

## Sexual & Reproductive Health and HIV

# LINKAGES: EVIDENCE REVIEW AND RECOMMENDATIONS

The importance of linking sexual and reproductive health (SRH) and HIV is widely recognized. The international community agrees that the Millennium Development Goals will not be achieved without ensuring universal access to SRH and HIV prevention, treatment, care and support. In order to gain a clearer understanding of the effectiveness, optimal circumstances, and best practices for strengthening SRH and HIV linkages, a systematic review of the literature was conducted. The findings corroborate the many benefits gained from linking SRH and HIV policies, systems and services.

### Key Research Questions

1. What linkages are currently being evaluated?
2. What are the outcomes of these linkages?
3. What types of linkages are most effective and in what context?
4. What are the current research gaps?
5. How should policies and programmes be strengthened?

### Benefits <sup>(i)</sup>

Bi-directional linkages between SRH and HIV-related policies and programmes can lead to a number of important public health, socio-economic and individual benefits:

- Improved access to and uptake of key HIV and SRH services
- Better access of people living with HIV (PLHIV) to SRH services tailored to their needs
- Reduction in HIV-related stigma and discrimination
- Improved coverage of underserved/vulnerable/key populations

- Greater support for dual protection
- Improved quality of care
- Decreased duplication of efforts and competition for resources
- Better understanding and protection of individuals' rights
- Mutually reinforcing complementarities in legal and policy frameworks
- Enhanced programme effectiveness and efficiency
- Better utilization of scarce human resources for health

## SRH and HIV Linkages Matrix

The numbers in each box represent the number of studies that met inclusion criteria, categorized by linkage-type. Matrix sections in grey represent linkage areas not included in final analysis.

Peer-reviewed Studies Promising Practices	HIV prevention, education & condoms <sup>(a)</sup>	HIV counselling & testing	Element 3 of PMTCT <sup>(b)</sup>	Clinical care for PLHIV	Psychosocial & other services for PLHIV
Family planning	54 / 27	6 / 18	2 / 8	1 / 6	6 / 7
Maternal & child health care	7 / 9	15 / 11	(c)	2 / 3	1 / 4
GBV prevention & management	4 / 10	1 / 2	1 / 2	1 / 1	0 / 1
STI prevention & management	129 / 25	9 / 12	1 / 4	4 / 4	5 / 4
Other SRH services	0 / 5	1 / 2	0 / 1	2 / 0	1 / 0

**Note:** Several studies incorporated multiple linkages. As a result, the number of linkages in the matrix exceeds the total number of studies (58).

<sup>(i)</sup> Rapid Assessment Tool for Sexual & Reproductive Health and HIV Linkages: A Generic Guide. GNP+, ICW, IPPF, UNAIDS, UNFPA, WHO and Young Positives, 2008.

<sup>(a)</sup> Not included in final analysis are studies integrating HIV prevention, education and condoms with SRH services (column one) as they have been reviewed elsewhere.

<sup>(b)</sup> Comprehensive prevention of mother-to-child transmission (PMTCT) includes the following four elements (from: "A Framework for Priority Linkages", WHO, UNFPA, IPPF, UNAIDS, 2005):

1. Prevent primary HIV infection among girls and women.
2. Prevent unintended pregnancies among women living with HIV.
3. Reduce mother-to-child transmission through anti-retroviral drug treatment or prophylaxis, safer deliveries and infant feeding counselling.
4. Provide care, treatment and support to women living with HIV and their families.

<sup>(c)</sup> Excluded from review are studies on element 3 of PMTCT not linked to other areas of SRH.

