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# Moving the Message Beyond the Methods: Toward Integration of Unintended Pregnancy and Sexually Transmitted Infection/HIV Prevention

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# INTRODUCTION

Preventing unintended pregnancy and sexually transmitted infections (STIs), including HIV, are public health priorities in the U.S.<sup>1</sup> Recognizing that both outcomes are related to sexual behavior, experts have called for integration of these prevention efforts.<sup>2,3</sup> Yet, integrating unintended pregnancy and STI/HIV prevention is challenging, partly because the most effective contraceptive options for preventing pregnancy provide no protection against STIs/ HIV. Although condoms can be 98% effective at preventing pregnancy when used correctly and consistently,<sup>4</sup> recent estimates indicate with typical use they are associated with a 13% pregnancy rate during the first year.<sup>5</sup> Use of a condom for STI/HIV prevention along with a more effective method for pregnancy prevention (e.g., intrauterine devices [IUDs], implants, oral contraceptives) is thus typically recommended for heterosexual couples who are not in a mutually monogamous relationship.<sup>6</sup> However, this behavior is uncommon.<sup>7</sup> Moreover, recent evidence suggests that users of long-acting reversible contraception (LARC), namely implants and IUDs, are less likely to use condoms compared with users of oral contraceptives.<sup>7,8</sup> Although the impact of LARC use on STI rates remains unclear, these findings have renewed attention on STI prevention within the context of pregnancy prevention,9 particularly because LARC use is increasing.10

This commentary makes a conceptual case for reframing clinic-based and broader public health messages as a first step toward strengthening such messages. Specifically, moving beyond a narrow focus on prevention methods to an emphasis on the goals of preventing

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unintended pregnancy and STIs/HIV should be considered. To illustrate a need for this reframing, limitations of current terminology—namely "dual use" and "dual protection" —are discussed. "Dual prevention" is presented as a term designed to reflect the two prevention goals and discuss potential practice applications. Working from the premise that terminology shapes public health and clinical approaches,<sup>11</sup> emphasizing the goals may help ensure that pregnancy and STI/HIV prevention messages are effective and comprehensive.

## CURRENT TERMINOLOGY: "DUAL USE" AND "DUAL PROTECTION"

#### **Dual Use**

Dual use terminology, including "dual-method use," "dual contraceptive method use," and "dual use of condoms with other contraceptives," has been used in messages with a narrow focus on methods. For example, major medical groups have described "dual use" for provider and patient audiences as "using two kinds of birth control at once" or "the combined use of condoms and hormonal contraceptives or an IUD."<sup>12,13</sup> The emphasis on methods in dual use terminology (e.g., dual-method use) has perhaps influenced these interpretations, which potentially undermine STI/HIV prevention. In the first example, dual use is framed in terms of contraceptive methods only, but use of two birth control methods does not guarantee that STI/HIV prevention is addressed (e.g., oral contraceptives and withdrawal). In the second example, condom use is mentioned but not explicitly connected to the goal of preventing STIs/HIV. Some individuals may interpret the message to be solely about pregnancy prevention and consider condoms in terms of back-up birth control. Data in fact suggest many young adults use condoms primarily for preventing pregnancy rather than reducing risk of infection.<sup>14</sup>

If pregnancy prevention is often the primary motivation for dual use behavior, it may account for lower condom use among LARC users, as suggested previously.<sup>7,8</sup> Essentially, because just 1% of LARC users becoming pregnant during the first year even with typical use,<sup>5</sup> they are unlikely to perceive the need for additional pregnancy protection. To motivate use of condoms with highly effective methods, health promotion messages may need to explicitly emphasize STI prevention as a distinct goal and promote condoms in relation to that goal.

An additional limitation of dual use terminology and related messages is the focus on two methods, which may not be necessary or sufficient. Condoms, when used correctly and consistently, protect against both pregnancy and STIs/HIV.<sup>4</sup> Abstinence is also a single strategy that addresses both goals. Further, research is ongoing to develop other multipurpose prevention technologies (e.g., vaginal rings with hormones for contraception and pre-exposure prophylaxis for STI/HIV prevention) that can address pregnancy and STI prevention with one method.<sup>15</sup> On the other hand, more than two methods may be warranted. For example, a LARC method could be used for pregnancy prevention along with a combination of condoms, preexposure prophylaxis, or testing and mutual monogamy for STI/HIV prevention. Additionally, individuals should receive the hepatitis B virus and human papillomavirus vaccines. Such an array of STI/HIV prevention approaches is not clearly reflected by dual use terminology.

