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# Achieving Synergies in Prevention through Linking Sexual and Reproductive Health and HIV Services

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## ABSTRACT

Integration, linkages and synergies are widely used terms among those interested in strengthening the relationship between sexual and reproductive health (SRH) services and HIV prevention. This paper explores these terms conceptually, and then reviews the wide range of combinations of SRH and HIV prevention services that have been linked or integrated. Several different combinations have proven feasible and acceptable in pilot situations, but there remains a lack of evidence as to their effectiveness in changing behaviours, including preventing HIV transmission. There is also limited experience with scaling up successful models and a need to move beyond a focus on services to consider system-level changes that will enable successful configurations of linked services to be implemented effectively and sustained routinely. Whether linking or integration of services, the limitations of using clinic-based infrastructures to reach the most vulnerable, including bridging and core populations, need to be recognized at the pilot-testing stage; Asian countries can learn much from the work that has been undertaken in Africa over the past decade when prioritizing between models.

## INTRODUCTION

Several international statements over the past decade (most notably the Glion Call to Action<sup>1</sup> and the New York Call for Commitment<sup>2</sup>) have endorsed the integration or linkage of services for sexual and reproductive health (SRH) with services for HIV prevention, treatment, care and support, in terms both of configuring service delivery systems and more broadly to address the structural determinants of vulnerability to HIV infection and adverse reproductive health (RH) outcomes. The

primary arguments in favour of linking SRH and HIV prevention services, and for developing links that function in both directions, have been: a substantial proportion of people are at risk of both unintended pregnancy and infection when having sex, and so need protection against both; integrating or linking services that offer dual protection is a more cost-effective and efficient means of their delivery than offering them separately; and SRH services can offer accessible, acceptable and less stigmatised points for HIV services for a variety of populations not usually reached by HIV services, and vice versa. With the advent of using anti-retroviral therapy to reduce perinatal transmission, this argument has also been applied to integrating prevention of mother to child transmission (PMTCT) services (i.e. HIV) with antenatal care (ANC) services (i.e. SRH) for pregnant women; experiences to date with PMTCT services, however, show limited integration with ANC, despite the intention that such services should be integrated.

Although such statements can be extremely convincing when presented in the international policy arena, operationalizing the concepts is proving much trickier, not least because of unclear thinking and a lack of conclusive evidence for the benefits and costs of moving to linking or integrating services that were previously offered separately, either by offering two or more services jointly (e.g. STI/HIV education with ANC or FP services) or by offering a single service that can prevent both HIV transmission and unwanted pregnancy (e.g. condom use). One way of achieving conceptual clarification would be a more judicious use of terminology; the following interpretations will guide the discussions in the remainder of this paper, but it should be noted that these do not reflect a consensus, but rather the perspective of this author.

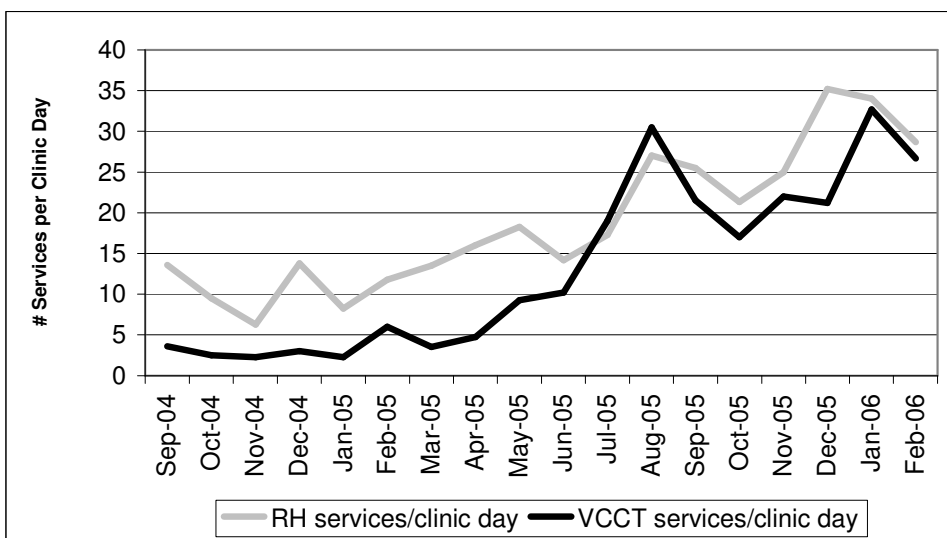
Within the SRH field, the concept of *integration* has been promoted for several decades. Following the 1994 International Conference on Population and Development, integration was interpreted primarily to mean offering a *range* of services that could meet several needs *simultaneously*, usually at the same time, same venue, and through the same provider. Referral for other services identified as needed but not available during a consultation could increase the range of services provided, but a lack of systematic procedures to guide providers in identifying additional client service needs has meant that “integrated” services have tended to be limited to those offered simultaneously<sup>3</sup>. This interpretation also guided early efforts to jointly offer SRH and HIV services, i.e. by focusing on ways of combining the provision of SRH and HIV services during one consultation, for example, through providing

STI/HIV education during FP or ANC services), and this interpretation of the term has dominated the literature until recently.