## Methodology

### Study Inclusion Criteria

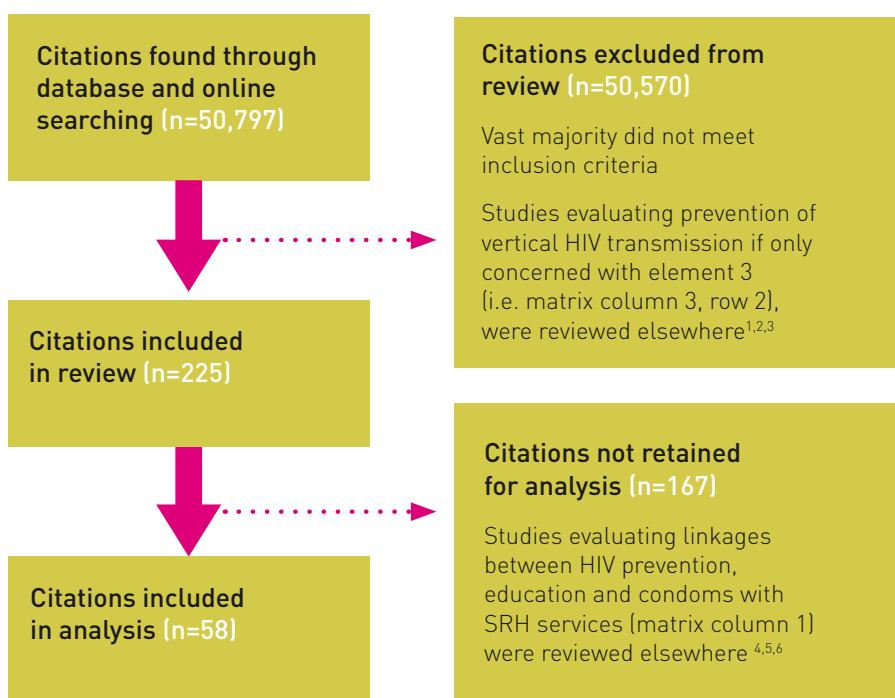
Linkages are a relatively new approach to increasing universal access to SRH and HIV prevention and care. In order to capture the most recent innovative linkages initiatives, this review was not limited to the standard peer-reviewed and rigorous evaluation studies, but also included "promising practices". The following inclusion criteria were used:

### Peer-reviewed Studies

- Published in peer-reviewed journal (1990-2007)
- Rigorous evaluation study (pre-post or control group)
- Conducted in any setting

### Promising Practices

- 'Grey' (non-peer-reviewed) literature (1990-2007)
- Some evaluation results reported
- Conducted in resource limited settings only



## Key Study Characteristics

**Number:** 58 studies met the inclusion criteria: 35 peer-reviewed studies and 23 promising practices.

**Region/Country:** 36 Africa, 11 UK or USA, 11 Asia, Eastern Europe, Latin America and the Caribbean. Nearly 80% of the promising practices were based in Africa.

### Direction of linkages:

- 34 studies integrated HIV services into existing SRH programmes
- 14 studies integrated SRH services into existing HIV programmes
- 10 studies integrated HIV and SRH services concurrently

**Type of integrated service:** The majority of studies included HIV testing as part of the integration; fewer studies evaluated integration of other HIV services.

**Study design rigour:** Only six studies used a randomized control design; most used a cross-sectional or pre-post design and/or included a control or comparison group.

**Setting:** Of the 58 studies, 39 fell into one of the following six categories\*

- Antenatal Care Clinics** adding HIV services (n=16)
- HIV Counselling & Testing Centres** adding SRH services (n=3)
- Family Planning Clinics** adding HIV services (n=6)
- HIV Clinics** adding SRH services (n=5)
- Sexually Transmitted Infection Clinics** adding HIV services (n=3)
- Primary Health Care Clinics** adding HIV and/or SRH services (n=10)

**Study limitations:** Few studies sought to answer a research question specifically about SRH and HIV service integration. Among studies with research questions directly related to integration, none were designed specifically to compare integrated services to the same services offered separately, no studies measured stigma outcomes, and of the few reporting cost outcomes, only two calculated cost-effectiveness.

\* four studies qualified for more than one setting

1. Volmink J, Siegfried NL, et al. Antiretrovirals for reducing the risk of mother-to-child transmission of HIV infection. *Cochrane Database Syst Rev*, 2007; Issue 1.

