of contraceptive commodities. Studies show that fertility awareness-based methods, like the TwoDay Method, attract couples who are new to family planning, have concerns about the side-effects or health consequences of other modern methods, and have cost considerations (Gribble *et al*., 2008). Within this context, the TwoDay Method may help address unmet need for family planning in countries where FGC and intra-vaginal practices are prevalent by adding an effective, easy-to-use, commodity-free method that does not affect the user's health, and may support healthy vaginal care (Arévalo *et al*., 2002).

The current TwoDay Method counselling protocol includes explanation of normal patterns of the presence or absence of secretions in typical menstrual cycles, and screens women for symptoms of pathologic secretions. Women presenting with symptoms of unhealthy secretions are treated using the normal protocol for the facility before starting the TwoDay Method. Also, users noticing secretions that last more than two weeks (consecutive), or less than five days, are advised that the method may not work for them. This approach may need modification in areas with high prevalence of FGC or intra-vaginal practices, because secretions may present differently.

Through informal conversations with TwoDay Method providers, the authors learned that most users are able to distinguish secretions associated with sexual arousal and/or semen from those indicative of fertility, despite not having these secretions described to them. Whether cervico-vaginal secretions associated with adverse health consequences of FGC can also be easily perceived as different from the normal variability of secretions associated with a woman's reproductive cycle is unknown. Research is also needed to determine if providing women who use vaginal drying agents with information about the function of healthy secretions may promote behaviour modification and healthier practices. The TwoDay Method, with its positive messages about vaginal health and couple communication, may discourage these intra-vaginal practices and contribute to improved access to services for women with symptomatic vaginal infections and/or FGC complications, or even support reduction of the incidence of intra-vaginal practices, in addition to offering a family planning method.

Given the potential challenges and possibilities of offering the TwoDay Method in areas where women have been subjected to FGC or other vaginal practices, studies to explore the feasibility and acceptability of offering the TwoDay Method in these areas should also explore the possible impact on effective use of the TwoDay Method, and carefully document experiences and lessons learned including cultural, sexual and gender-related influences around FGC, intra-vaginal practices and self-assessment of secretions.

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