As practical experience has been gained through piloting the simultaneous provision of various combinations of services, its limitations have been realised and the term *linkage* began to be used more widely, for at least two reasons. First, the problems of providing services to prevent HIV transmission *sexually* by combining them with an SRH service such as family planning, or to prevent transmission *perinatally* through combining an HIV prevention service with pregnancy care services, has led many programmes to provide the services through *separate* delivery mechanisms and to establish an *enabling* or referral linkage between them. The need to link SRH and HIV services reflects the unfortunate reality that, nationally and internationally, policies, funding and health systems for these services remain separate and will do so for the foreseeable future, thereby necessitating a linked rather than integrated delivery approach; provision of PMTCT services during ANC for pregnant women is a clear example of the problems faced when trying to “integrate” services but because of the separations in policy, funding and systems, the reality is that they need are usually “linked” instead. Secondly, the term linkage is also being used to focus attention on the fact that people’s vulnerabilities to HIV and to SRH ill-health are usually linked, through common structural determinants such as poverty, gender inequality, marginalization and inequitable access to information and services<sup>4</sup>. Developing policies, systems and programmes that jointly address these determinants will increase the likelihood of improving access to both SRH and HIV services.

Clearly both integration and linkage of services are possible and desirable. The challenge is identifying whether integration or linkage – or offering SRH and HIV prevention services independently – is the more appropriate means for meeting the SRH and HIV prevention needs of clients. Whether combining services creates synergy<sup>5</sup>, that is, the outcomes from combining the services are greater than the outcomes when offering the services individually (i.e.  $1 + 1 = 3$ ), is clearly a key criterion. Moreover, the services being offered jointly must already be proven to be effective individually because “doing something ineffective can be worse than doing nothing if it takes resources and attention away from other, effective interventions”<sup>6</sup>. And of course, integrated or linked services need to cost no more, and preferably less, than providing them individually.

An example to illustrate these principles is the Child in Need Institute (CINI) in West Bengal, India<sup>7</sup>. For many years CINI operated a Reproductive Health clinic that provided curative RTI/STI services and preventive services such as family planning, condoms and counselling on RTI/HIV risk behaviours. With a new source of funding, it created a separate HIV Voluntary Confidential Counselling and Testing (VCCT) centre. Over time, however, it began facing coordination problems when clients attending one clinic needed the services of the other. Moreover, CINI had counsellors in both facilities, which increased their fixed costs, and it operated each facility on a separate budget which did not allow for cross-subsidization of costs. In June 2005, the decision was taken to offer the VCCT service within the RH clinic, with the expectation that this would increase access to both the RH and VCCT services, would increase the overall volume of services provided, and would reduce the costs of offering services.



**Figure 1: Achieving synergy through combining RH and VCT services.**

Figure 1 shows that, before integration, the average clinic day included 12 RH services and 4 VCCT services; subsequently, the average clinic day increased to 25 RH services and 22 VCCT services, thereby increasing access to both RH and HIV services. Moreover, on average 38 percent of clients received both RH and VCCT services, which, although data aren't available before integration, is likely to be a higher proportion

than when services were offered separately. The combined services also proved more cost-effective; before being combined, the mean cost of an RH service was 130 rupees and a VCCT service was 86 rupees, giving a joint cost of 216 rupees; when combined, the cost of providing both services together was 144 rupees.

### **Possibilities for combining SRH and HIV services**

This example represents only one of many possible combinations of SRH and HIV prevention services. Figure 2 describes, and not exhaustively, the range of possible service combinations that could be made between SRH and HIV to provide clients with dual protection; whether every combination achieves synergy, achieves it cost-effectively and has impact on both behaviours is the big unknown. It would not be a wise use of resources to evaluate every single combination to find out which should be pursued further (although virtually all combinations are being tested, primarily in Africa, and most are presented in this book). Some criteria need to be considered when allocating resources to addressing this issue.

<b>Existing HIV/AIDS services + ... SRH service</b>		<b>Existing SRH services + ... HIV service</b>	
VCT +	FP; STI; condoms; BCC	FP +	VCT; BCC; condoms; STI
PMTCT +	FP; condoms; BCC	ANC+	PMTCT; FP; STI
ART+	FP; condoms; BCC	Delivery +	PMTCT; STI
BCC +	STI; FP; condoms; VCT	Postpartum +	VCT; ART; BCC; FP; STI
		PAC/abortion+	VCT; BCC; FP; STI
		STI +	VCT; BCC; condoms; FP
		Post-rape +	VCT/PEP; EC; STI

**Figure 2: Possible service linkages and integration for achieving synergy in prevention.**

Clearly, the *epidemiological situation* is crucial. A critical factor is the proportion of the population that uses SRH services and that is vulnerable to the risk of HIV infection. Although this will be higher in generalized epidemics, in situations where the epidemic expands through sexual transmission within a bridging population (usually the male partners of female sex workers) it may be effective to start combining HIV prevention services with SRH services to slow its transmission into the general population.