2. Wiysonge CS, Shey MS, et al. Vaginal disinfection for preventing mother-to-child transmission of HIV infection. *Cochrane Database Syst Rev* 2005; Issue 4.

3. Madi BC, Smith N, et al. Interventions for preventing postnatal mother-to-child transmission of HIV. [Protocol] *Cochrane Database Syst Rev* 2007; Issue 3.

4. Kirby DB, Laris BA, Roller LA. Sex and HIV education programs: their impact on sexual behaviors of young people throughout the world. *J Adolesc Health* 2007; 40(3):206-17.

5. Foss AM, Hossain M, Vickerman PT, Watts CH. A systematic review of published evidence on intervention impact on condom use in sub-Saharan Africa and Asia. *Sex Transm Infect* 2007; 83(7):510-6. Epub 2007 Oct 11. Review.

6. "Steady, Ready, Go", Information brief from the Talloires consultation to review the evidence for policies and programmes to achieve the global goals on young people.

## Outcome Measures

The following outcomes were reported:

### Peer-reviewed Studies

Health	(n=5)
Behavioural	(n=17)
Knowledge and attitudes	(n=7)
Process	(n=18)
Stigma	(n= 0)
Cost	(n= 0)

### Promising Practices

Health	(n=1)
Behavioural	(n= 9)
Knowledge and attitudes	(n=7)
Process	(n=20)
Stigma	(n= 0)
Cost	(n= 7)

## Overall Findings

- 1) Despite diverse settings and clients, the majority of studies showed improvements in all outcomes measured, and only a few showed mixed results. Many studies reported an increase or improvement in:
  - access to and uptake of services, including HIV testing
  - health and behavioural outcomes
  - condom use
  - HIV and sexually transmitted infection (STI) knowledge
  - overall quality of service
- 2) Linking SRH and HIV was considered beneficial and feasible, especially in family planning (FP) clinics, HIV counselling and testing centres (C&T), and HIV clinics.
- 3) Of the 58 studies analysed, more were conducted between 2000–2007 (65%) than 1990–1999 (35%). This trend was primarily seen in the promising practices; however, this may be due to publication bias as older, unpublished reports may no longer be available.
- 4) There was a slight time trend in directionality of linkages. Earlier studies were more often SRH programmes adding HIV services, while later studies were more often HIV programmes adding SRH services.
- 5) Preliminary analysis of both cost-effectiveness studies suggested net savings from HIV/STI prevention integrated into maternal and child health services.
- 6) Nearly three quarters (71%) of peer-reviewed studies evaluated programmes with only one type of linkage. In contrast, over half (57%) of promising practices evaluated programmes with five or more linkages, while just 9% had only one type of linkage. This difference may be due to more recent programmes linking SRH and HIV services more comprehensively, or the fact that peer-reviewed studies were often designed to address narrow research questions.
- 7) Of the few studies reporting cost outcomes, all were conducted after 2000. This positive trend may indicate an intent to scale up linked services.
- 8) Studies reporting health outcomes were evenly distributed across time.
- 9) Interventions which successfully implemented provider training resulted in improved provider knowledge and attitudes, leading to better SRH and HIV service provision.
- 10) Notably, few or no studies addressed the following:
  - Linked services targeting men and boys
  - Gender-based violence (GBV) prevention
  - Stigma and discrimination
  - Comprehensive SRH services for PLHIV, including addressing unintended pregnancies and planning for safe, desired pregnancies.
- 11) More attention needs to be paid to commodity security, in particular contraceptives.

## Factors Promoting or Inhibiting Effective Linkages

### Promoting Factors

- Positive attitudes and good practices among providers and staff
- Ongoing capacity building
- Involvement of the community and government during planning and implementation
- Simple, easily applied additional services which add no costs to existing services
- Non-stigmatizing services
- Male partner inclusion
- Engagement of key populations

### Inhibiting Factors

- Lack of commitment from stakeholders
- Non-sustainable funding
- Clinics understaffed/low morale/high turnover/inadequate training
- Inadequate infrastructure, equipment, and commodities
- Lack of male partner participation
- Women not sufficiently empowered to make SRH decisions
- Cultural and literacy issues
- Adverse social events/domestic violence incidence
- Poor programme management and supervision
- Stigma preventing clients from utilizing services