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#### **Dual Protection**

The term "dual protection" has the potential to address some of the limitations of dual use. Researchers have described dual protection as protection against both unintended pregnancy and STI/HIV.<sup>16</sup> Recommendations for providing quality family planning services use the term in this manner.<sup>6</sup> As conceptualized, dual protection has been recognized as a more appropriate way to refer to preventing pregnancy and STIs/HIV together because it is meant to reflect the two prevention goals.<sup>17</sup>

Unfortunately, dual protection is still commonly conflated with dual use. For example, a popular health information website notes: "When we talk about dual use [...] we're talking about dual protection: pairing up birth control methods that protect you from pregnancy AND sexually transmitted infections, like using condoms and the pill together, or condoms and the IUD, or condoms and an implant, or condoms and the ring."<sup>13</sup> Not only are the terms used interchangeably, but the methods are framed as "birth control methods" and condom use is not explicitly linked to preventing STIs/HIV. The message also addresses two methods only, with the implicit STI/HIV prevention method limited to condoms. Although condom use is an effective STI/HIV prevention strategy, dual protection, like dual use, may not clearly promote STI/HIV prevention strategies in addition to condoms (e.g., testing combined with mutual monogamy).

Again, terminology may have influenced dual protection messages that continue to emphasize methods, including condoms as the sole option for STI/HIV prevention. Until recently, "unprotected sex" has referred to sex without a condom, particularly within the context of HIV prevention.<sup>18</sup> The word "protection" may thus evoke condom use rather than the prevention goals or a broad array of STI/HIV prevention strategies. This connection between protection and condoms has perhaps contributed to the use of dual protection to describe condom use alone as a method for both pregnancy and STI/HIV prevention.<sup>16</sup> Acknowledging condom use as a single prevention strategy addresses a limitation of dual use; however, this interpretation emphasizes a specific method rather than the prevention goals and the variety of strategies that can be used to address them.

#### FOCUSING ON THE PREVENTION GOALS: "DUAL PREVENTION"

Given limitations of dual use and dual protection terminology and resulting messages, the term "dual prevention" is presented as an alternative. Here, "dual" explicitly refers to the two goals of preventing unintended pregnancy and infection—instead of the methods used to address these health concerns. The concept underlying dual prevention is similar to what was intended with dual use and dual protection, but by explicitly referencing "prevention," this term may more clearly reflect the goals and thus, may shape approaches that explicitly and comprehensively address both unintended pregnancy and STI/HIV prevention.

Table 1 illustrates how dual prevention can inform health promotion practice. This table presents a menu of prevention strategies, each linked to one of the two prevention goals. Some strategies, which address both goals (e.g., condoms), appear in both columns. As new prevention options become available, these strategies could be added to the appropriate columns. Strategies that should be universally implemented can be emphasized (e.g.,

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hepatitis B virus and human papillomavirus vaccination). Essentially, assessing the relative importance of the two prevention goals for an individual patient/couple should serve as the initial framework for clinic-based counseling and broader health education in line with the principles of Motivational Interviewing<sup>19</sup>; the strategies or methods should then follow from those goals. Doing so would ensure that both unintended pregnancy and STIs/HIV prevention are explicitly addressed and that strategies are described in relation to these goals, while keeping the patient's priorities at the center of decision making. Framing messages and counseling in this way also makes it possible to address the use of one or multiple strategies for each goal.

Messages informed by dual prevention have the potential to resonate more broadly with health consumers. Moving away from an emphasis on contraceptive methods, which are largely female-controlled and targeted, may help increase relevance for men. Additionally, having an array of strategies to offer for STI/HIV prevention can help ensure this goal is adequately addressed as relationships evolve. For example, couples who were using condoms to prevent STIs/HIV but are trying to conceive may then wish to consider STI/HIV prevention strategies such as testing combined with mutual monogamy. Finally, framing clinic-based counseling in terms of the prevention goals can help ensure an assessment of the strength of patients' motivations to avoid pregnancy and STIs/HIV. Counseling about risks and prevention strategies can then be tailored to patient characteristics, such as fertility, fertility intentions, relationship context, gender, and sexual orientation.

Another distinct advantage of dual prevention is that the term and concept are applicable to systems-level integration of prevention and care services. For example, provision of family planning services during visits for STI/HIV testing and treatment and vice versa could be described as dual prevention. In a sense, dual prevention merges the focus on individual behavior associated with dual use and dual protection with a more systems-oriented sexual health framework, referring to comprehensive service delivery related to sexual behavior and relationships.<sup>20</sup> Given multiple levels of influence on sexual and reproductive health,<sup>2</sup> having a concrete way to conceptualize and communicate multilevel strategies can potentially facilitate more integrated, comprehensive, and effective approaches.

