

Behavioural Predictors of Uptake of HIV and Pregnancy Prevention Products among Adolescent Girls and Young Women and Female Sex Workers in Kenya and Uganda



www.UPTAKEstudy.org



Authors: Yvonne Wangui Machira¹, Lang Gao², Edel Koki², Josphat Korir², Stephanie Shari², Omu Anzala³, Gloria Omosa-Manyonyi³, Mitzy Gafos⁴, Pitchaya Indravudh⁴, Kenneth Katumba⁵, and Gabriela Gomez¹

¹International AIDS Vaccine Initiative (IAVI), ²Busara Center for Behavioural Economics, ³KAVI Institute of Clinical Research (KAVI-ICR), ⁴London School of Hygiene and Tropical Medicine (LSHTM), ⁵MRC/UVRI & LSHTM (MUL) Uganda Research Unit

BACKGROUND:

UPTAKE is a programme that seeks to accelerate access and facilitate adherence to effective and innovative long-acting technologies to prevent HIV and unintended pregnancy among Adolescent Girls and Young Women (AGYW) and Female Sex Workers (FSW) through behavioural science in Kenya and Uganda. We identified behavioural characteristics which predict the use of HIV and pregnancy prevention products and measured the strength of preferences.

METHODS:

A quantitative survey was administered to 322 AGYW (174 in Kenya; 148 in Uganda) and 330 FSW (165 in Kenya; 165 in Uganda). Descriptive, inferential, and segmentation analysis was applied to reveal user-preferences, behavioural patterns and the predicting factors of product uptake.

DEMOGRAPHIC	AGYW	FSW
Age (years, %)	<18, 22% 19-24, 78%	19-45, 98.5% 52%, 30-45
Started/completed secondary education	63%	22%
Earned income in past month	55.5%	56% (sex work as main source for 91%)

RESULTS (AWARENESS AND USE OF PRODUCTS):

Product usage, particularly for HIV prevention, was lower among AGYW than FSW. Although awareness of long-acting (LA) prevention products including implants and intra-uterine devices (IUDs) was high among both groups, uptake remained low, primarily due to perceived side effects. For pregnancy prevention, the male condom was most used among both AGYW and FSW, followed by injectables. For HIV prevention, male condoms were most used, followed by oral pre-exposure prophylaxis (PrEP).

Contraceptives awareness and use

Long Acting	Awareness by Sample	Use by Sample
Implants	AGYW - 68% FSW - 76%	AGYW - 17% FSW - 22%
IUD-COIL	AGYW - 57% FSW - 62%	AGYW - 1% FSW - 2%
Short Acting	Awareness by Sample	Use by Sample
Injections	AGYW - 84% FSW - 90%	AGYW - 35% FSW - 43%
Pills	AGYW - 76% FSW - 83%	AGYW - 14% FSW - 12%
Emergency	AGYW - 62% FSW - 43%	AGYW - 21% FSW - 10%
Male condoms	AGYW - 92% FSW - 90%	AGYW - 48% FSW - 48%
Female condoms	AGYW - 36% FSW - 42%	AGYW - 1% FSW - 4%
Spermicide	AGYW - 2% FSW - 3%	AGYW - 0% FSW - 0%

HIV prevention awareness and use

Method	Awareness by Sample	Use by Sample
Oral PrEP	AGYW - 61% FSW - 84%	AGYW - 12% FSW - 47%
PEP	AGYW - 34% FSW - 36%	AGYW - 2% FSW - 6%
Injection	AGYW - 5% FSW - 8%	AGYW - 0% FSW - 1%
Male condoms	AGYW - 98% FSW - 98%	AGYW - 92% FSW - 86%
Female condoms	AGYW - 36% FSW - 42%	AGYW - 0% FSW - 8%
Ring	AGYW - 2% FSW - 3%	AGYW - 0% FSW - 0%

RESULTS (DRIVERS OF PRODUCT USAGE):

Influential factors driving and predicting uptake varied by product. Effectiveness and easy accessibility were the most highly valued product features. At the 0.05 significance level, risk preference, stigma, Intimate Partner Violence (IPV), locus of control, peer influence, subjective risk, country, and age appeared significant in influencing uptake of various products. Segmentation to identify descriptive groups of AGYW and FSW in relation to their potential use of future long-acting HIV prevention and MPT products was only found influential for the uptake of implants and male condoms among AGYW.