## Facility-based Analysis

The following tables summarize findings from a subset of studies grouped by type of facility:

1. **Antenatal Care Clinics** adding HIV services (n=16)
2. **HIV Counselling & Testing Centres** adding HIV services (n=3)
3. **Family Planning Clinics** adding HIV services (n=6)
4. **HIV Clinics** adding SRH services (n= 5)
5. **Sexually Transmitted Infection Clinics** adding HIV services (n=3)
6. **Primary Health Care Clinics** adding HIV and/or SRH services (n=10)

Of the 58 studies, 39 fell into one of these six categories. The remaining 19 studies were conducted in another type of setting or did not clearly specify the setting. Findings are reported and interpreted according to the objectives of the study. For a full list of studies included in each summary, please visit the online document (see page 8 for web addresses).

## Antenatal Care Clinics

<b>Studies</b>	9 peer-reviewed studies	7 promising practices
<b>Locations</b>	<b>Peer-reviewed studies:</b> 2 in USA 1 in Zimbabwe 1 in China 1 in UK 1 in Burkina Faso 2 in Kenya 1 in Zambia	<b>Promising practices:</b> 1 in South Africa 1 in United Republic of Tanzania 1 in Ethiopia 1 in Zambia 1 in Dominican Republic 1 in Ukraine 1 in Zimbabwe
<b>Interventions</b>	<ul style="list-style-type: none"> <li>All interventions integrated some form of HIV counselling C&amp;T into maternal and child health (MCH) services in antenatal care (ANC) settings.</li> <li>C&amp;T in a variety of forms, including in-clinic services; screening for referral to off-site C&amp;T; routine provision of C&amp;T (opt-out); C&amp;T by client request only; C&amp;T performed by clinic providers, trained counselling staff or community volunteers; couples</li> </ul>	or individual C&T; individual counselling sessions and group counselling sessions. <ul style="list-style-type: none"> <li>In many of the interventions, C&amp;T was the only HIV service integrated into routine ANC services. In a few, C&amp;T was performed in conjunction with distribution of nevirapine or offered within an enhanced package of services including care and support for PLHIV.</li> </ul>
<b>Study Design</b>	<b>Peer-reviewed studies:</b> 3 serial cross-sectional 3 cross-sectional 2 non-randomized control trial 1 pre-post	<b>Promising practices:</b> 2 serial cross-sectional 1 cross-sectional 4 mixed methods
<b>Reported Outcomes</b>	<b>Health outcomes:</b> None reported <b>Behavioural outcomes:</b> Condom use, number of sex partners and contraceptive use <b>Knowledge/attitudes outcomes:</b> Male and female condoms, HIV and STI facts	<b>Process data /outcomes:</b> Access to HIV testing; availability & uptake of drugs; uptake of HIV testing; provider training; provider knowledge; provider implementation; provider attitudes; quality of services; cost
<b>Findings</b>	<ul style="list-style-type: none"> <li>Significant increase in condom use among sexually active women, but not men, and among sexually active women living with HIV, but not HIV-negative women.</li> <li>Decrease in number of sex partners among women, but not men.</li> <li>Post-intervention increase in use of a modern method of contraception among mothers.</li> <li>Overall increase in HIV knowledge post-intervention, increases in knowledge of methods to reduce mother-to-child transmission.</li> <li>Increase in HIV tests offered at first visit, increase in HIV testing coverage, and increased awareness of places offering C&amp;T.</li> <li>Increase in uptake of C&amp;T among all groups directly offered testing, including after a new policy made HIV testing part of routine ANC for all women, and after provider-initiated opt-out testing was implemented, although rates of partners' testing and counselling did not change significantly.</li> <li>Increase in the availability of antiretroviral (ARV) drugs for women living with HIV but no change in rates of uptake of single-dose nevirapine among women living with HIV after implementation of opt-out testing in one study.</li> <li>Post-intervention increase in health workers trained in HIV</li> </ul>	counselling and other topics. <ul style="list-style-type: none"> <li>Increase in provider knowledge about HIV post-intervention, increase in providers identifying exclusive breastfeeding as one of the ways to reduce mother-to-child transmission.</li> <li>Increases in proportion of first-visit clients receiving HIV-related information or services and proportion of observed client-health worker interactions which included a discussion about mother-to-child transmission and infant feeding choices. Higher rates of thorough and appropriate counselling experiences reported by clients post-intervention.</li> <li>Improvements in provider attitudes toward provision of HIV services and attitudes about PLHIV.</li> <li>No difference in client satisfaction with consultation between those who did and did not receive routine C&amp;T. Clients reported more favourable views of counsellors' performance during counselling sessions if counsellors had been exposed to a prevention of mother-to-child transmission (PMTCT) training.</li> <li>Cost for promoting timely initiation of breastfeeding was lower than that of other intervention components (i.e., HIV education, voluntary counselling and testing (VCT) uptake, delivery in ANCs, exclusive breastfeeding) yet showed the most significant improvements. VCT uptake showed the lowest rate of increase, and was the most costly behaviour to change.</li> </ul>

