

Providing for Women's Pleasure in the Next Generation of Condoms

In March 2013, the Gates Foundation released its latest Grand Challenge in Global Health: a call for proposals regarding the development of more appealing, pleasurable, and user-friendly male condoms [1]. Given their universal recognition, practicality, low cost, and unique ability to prevent both pregnancy and STIs, condoms are a valuable and often underutilized tool in promoting global health. Though condoms often receive less attention than biomedical prevention technologies such as male circumcision or pre- and postexposure prophylaxis, they have saved thousands, if not millions, of lives over the course of the AIDS pandemic. Moreover, if condoms transferred more heat and sensation, were easier to apply correctly, broke less often, were reusable, and/or were more readily available, they could curb even more STI/HIV transmissions and unintended pregnancies worldwide.

Thus, we and many others in the field would be thrilled to see the spotlight in HIV prevention return to the humble yet hard-working condom. Despite their limitations, condoms are more effective than any other method at dual protection against HIV and unintended pregnancy (although the prevention of pregnancy may present a disadvantage for couples seeking to prevent disease but achieve a pregnancy). Condoms are also comparatively cost-effective. Clinical trials of other potential prevention technologies such as microbicides [2] and diaphragms [3] have had disappointing results, despite expensive research efforts. Comparatively smaller investments in condom redesign and distribution could have significantly greater payoff.

We also applaud the Gates Grand Challenge for addressing *pleasure*—an aspect of condom use absolutely central to use and uptake but often unaddressed in academic or clinical research, condom distribution, and marketing campaigns worldwide [4,5]. The call for proposals states, “The primary drawback [of condoms] from the male perspective is that condoms decrease pleasure as compared to no condom, creating a trade-off that many men find unacceptable.” [1] This assertion is certainly supported by a body of empirical

literature that documents that many men do not like using male condoms because they curtail sexual sensation and/or pleasure [6–8], interrupt the sexual heat of the moment [9], make erections harder to maintain, undermine arousal [10], or impair other aspects of sexual functioning and enjoyment [11–13]. A 14-country study by the Joint United Nations Programme on HIV/AIDS found that men's most frequently reported reason for not using condoms was reduced sexual pleasure [14]. Researchers from Indiana University have also devoted significant effort to documenting the sexual acceptability of male condoms [15,16], including effects of lubricant use [17,18].

However, the Gates Grand Challenge omits a critical aspect of the relationship between condoms and pleasure: *women, too, have sexual experiences with condoms, and these experiences shape their condom use practices as well as men's*. Particularly in areas where heterosexual contact drives the local HIV epidemic, women's sexual experiences with condoms should be at least one aspect addressed by condom redesign and redistribution efforts. (In settings in which HIV is also transmitted through sexual contact between men, condom revamps should also attend to the unique sexual aspects of condom use during anal penetration.) Though this area has been comparatively understudied, growing evidence demonstrates that the ways male condoms feel sexually matter to women and not only to men. In an exploratory study of 189 US women, 23% of those who had used condoms in the past month reported decreased pleasure due to this method of contraception [19]. Women in other studies report disliking the ways condoms diminish sensation [20], exacerbate vaginal dryness [21], or interrupt the sexual moment [20]. Research from both the United Kingdom [22] and the United States [23] demonstrates that women who have experienced reductions in sexual pleasure and functioning related to condom use are less likely to use condoms compared with women with more positive condom experiences. Finally, we know that women may dispense with male condoms in order to enhance their *partner's* pleasure, and thus their own [21]. Unpublished evidence from both of our studies

suggests that in order to protect partners' sexual egos, some women may encourage the initiation of vaginal intercourse without a condom, only applying one once an erection is being maintained. Such delayed application of condoms may reduce or negate potential STI prevention [24].

Notably, women's experiences with whether condoms diminish their arousal may be even more influential on use patterns than men's attitudes. In one recent cross-sectional survey of 5,600 adults in the United States and Canada, men were slightly but significantly more likely than women to report that "using condoms causes me to lose my arousal" [25]. But *women* who reported condom-associated arousal loss were more likely than men to have had unprotected sex in the last 12 months, even when other factors such as relationship length, age, and income level were controlled for [25].

To be sure, the burgeoning research has a number of gaps, including (with some exceptions [17]) the lack of nationally representative data, particularly from developing-country settings. But the findings shared here nonetheless provide convincing motivation for developers and researchers to attend to women's sexual experiences with male condoms in the future. Moreover, findings from studies of women-controlled prevention technologies such as female condoms [26–28], microbicides [29–32], and diaphragms [33,34], both in the United States and in developing-country settings, offer further indication that women's sexual experiences of prevention methods shape acceptability, uptake, and consistency of use.

Once again, we applaud the Gates Grand Challenge call for more research on enhancing the sexual acceptability of male condoms. Though the deadline for the challenge has passed, we nonetheless encourage developers and researchers to attend to women's as well as men's sexual experiences with condoms in their future work—and to recognize how the relationship between sexual pleasure and condom practices will differ by cultural and social location, as well as gender and sexual orientation. Condoms are a relational technology—one that affects both people in the sexual experience. To ignore these aspects of condoms and pleasure would lead not only to subpar science but also to a missed opportunity to increase global condom acceptability and improve global health.

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NA

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