

Preferences for multipurpose technology and non-oral methods of antiretroviral therapy among women living with HIV in western Kenya: a survey study

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March 30, 2022

Abstract

Objective: To understand the preferences of women living with HIV (WLHIV) for methods of multipurpose technology (MPT) for the co-administration of contraception and antiretroviral therapy (ART) and non-oral ART to guide their development and implementation. **Design:** A cross-sectional telephone survey as part of a study of pregnancy incidence among contraception and ART users **Setting:** Our study was performed in western Kenya **Population:** We included 1132 WLHIV of reproductive potential with prior experience using injectable and long-acting contraception **Methods:** We performed descriptive statistics and multinomial logistic regression **Main Outcome Measures:** Main outcomes were interest in MPT, important characteristics and preferred methods for MPT and non-oral ART, and predictors of interest in specific methods **Results:** Two-thirds (67%) reported interest in MPT, most commonly due to ease of using a single medication for both HIV treatment and pregnancy prevention (26%). Main reasons for lack of interest in MPT were need to stop/not use contraception while continuing ART (21%) and risk of side effects (16%). Preferred methods for MPT and non-oral ART were injectables (50%, 54%) and implants (32%, 31%). Prior use of a contraceptive implant or injectable predicted interest in similar methods for MPT and non-oral ART, and this did not vary by age. **Conclusions:** Many WLHIV in western Kenya are interested in MPT for contraception and ART. Prior experience with contraceptive implants and injectables predicts interest in similar methods of MPT and non-oral ART. **Funding:** NIH NIAID (K23AI120855) and the NIH NIAID, NICHD, NIDA, NCI, & NIMH for the EA-IeDEA Consortium (U01AI069911)

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Figure 1: Reported reasons for interest, lack of interest, and unsure interest in the use of multipurpose technology (MPT) for contraception and antiretroviral (ART) therapy among women of reproductive potential living with HIV (N=1132). Qualitative interpretation classified based on the analytic framework of Wyatt, et al. for the categorization of attributes influencing contraceptive choice.

Domain	Theme	Subthemes	Interested	Not Interested	Unsure of Interest
Mechanistic	User action	Ease of use Probability of omission Frequency of use Medication burden	<i>Easier to use if combined*</i> Reduced method forgetfulness Less frequent use Reduced medication burden	Easier to use if separate/confusion in combined use Increased medication burden	
	Ease of use	Convenience Method	Overall convenience	Easier to use different methods of ART & FP Difficult to combine due to different mechanisms of ART & FP	
	Return to fertility	Reversibility		<i>Need to stop FP & continue ART*</i>	
Method Effect	Combined effects		<i>Benefit of combined effects (HIV treatment + pregnancy prevention)*</i>	Different effects should not be combined	
	Efficacy	Pregnancy prevention Combined efficacy	<i>Prioritization of pregnancy prevention*</i> Better efficacy for pregnancy prevention Better combined efficacy	Reduced combined efficacy	Unknown combined efficacy
	Side Effects		Fewer side effects Hoping for fewer side effects	<i>Greater/worse/different combined side effects*</i> Personal or vicarious negative experience with FP side effects Difficulty determining which medication is causing side effects Difficulty in discontinuing/changing methods in case of side effects	Unknown combined side effects
	Reversibility				
Social/Normative	Health benefits		Non-contraceptive health benefits		
	Partner Role			Lack of partner support	Need to consult partner
	Vicarious experience	Trying new things HCW influence	Interest in trying new things Positive HCW influence	Fear of coercive FP use by HCW	Deferring to HCW
	Expectations	Lack of need for FP Effect of FP use on behavior Preferences		<i>Perceived lack of need for FP, but not wanting to be pregnant*</i> <i>Desire to become pregnant*</i> Using abstinence or condoms as primary FP method Using FP promotes sexual promiscuity Prefer separate methods	Prefer separate methods
	Religion			Religion forbids FP use	
Practical	Privacy		Concealability of ART &/or FP use		
	Availability	Service Integration User action	<i>Streamlined/integrated HIV + FP care*</i> Reduced appointment forgetfulness		
	Time	Service Method Overall	Service time-saving (reduced appointment frequency/waiting time) Method use time-saving (reduced medication-taking) Overall time-saving		
	Costs	Transport Overall	Reduced transport cost Overall reduced cost	Overall increased cost	

*Most commonly reported reasons for interest, lack of interest and unsure interest within each domain

ART = antiretroviral therapy

FP = family planning (contraception)

HCW = health care worker