## HIV Counselling and Testing Centres

<b>Studies</b>	1 peer-reviewed study	2 promising practices
<b>Locations</b>	<b>Peer-reviewed studies:</b> 1 in Haiti	<b>Promising practices:</b> 2 in Kenya
<b>Interventions</b>	<ul style="list-style-type: none"> <li>VCT clinic that progressively integrated a variety of SRH and primary health care services, including tuberculosis services, STI management, FP services, nutritional support for families affected by HIV, prenatal services for pregnant women living with HIV (including</li> </ul>	<p>PMTCT), post-rape services (including counselling, emergency contraceptives, and post-exposure prophylaxis [PEP]) and PEP for health care-workers.</p> <ul style="list-style-type: none"> <li>VCT providers trained in FP counselling and methods.</li> </ul>
<b>Study Design</b>	<b>Peer-reviewed studies:</b> 1 serial cross-sectional	<b>Promising practices:</b> 1 cross-sectional 1 pre-post
<b>Reported Outcomes</b>	<p><b>Health outcomes:</b> None reported  <b>Behavioural outcomes:</b> HIV testing, FP use, condom use  <b>Knowledge/attitudes outcomes:</b> Providers' knowledge of and attitudes toward FP methods</p>	<b>Process data /outcomes:</b> Availability of guidelines, policies and supplies; client-provider discussions about FP and fertility; referrals, client satisfaction and cost; preferred timing of FP in VCT
<b>Findings</b>	<ul style="list-style-type: none"> <li>The number of clients being tested for HIV increased dramatically.</li> <li>Percentage of VCT clients who chose a FP method increased.</li> <li>VCT providers' knowledge and attitudes toward FP improved.</li> <li>Trained providers were more likely to engage in FP discussions with VCT clients.</li> </ul>	<ul style="list-style-type: none"> <li>After adding FP, there was no change in observed quality of VCT.</li> <li>Cost per VCT provider trained in FP was US\$672.</li> <li>In timing of FP counselling during VCT, providers preferred pre-test counselling and clients preferred post-test counselling.</li> </ul>