Of course, terminology and messages only go so far. Unintended pregnancy and STIs/HIV have historically been addressed separately because of categorical funding and vertical programs for each outcome. Perhaps dual prevention can inform evaluation efforts to identify opportunities for service integration. That said, even the term and underlying concept has limitations. "Dual" may not sufficiently reflect the number of prevention efforts that need to be brought together. In practice HIV and other STIs are often addressed separately so it may be somewhat premature to present STI/HIV prevention as one goal. Other dimensions of sexual and reproductive health, such as healthy relationships, are also important. Within the context of pregnancy and STI/HIV prevention, "dual" may lead to a continued focus on methods, given the longstanding prominence of dual use; a more substantial shift in terminology may thus be helpful. Research, including qualitative studies and message testing with clinicians, health educators, and health consumers, would help to inform such changes in terminology.

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# CONCLUSIONS

Taking into account the benefits and limitations of the terminology and concepts discussed, Table 2 summarizes the extent to which dual use, dual protection, and dual prevention focus on methods and goals. Dual use is associated with framing primarily around methods and even contraceptive methods. Dual protection begins to address the goals but related messages may still overly emphasize methods. Dual prevention aims to shift focus to the goals, making it easier to promote use of one or multiple strategies for each goal, including STI/HIV prevention strategies in addition to condoms.

This commentary presents a conceptual rationale for reframing messages to explicitly address the two goals of preventing unintended pregnancy and STIs/HIV. It provides a starting point for future empirical work to strengthen terminology and related messages and also suggests clear practice implications. For example, approaching counseling by assessing goals and using a menu of options similar to Table 1 in both family planning and STI/ HIV-related visits may be an effective approach. At minimum, clinical providers and health educators should describe strategies explicitly in relation to each prevention goal and ensure that the array of strategies available for each goal is addressed. For many, this may already be standard practice. Yet examples in this commentary suggest there are opportunities to strengthen health promotion messages to address both STI/HIV and pregnancy prevention. A recent editorial in response to findings about low condom use among adolescent LARC users made an urgent call for a better message.<sup>9</sup> Moving the message beyond the methods to include a focus on the goals may be one way to get there.

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## REFERENCES

- 1. Healthy People 2020. Washington, DC: U.S. DHHS, Office of Disease Prevention and Health Promotion. www.healthypeople.gov/2020/topics-objectives. Accessed June 17, 2017.
- Bearinger LH, Resnick MD. Dual method use in adolescents: a review and framework for research on use of STD and pregnancy protection. J Adolesc Health. 2003;32(5):340–349. 10.1016/ S1054-139X(03)00018-1. [PubMed: 12729983]
- 3. Cates W Jr. Sexually transmitted diseases and family planning. Strange or natural bedfellows, revisited. Sex Transm Dis. 1993;20(3):174–178. 10.1097/00007435-199305000-00011. [PubMed: 8511713]
- Cates W Jr, Steiner MJ. Dual protection against unintended pregnancy and sexually transmitted infections: what is the best contraceptive approach? Sex Transm Dis. 2002;29(3):168–174. 10.1097/00007435-200203000-00007. [PubMed: 11875378]
- Sundaram A, Vaughan B, Kost K, et al. Contraceptive failure in the United States: estimates from the 2006–2010 National Survey of Family Growth. Perspect Sex Reprod Health. 2017;49(1):7–16. 10.1363/psrh.12017. [PubMed: 28245088]
- 6. Gavin L, Moskosky S, Carter M, et al. Providing quality family planning services: recommendations of CDC and the U.S. Office of Population Affairs. MMWR Recomm Rep. 2014;63(RR-04): 1–54.