AGYW segments – Kenya

Segment 1: Cautious girl	Segment 2: Adventurous girl
Slightly more likely to have used contraceptives and most likely to use HIV prevention methods , with 60% reporting to use them.	Segment 2 is less likely to have used contraception and HIV prevention methods. This is especially the case with HIV prevention methods with only 45% using them.

AGYW segments – Uganda

Segment 1: Trusting girl	Segment 2: Believing girl	Segment 3: Doubting girl
Slightly less likely to have used contraceptives and most likely to use HIV prevention methods , with 78% reporting to use them.	Most likely to have used contraceptives and HIV prevention methods , with 78% reporting to use HIV prevention products.	Slightly more likely to have used contraceptives than segment 1 and least likely to use HIV prevention methods , with 71% reporting to use them.

FSW segments – Kenya

Segment 1: Carefree woman	Segment 2: Conservative woman
Slightly more likely to have used contraceptives and slightly less likely to use HIV prevention methods, with 99% reporting to use them.	Slightly less likely to have used contraceptive and the most likely to use HIV prevention methods , with 100% reporting to use HIV prevention products.

FSW segments – Uganda

Segment 1: Cautious woman	Segment 2: Conservative woman
Slightly less likely to have used contraceptives and HIV prevention methods , with 96% reporting to use HIV prevention products.	Slightly more likely to have used contraceptives and the most likely to use HIV prevention methods , with 99% reporting to use them.

CONCLUSION:

Behavioural interventions should be tailored by product and respond to key influential factors to increase awareness and bridge the gap between awareness and uptake. Interventions should:

1. Focus on addressing concerns related to side effects, including through providing accurate product information and dispelling misconceptions.
2. Include efforts to enhance product effectiveness and accessibility. These should be well communicated to make these features salient and visible.
3. Feature targeted outreach (such as tailored education campaigns, community outreach programs, and peer support networks) for AGYW and FSW to circumvent unique barriers faced by these key populations in accessing healthcare services.

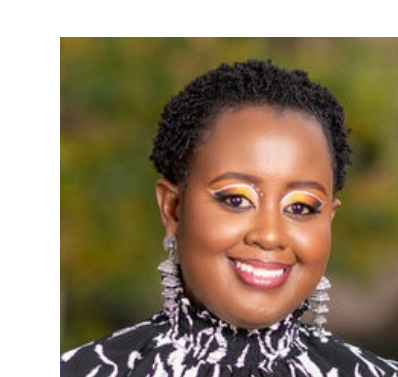
ACKNOWLEDGEMENTS:

With thanks to the study participants, EDCTP the study funders, and all the UPTAKE consortium partners.



This project is part of the EDCTP2 programme supported by the European Union (grant number CSA2018HS-2525).

Eleventh EDCTP Forum
Partnering for Global Health Research Innovation and Impact in Africa
7–10 November 2023 | Paris, France
Celebrating EDCTP: two decades and beyond



Yvonne Wangui Machira, IAVI
ymachira@iavi.org

Behavioural Predictors of Uptake of HIV and Pregnancy Prevention Products among Adolescent Girls and Young Women and Female Sex Workers in Kenya and Uganda



www.UPTAKEstudy.org



Authors: Yvonne Wangui Machira¹, Lang Gao², Edel Koki², Josphat Korir², Stephanie Shari², Omu Anzala³, Gloria Omosa-Manyonyi³, Mitzy Gafos⁴, Pitchaya Indravudh⁴, Kenneth Katumba⁵, and Gabriela Gomez¹

¹International AIDS Vaccine Initiative (IAVI), ²Busara Center for Behavioural Economics, ³KAVI Institute of Clinical Research (KAVI-ICR), ⁴London School of Hygiene and Tropical Medicine (LSHTM), ⁵MRC/UVRI & LSHTM (MUL) Uganda Research Unit

BACKGROUND:

UPTAKE is a programme that seeks to accelerate access and facilitate adherence to effective and innovative long-acting technologies to prevent HIV and unintended pregnancy among Adolescent Girls and Young Women (AGYW) and Female Sex Workers (FSW) through behavioural science in Kenya and Uganda. We identified behavioural characteristics which predict the use of HIV and pregnancy prevention products and measured the strength of preferences.