## Family Planning Clinics

<b>Studies</b>	No peer-reviewed studies	6 promising practices
<b>Locations</b>	<b>Peer-reviewed studies:</b> None	<b>Promising practices:</b> 1 in Kenya 1 in Nepal 1 in South Africa 1 in Dominican Republic 1 in Uganda 1 in United Republic of Tanzania
<b>Interventions</b>	<ul style="list-style-type: none"> <li>Existing FP clinics integrating C&amp;T services or C&amp;T as part of a package of new STI services offered.</li> <li>Existing FP clinic integrating C&amp;T and provision of ARV drugs.</li> </ul>	<ul style="list-style-type: none"> <li>Integration of C&amp;T into FP services comparing direct provision of C&amp;T services versus referral for testing.</li> </ul>
<b>Study Design</b>	<b>Peer-reviewed studies:</b> None	<b>Promising practices:</b> 1 participatory appraisal approach 3 cross-sectional 1 serial cross-sectional 1 mixed methods
<b>Reported Outcomes</b>	<p><b>Health outcomes:</b> None reported  <b>Behavioural outcomes:</b> Condom use  <b>Knowledge/attitudes outcomes:</b> HIV and STI knowledge</p>	<b>Process data /outcomes:</b> Availability of ARV drugs and HIV testing; availability of equipment and materials; providers' knowledge and attitudes & use of skills; providers' training; quality of services; uptake of FP materials and ARV drugs; uptake of HIV testing; cost
<b>Findings</b>	<ul style="list-style-type: none"> <li>Integration of HIV services into FP services is feasible and improves outcomes.</li> <li>Integration did not increase waiting times or decrease quality of FP services.</li> <li>One study comparing direct provision of C&amp;T versus referral found that both versions should be considered.</li> </ul>	<ul style="list-style-type: none"> <li>Two studies reported absolute cost data but no cost-effectiveness data or comparisons across models.</li> <li>Conducted in resource-limited settings only.</li> </ul>

## HIV Clinics

<b>Studies</b>	5 peer-reviewed studies	No promising practices
<b>Locations</b>	<b>Peer-reviewed studies:</b> 2 in UK                      2 in USA 1 in Thailand	<b>Promising practices:</b> None
<b>Interventions</b>	<ul style="list-style-type: none"> <li>■ HIV clinic offering women living with HIV screening for STIs, contraceptives, pre-conception counselling, and cervical cytology.</li> <li>■ MCH programme started within an HIV clinic to improve clinic attendance. The programme involved a number of woman and child friendly aspects, such as private waiting areas and examination rooms for women and children, more female providers, free onsite child care, and transportation.</li> </ul>	<ul style="list-style-type: none"> <li>■ With the goal of increasing safe sex practices, adults with HIV received safe sex messages that either emphasized the benefits or costs of their decisions. The study included a control group.</li> <li>■ A sexual health clinic was started for clients with HIV to increase uptake of STI screening.</li> <li>■ Women living with HIV were offered STI screening, and those who consented received an exam, screening for skin ulcers, and STI testing. STI treatment and condoms were free.</li> </ul>
<b>Study Design</b>	<b>Peer-reviewed studies:</b> 2 serial cross-sectional 1 cross-sectional 1 randomized trial 1 non-randomized control trial	<b>Promising practices:</b> None
<b>Reported Outcomes</b>	<b>Health outcomes:</b> None reported <b>Behavioural outcomes:</b> Unprotected sex and condom use <b>Knowledge/attitudes outcomes:</b> None reported	<b>Process data/outcomes:</b> Availability of STI screening; uptake of cervical cytology; uptake of scheduled HIV visits; uptake of STI screening; uptake of Hepatitis B screening; quality of services
<b>Findings</b>	<ul style="list-style-type: none"> <li>■ Unprotected sex either decreased or remained the same compared to control depending on the specific intervention and the subpopulation under study.</li> <li>■ Use of condoms decreased among clients with HIV in one study (interpreted by the authors as a success, as their goal was to increase uptake of more reliable forms of contraception, although this outcome was not measured).</li> <li>■ Offer of STI screening increased: annual STI screening and STI screening at first visit were higher among intervention than control.</li> </ul>	<ul style="list-style-type: none"> <li>■ Uptake of screening for Hepatitis B was similar between intervention and control.</li> <li>■ Uptake of cervical cytology increased from pre- to post-intervention and was higher among intervention than control.</li> <li>■ The number of women living with HIV attending at least 75% of their scheduled HIV visits was greater among the intervention than the control.</li> <li>■ Client reporting showed that physicians talked about safer sex at half or more of clinic visits, an increase from baseline values.</li> </ul>