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- Eisenberg DL, Allsworth JE, Zhao Q, Peipert JF. Correlates of dual-method contraceptive use: an analysis of the National Survey of Family Growth (2006–2008). Infect Dis Obstet Gynecol. 2012;2012:717163. 10.1155/2012/717163. [PubMed: 22505799]
- Steiner RJ, Liddon N, Swartzendruber AL, Rasberry CN, Sales JM. Long-acting reversible contraception and condom use among female U.S. high school students: implications for sexually transmitted infection prevention. JAMA Pediatr. 2016;170(5):428–434. 10.1001/ jamapediatrics.2016.0007. [PubMed: 26974492]
- 9. Potter J, Soren K. Long-acting reversible contraception and condom use: we need a better message. JAMA Pediatr. 2016;170(5):417–418. 10.1001/jamapediatrics.2016.0141. [PubMed: 26974055]
- Branum AM, Jones J. Trends in long-acting reversible contraception use among U.S. women aged 15–44. NCHS Data Brief. 2015;188:1–8.
- 11. The National Campaign to Prevent Teen and Unplanned Pregnancy. Whoops proof birth control: how to reach women and increase their positive regard for the most effective methods of contraception. https://thenationalcampaign.org/sites/default/files/resource-primary-download/ whoops\_proof\_insights.pdf. Accessed August 13, 2017.
- Committee on Adolescence. Condom use by adolescents. Pediatrics. 2013;132(5):973–981. 10.1542/peds.2013-2821. [PubMed: 28448257]
- 13. Planned Parenthood. Advanced sex ed: dual use. http://plannedparenthood.tumblr.com/post/ 119202600875/welcome-to-advanced-sex-ed-put-on-your-smarty. Accessed June 17, 2017.
- 14. Cooper ML, Agocha VB, Powers AM. Motivations for condom use: do pregnancy prevention goals undermine disease prevention among heterosexual young adults? Health Psychol. 1999;18(5): 464–474. 10.1037/0278-6133.18.5.464. [PubMed: 10519462]
- Malcolm RK, Boyd P, McCoy CF, Murphy DJ. Beyond HIV microbicides: multipurpose prevention technology products. BJOG. 2014;121 (suppl 5):62–69. 10.1111/1471-0528.12852.
- Woodsong C, Koo HP. Two good reasons: women's and men's perspectives on dual contraceptive use. Soc Sci Med. 1999;49(5):567–580. 10.1016/S0277-9536(99)00060-X. [PubMed: 10452414]
- Carter MW, Hock-Long L, Kraft JM, Henry-Moss D, Hatfield-Timajchy K, Singer M. Strategies for managing the dual risk of sexually transmitted infections and unintended pregnancy among Puerto Rican and African American young adults. Am J Public Health. 2012;102(3): 449–456. 10.2105/AJPH.2011.300461. [PubMed: 22390507]
- Kempner M Why the CDC stopped calling sex without a condom "unprotected sex." https://rewire.news/article/2014/02/24/cdc-stopped-calling-sex-without-condom-unprotected-sex/. Published 2014. Accessed June 17, 2017.
- Miller WR, Rollnick S. Motivational Interviewing: Helping People Change, 3rd ed., New York: Guilford Press, 2013.
- 20. Swartzendruber A, Zenilman JM. A national strategy to improve sexual health. JAMA. 2010;304(9):1005–1006. 10.1001/jama.2010.1252. [PubMed: 20810379]

#### Table 1.

#### Dual Prevention Goals and Strategies

Goal: Prevent unintended pregnancy	Goal: Prevent STIs/HIV
Abstinence	Abstinence
Sterilization (vasectomy and tubal)	Condoms
• IUDs	<ul> <li>Testing and mutual monogamy</li> </ul>
• Implants	
Oral contraceptives	• HPV vaccine (for HPV only) <sup>a</sup>
• Depo-Provera	·····
• Birth control patch	• HBV vaccine (for HBV only) <sup>a</sup>
• Birth control ring	, , , , , , , , , , , , , , , , , , ,
• Condoms	• PrEP (for HIV only)
• Engaging in sexual behaviors other than intercourse	
• Other birth control methods <sup>b</sup>	

<sup>a</sup>Strategy should be implemented universally in accordance with the Advisory Committee on Immunization Practices recommendations.

 ${}^{b}\!\!\!\mathrm{Withdrawal},$  sponge, spermicide, fertility awareness, and lactational amenorrhea.

HBV, hepatitis B virus; HPV, human papillomavirus; IUD, intrauterine device; PrEP, pre-exposure prophylaxis; STI, sexually transmitted infection.

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Benefits and Limitations of Terminology and Related Messages

Dual use	Dual protection	Dual prevention
Widely used (+)	Can refer to prevention goals (+)	• Refers to prevention goals (+)
• Focuses on methods, including contraceptive method only (–) • Conflated with dual use (–)	• Conflated with dual use (–)	• One or multiple methods (+)
• Focuses on two methods only (–)	• Focuses primarily on condoms as STI/HIV prevention strategy (-) • STI/HIV prevention methods beyond condoms (+)	• STI/HIV prevention methods beyond condoms (+)
		• "Dual" has limitations (–)
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(+), benefit; (-), limitation; STI, sexually transmitted infection.