METHODS:

A quantitative survey was administered to 322 AGYW (174 in Kenya; 148 in Uganda) and 330 FSW (165 in Kenya; 165 in Uganda). Descriptive, inferential, and segmentation analysis was applied to reveal user-preferences, behavioural patterns and the predicting factors of product uptake.

DEMOGRAPHIC DATA:

AGYW:

- 22% were below 18 years and 78% between 19-24 years old
- 63% started or completed secondary education
- 55.5% earned income in past month

FSW:

- 98.5% between 19-45, with 52% between 30-45 years
- 22% started or completed secondary education
- 56% earned income in past month; sex work was main source for 91%

RESULTS (AWARENESS AND USE OF PRODUCTS):

Product usage, particularly for HIV prevention, was lower among AGYW than FSW. Although awareness of long-acting (LA) prevention products including implants and intra-uterine devices (IUDs) was high among both groups, uptake remained low, primarily due to perceived side effects. For pregnancy prevention, the male condom was most used among both AGYW and FSW, followed by injectables. For HIV prevention, male condoms were most used, followed by oral pre-exposure prophylaxis (PrEP).

Contraceptives awareness and use

Long Acting	Awareness by Sample	Use by Sample
Implants	AGYW - 68% FSW - 76%	AGYW - 17% FSW - 22%
IUD-COIL	AGYW - 57% FSW - 62%	AGYW - 1% FSW - 2%
Short Acting	Awareness by Sample	Use by Sample
Injections	AGYW - 84% FSW - 90%	AGYW - 35% FSW - 43%
Pills	AGYW - 76% FSW - 83%	AGYW - 14% FSW - 12%
Emergency	AGYW - 62% FSW - 43%	AGYW - 21% FSW - 10%
Male condoms	AGYW - 92% FSW - 90%	AGYW - 48% FSW - 48%
Female condoms	AGYW - 36% FSW - 42%	AGYW - 1% FSW - 4%
Spermicide	AGYW - 2% FSW - 3%	AGYW - 0% FSW - 0%

HIV prevention awareness and use

Method	Awareness by Sample	Use by Sample
Oral PrEP	AGYW - 61% FSW - 84%	AGYW - 12% FSW - 47%
PEP	AGYW - 34% FSW - 36%	AGYW - 2% FSW - 6%
Injection	AGYW - 5% FSW - 8%	AGYW - 0% FSW - 1%
Male condoms	AGYW - 98% FSW - 98%	AGYW - 92% FSW - 86%
Female condoms	AGYW - 36% FSW - 42%	AGYW - 0% FSW - 8%
Ring	AGYW - 2% FSW - 3%	AGYW - 0% FSW - 0%

RESULTS (DRIVERS OF PRODUCT USAGE):

Influential factors driving and predicting uptake varied by product. Effectiveness and easy accessibility were the most highly valued product features. At the 0.05 significance level, risk preference, stigma, Intimate Partner Violence (IPV), locus of control, peer influence, subjective risk, country, and age appeared significant in influencing uptake of various products. Segmentation to identify descriptive groups of AGYW and FSW in relation to their potential use of future long-acting HIV prevention and MPT products was only found influential for the uptake of implants and male condoms among AGYW.

AGYW segments – Kenya

Segment 1: Cautious girl	Segment 2: Adventurous girl
Slightly more likely to have used contraceptives and most likely to use HIV prevention methods, with 60% reporting to use them.	Segment 2 is less likely to have used contraception and HIV prevention methods. This is especially the case with HIV prevention methods with only 45% using them.

AGYW segments – Uganda

Segment 1: Trusting girl	Segment 2: Believing girl	Segment 3: Doubting girl
Slightly less likely to have used contraceptives and most likely to use HIV prevention methods, with 78% reporting to use them.	Most likely to have used contraceptives and HIV prevention methods, with 78% reporting to use HIV prevention products.	Slightly more likely to have used contraceptives than segment 1 and least likely to use HIV prevention methods, with 71% reporting to use them.