## Sexually Transmitted Infection Clinics

<b>Studies</b>	3 peer-reviewed studies	No promising practices
<b>Locations</b>	<b>Peer-reviewed studies:</b> 1 in India                      1 in USA 1 in Thailand	<b>Promising practices:</b> None
<b>Interventions</b>	<ul style="list-style-type: none"> <li>■ HIV C&amp;T offered to STI clinic clients.</li> </ul>	<ul style="list-style-type: none"> <li>■ Women living with HIV at an infectious disease clinic and an STI clinic offered STI screening and treatment, as needed.</li> </ul>
<b>Study Design</b>	<b>Peer-reviewed studies:</b> 1 retrospective cohort 1 cross-sectional 1 time series	<b>Promising practices:</b> None
<b>Reported Outcomes</b>	<b>Health outcomes:</b> Gonorrhoea incidence <b>Behavioural outcomes:</b> Condom use	<b>Knowledge/attitude outcomes:</b> HIV transmission and prevention knowledge <b>Process data /outcomes:</b> None reported
<b>Findings</b>	<ul style="list-style-type: none"> <li>■ Post-test rates of gonorrhoea re-infection were consistently lower than pre-test rates.</li> <li>■ Two of three studies reported positive behavioural outcomes.</li> </ul>	<ul style="list-style-type: none"> <li>■ After the intervention, clients reported less frequent visits to sex workers and more consistent use of condoms.</li> </ul>

## Primary Health Care

<b>Studies</b>	5 peer-reviewed studies	5 promising practices
<b>Locations</b>	<b>Peer-reviewed studies:</b> 1 in Kenya                      1 in United Republic of Tanzania 1 in Zimbabwe                  1 in Zambia 1 in USA	<b>Promising practices:</b> 4 in Kenya 1 in Brazil
<b>Interventions</b>	<ul style="list-style-type: none"> <li>Integrating HIV and STI services and HIV and FP counselling and services, providing contraceptives to PLHIV, and building the capacity of health care staff and health facilities to provide integrated services.</li> </ul>	<ul style="list-style-type: none"> <li>Integrating HIV, STI and FP services into services offered at a primary health care clinic at a border-crossing truck stop, district level primary health care facilities, a post-abortion care facility, a well-child/acute care paediatric clinic, an adolescent health clinic, a governmental hospital and primary health care clinic, and a mobile clinic.</li> </ul>
<b>Study Design</b>	<b>Peer-reviewed studies:</b> 1 randomized control trial 1 pre-post 1 prospective cohort 1 cross-sectional 1 serial cross-sectional	<b>Promising practices:</b> 3 cross-sectional 1 serial cross-sectional 1 participatory appraisal
<b>Reported Outcomes</b>	<b>Health outcomes:</b> HIV incidence <b>Behavioural outcomes:</b> Contraceptive use, condom use, number of sexual partners <b>Knowledge/attitude outcomes:</b> None reported	<b>Process data /outcomes:</b> Access to HIV testing; access to other services; availability of drugs; availability of FP methods and information, education, communication (IEC) materials; provider training; provider implementation; uptake of HIV testing, drugs, condoms, FP methods, IEC materials, other services; quality of services; cost.
<b>Findings</b>	<ul style="list-style-type: none"> <li>No significant effect of integrating HIV testing on HIV incidence among males and females, although impact on HIV incidence is only likely to be shown after long term observation.</li> <li>Receiving VCT increased condom use, dual contraceptive methods, and receipt of a positive HIV test generally resulted in fewer sexual partners and higher levels of condom use.</li> <li>Improved access to VCT and increased HIV C&amp;T uptake, especially if point-of-care tests were offered, but mixed results for postpartum C&amp;T. High rates of uptake for other services, such as HIV education.</li> <li>High rates of attendance at ANC and well-baby visits, increased uptake of post-abortion services.</li> </ul>	<ul style="list-style-type: none"> <li>Increased number of pregnant women who learned their HIV status at first ANC visit, and increased uptake of nevirapine among women living with HIV, but not among women living with HIV who received a postnatal follow up visit.</li> <li>Inconsistent availability and uptake of supplies. Availability of IEC materials decreased post-integration in one study; uptake was low in some settings but high in others. FP methods restricted to only some facilities.</li> <li>Training of providers was inadequate on a range of topics. Provider implementation and quality of services showed mixed results.</li> <li>Cost of delivering integrated services was reported but not translated into cost-effectiveness.</li> </ul>