FSW segments – Kenya

Segment 1: Carefree woman	Segment 2: Conservative woman
Slightly more likely to have used contraceptives and slightly less likely to use HIV prevention methods, with 99% reporting to use them.	Slightly less likely to have used contraceptive and the most likely to use HIV prevention methods, with 100% reporting to use HIV prevention products.

FSW segments – Uganda

Segment 1: Cautious woman	Segment 2: Conservative woman
Slightly less likely to have used contraceptives and HIV prevention methods, with 96% reporting to use HIV prevention products.	Slightly more likely to have used contraceptives and the most likely to use HIV prevention methods, with 99% reporting to use them.

CONCLUSION:

Behavioural interventions should be tailored by product and respond to key influential factors to increase awareness and bridge the gap between awareness and uptake. Interventions should:

1. Focus on addressing concerns related to side effects, including through providing accurate product information and dispelling misconceptions.
2. Include efforts to enhance product effectiveness and accessibility. These should be well communicated to make these features salient and visible.
3. Feature targeted outreach (such as tailored education campaigns, community outreach programs, and peer support networks) for AGYW and FSW to circumvent unique barriers faced by these key populations in accessing healthcare services.

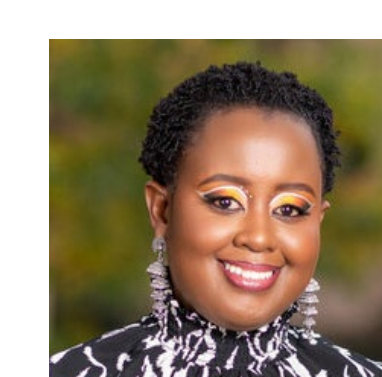
ACKNOWLEDGEMENTS:

With thanks to the study participants, EDCTP the study funders, and all the UPTAKE consortium partners.



This project is part of the EDCTP2 programme supported by the European Union (grant number CSA2018HS-2525).

Eleventh EDCTP Forum
Partnering for Global Health Research Innovation and Impact in Africa
7–10 November 2023 | Paris, France
Celebrating EDCTP: two decades and beyond



Yvonne Wangui Machira, IAVI
ymachira@iavi.org

Behavioural Predictors of Uptake of HIV and Pregnancy Prevention Products among Adolescent Girls and Young Women and Female Sex Workers in Kenya and Uganda

UPTAKE

www.UPTAKEstudy.org



Authors: Yvonne Wangui Machira¹, Lang Gao², Edel Koki², Josphat Korir², Stephanie Shari², Omu Anzala³, Gloria Omosa-Manyonyi³, Mitzy Gafos⁴, Pitchaya Indravudh⁴, Kenneth Katumba⁵, and Gabriela Gomez¹

¹International AIDS Vaccine Initiative (IAVI),

²Busara Center for Behavioural Economics

³KAVI Institute of Clinical Research (KAVI-ICR)

⁴London School of Hygiene and Tropical Medicine (LSHTM)

⁵MRC/UVRI & LSHTM (MUL) Uganda Research Unit

BACKGROUND:

UPTAKE is a programme that seeks to accelerate access and facilitate adherence to effective and innovative long-acting technologies to prevent HIV and unintended pregnancy among Adolescent Girls and Young Women (AGYW) and Female Sex Workers (FSW) through behavioural science in Kenya and Uganda. We identified behavioural characteristics which predict the use of HIV and pregnancy prevention products and measured the strength of preferences.

METHODS:

A quantitative survey was administered to 322 AGYW (174 in Kenya; 148 in Uganda) and 330 FSW (165 in Kenya; 165 in Uganda). Descriptive, inferential, and segmentation analysis was applied to reveal user-preferences, behavioural patterns and the predicting factors of product uptake.