## 15 Key Recommendations

### Policy makers

1. Advocate and support SRH and HIV linkages at the policy, systems and service levels since they are demonstrated to improve outcomes.
2. Develop, adopt, modify and strengthen relevant policies, HIV and SRH strategic plans and coordination mechanisms to foster effective linkages.
3. Create a supportive policy environment to ensure the implementation of a collective human rights and gender-sensitive approach to SRH and HIV linkages.
4. Advocate for additional funding of rigorous research to address important outcomes, such as health, cost, and stigma of integrated services as well as novel approaches to integration.
5. Act on commitments made through regular assessments of national responses to SRH and HIV linkages.

### Programme managers

6. Strengthen linked SRH and HIV responses in both directions through:
  - a) Stakeholder commitment
  - b) Human resources and planning
  - c) Health provider training
  - d) Client education involvement
  - e) Quality of services
  - f) Infrastructure
  - g) Supply management (including commodity security)
7. Through the development of robust indicators, rigorously monitor and evaluate integrated programmes during all phases of implementation to improve current and future programmes.
8. Ensure that key HIV services (including VCT; PMTCT; and antiretroviral therapy (ART)) are integrated with other SRH services.
9. Ensure that key SRH services (such as FP, including preconception planning; maternal and child health; prevention and management of GBV; and STI management) are integrated with other HIV services.
10. Advocate, support and facilitate operations research to demonstrate that linking SRH and HIV can act as a modality of stigma reduction.

### Researchers

11. Design rigorous studies to evaluate integrated SRH and HIV services, particularly comparative assessments of integrated delivery of services versus non-integrated delivery of the same services.
12. Evaluate key outcomes, such as:
  - a) Health
  - b) Stigma reduction
  - c) Cost-effectiveness
  - d) Trends in access to services
13. Direct research towards areas of integration that are currently understudied, notably integrating SRH services with HIV services for PLHIV, including clinical and psychosocial care, contraception and pre-conception planning if pregnancy is desired, gender-based violence reduction and linked services for men and boys.
14. Foster community participation in research to ensure that all research on linkages has relevant outcomes for clients.
15. Ensure strengthened collaboration between the SRH and HIV research communities through the development of a collective linkages research agenda.

## Acronyms and Definitions

**AIDS** acquired immunodeficiency syndrome

**ANC** antenatal care

**ART** antiretroviral therapy

**ARV** antiretroviral

**C&T** counselling and testing

**FP** family planning

**GBV** gender-based violence

**GNP+** The Global Network of People Living with HIV/AIDS

**HIV** human immunodeficiency virus

**ICW** International Community of Women Living with HIV/AIDS

**IEC** information, education, communication

**IPPF** International Planned Parenthood Federation

**MCH** maternal and child health

**PEP** post-exposure prophylaxis

**PLHIV** people living with HIV

**PMTCT** prevention of mother-to-child transmission

**SRH** sexual and reproductive health

**STI** sexually transmitted infection

**UCSF** University of California San Francisco

**UK** United Kingdom

**UNAIDS** The Joint United Nations Programme on HIV/AIDS

**UNFPA** United Nations Population Fund

**USA** United States of America

**VCT** voluntary counselling and testing

**WHO** World Health Organization

**Linkages:** The bi-directional synergies in policy, programmes, services and advocacy between sexual and reproductive health and HIV. Refers to a broader human rights based approach, of which service integration is a subset.

**Integration:** Different kinds of sexual and reproductive health and HIV services or operational programmes that can be joined together to ensure and perhaps maximize collective outcomes. This would include referrals from one service to another, for example. It is based on the need to offer comprehensive services.

This document is a preliminary overview of findings. For more information about the methodology and programme-specific findings, as well as a complete list of references, please refer to the full report available on the websites below.



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