DEMOGRAPHIC DATA:

AGYW:

- 22% were below 18 years and 78% between 19-24 years old
- 63% started or completed secondary education
- 55.5% earned income in past month

FSW:

- 98.5% between 19-45, with 52% between 30-45 years
- 22% started or completed secondary education
- 56% earned income in past month; sex work was main source for 91%

RESULTS (AWARENESS AND USE OF PRODUCTS):

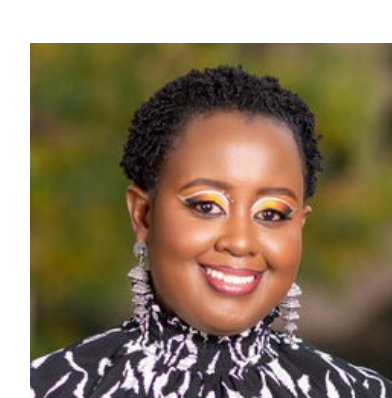
Product usage, particularly for HIV prevention, was lower among AGYW than FSW. Although awareness of long-acting (LA) prevention products including implants and intra-uterine devices (IUDs) was high among both groups, uptake remained low, primarily due to perceived side effects. For pregnancy prevention, the male condom was most used among both AGYW and FSW, followed by injectables. For HIV prevention, male condoms were most used, followed by oral pre-exposure prophylaxis (PrEP).

Contraceptives awareness and use

Long Acting	Awareness by Sample	Use by Sample
Implants	AGYW - 68% FSW - 76%	AGYW - 17% FSW - 22%
IUD-COIL	AGYW - 57% FSW - 62%	AGYW - 1% FSW - 2%
Short Acting	Awareness by Sample	Use by Sample
Injections	AGYW - 84% FSW - 90%	AGYW - 35% FSW - 43%
Pills	AGYW - 76% FSW - 83%	AGYW - 14% FSW - 12%
Emergency	AGYW - 62% FSW - 43%	AGYW - 21% FSW - 10%
Male condoms	AGYW - 92% FSW - 90%	AGYW - 48% FSW - 48%
Female condoms	AGYW - 36% FSW - 42%	AGYW - 1% FSW - 4%
Spermicide	AGYW - 2% FSW - 3%	AGYW - 0% FSW - 0%

HIV prevention awareness and use

Method	Awareness by Sample	Use by Sample
Oral PrEP	AGYW - 61% FSW - 84%	AGYW - 12% FSW - 47%
PEP	AGYW - 34% FSW - 36%	AGYW - 2% FSW - 6%
Injection	AGYW - 5% FSW - 8%	AGYW - 0% FSW - 1%
Male condoms	AGYW - 98% FSW - 98%	AGYW - 92% FSW - 86%
Female condoms	AGYW - 36% FSW - 42%	AGYW - 0% FSW - 8%
Ring	AGYW - 2% FSW - 3%	AGYW - 0% FSW - 0%



Yvonne Wangui Machira, IAVI
ymachira@iavi.org



RESULTS (DRIVERS OF PRODUCT USAGE):

Influential factors driving and predicting uptake varied by product. Effectiveness and easy accessibility were the most highly valued product features. At the 0.05 significance level, risk preference, stigma, Intimate Partner Violence (IPV), locus of control, peer influence, subjective risk, country, and age appeared significant in influencing uptake of various products. Segmentation to identify descriptive groups of AGYW and FSW in relation to their potential use of future long-acting HIV prevention and MPT products was only found influential for the uptake of implants and male condoms among AGYW.

CONCLUSION:

Behavioural interventions should be tailored by product and respond to key influential factors to increase awareness and bridge the gap between awareness and uptake. Interventions should:

1. Focus on addressing concerns related to side effects, including through providing accurate product information and dispelling misconceptions.
2. Include efforts to enhance product effectiveness and accessibility. These should be well communicated to make these features salient and visible.
3. Feature targeted outreach (such as tailored education campaigns, community outreach programs, and peer support networks) for AGYW and FSW to circumvent unique barriers faced by these key populations in accessing healthcare services.

ACKNOWLEDGEMENTS:

With thanks to the study participants, EDCTP the study funders, and all the UPTAKE consortium partners.



This project is part of the EDCTP2 programme supported by the European Union (grant number CSA2018HS-2525).

Eleventh EDCTP Forum

Partnering for Global Health Research Innovation and Impact in Africa

7–10 November 2023 | Paris, France

Celebrating EDCTP: two decades and beyond