In a generalised epidemic there will also be significant number of HIV positive persons wanting, and having a right to, access SRH services to help them prevent unintended pregnancies, STIs, HIV re-infection, and HIV transmission in a discordant couple – as well as accessing other SRH services. In concentrated epidemics, and where transmission is primarily sexual, there may be situations in which synergy could be achieved by combining services, for example, if those with the highest vulnerabilities or risk behaviours routinely access SRH services and if linkage or integration increased access to SRH services by HIV positives.

Another consideration is whether or not the *most vulnerable* can be better reached through independent or combined services. For example, the poorest, adolescents of both sexes and adult men do not frequently access SRH services, especially when provided in clinics. In many countries these sub-populations are the most vulnerable and so it is questionable whether allocating resources to widespread integration or linkage of HIV prevention with SRH services would benefit such populations. SRH services are usually configured for and attended by women, sometimes exclusively, but providing them with HIV prevention information and services may be futile if they are not empowered to negotiate safer sex with their partner(s). Empowerment efforts can focus on women and girls alone, but increasing male participation in and utilization of SRH services can lead to greater joint decision-making around safer sex<sup>8</sup>.

In some situations, HIV and SRH prevention services have to be provided simultaneously for the service to be considered complete. For example, female rape survivors, especially in areas of HIV prevalence, require services simultaneously and within 72 hours of the rape to prevent pregnancy, HIV and other STIs. In most developing countries, unfortunately, these individual services remain fragmented even in tertiary hospitals, and at best are linked through often ineffective referral mechanisms. Efforts are now being made to strengthen and integrate

these HIV and SRH prevention services to provide a 'one-stop' post-rape service<sup>9,10</sup>; further challenges are also emerging in developing systematic referral linkages to trauma counselling and legal services during or after the integrated medical management service.

### **Getting specific: promising and not so promising combinations**

Within the range of possible combinations outlined in Figure 2, some continue to receive more attention than others, and for easily justifiable reasons – in high HIV prevalence settings, for example, integrating or linking PMTCT with existing ANC services, and strengthening post-exposure prophylaxis within comprehensive post-rape services to prevent HIV acquisition, are clearly service combinations that need to be enhanced. Within the rapidly evolving field of linking HIV and SRH services, however, several issues and service combinations are emerging that need careful attention to ensure that appropriate policies and programmatic guides are created.

*Integrating STI treatment into MCH/FP clinic services:* This was probably the first serious attempt to increase HIV prevention through integrating SRH services. Results from the randomized community trial in Mwanza, Tanzania<sup>11</sup> showed that presence of STIs is an important co-factor that enhances the likelihood of HIV transmission, and that detecting and treating STIs could lead to significant reductions in HIV transmission. Subsequent efforts to replicate this outcome through large-scale randomized community trials in Uganda<sup>12, 13</sup> failed to demonstrate the same impact for several reasons<sup>14</sup>; pilot projects developed to test programmatic models<sup>15, 16</sup>, together with analyses of the policy implications of combining these services<sup>17</sup>, have also highlighted the many technical problems with implementing this combination. This is especially so when STI treatment is dependent on syndromic management, the majority of infected women are asymptomatic, and men with STIs do not visit MCH/FP clinics – as is the situation in most developing countries. Shelton has been particularly eloquent in warning against promoting STI control through clinic-based MCH/FP services in the absence of cheaper and more effective STI diagnostics<sup>18, 19</sup>.

One combination of STI and SRH services, however, with proven effectiveness is syphilis detection and management within ANC for pregnant women; despite the long-standing evidence that providing this combination of services is both effective and cost-effective, at least in sub-Saharan Africa<sup>20</sup>, and that programmatic guidance exists for rolling out



such an approach<sup>21</sup>, remarkably little attention or resources are being allocated to scaling up this successful example of integration. The rapid and relatively well-financed roll-out of PMTCT services offers an excellent opportunity to strengthen maternal syphilis screening and management<sup>22</sup>, but action must be taken quickly to ensure that syphilis screening becomes integrated as a routine component of PMTCT from the beginning, rather than having to be integrated or linked after the PMTCT services are established.

*Behaviour change communication (BCC) and condom promotion through SRH services:* communicating messages to reduce risky sexual behaviours, and especially concerning the number and frequency of partners and the correct and consistent use of condoms, is a proven effective HIV prevention strategy<sup>23</sup>, and one that can feasibly be combined with several SRH services. Clinic settings provide an opportunity to communicate such messages, as well as for promoting and providing condoms, to clients coming for family planning (through 'dual protection' messages that promote condom use for both contraceptive and infection prevention reasons), as well as during antenatal and postnatal care. As the recipients of messages in these settings are generally married women, however, who usually have little power to negotiate condom use or their partner's sexual behaviour, the effectiveness of combining these services on HIV prevention is limited. One possibility for increasing the likelihood of couple communication about condom use is through PMTCT services, especially when the results of HIV testing become known. This is another important, but to date neglected, aspect of PMTC services.

An exception to this is clinic-based STI services, which serve higher risk populations, often predominantly men. Although it might be reasonable to assume that condom promotion and messages on partner reduction should be an integral component of STI services, they frequently are not included and so every effort should be made to integrate these elements into existing STI services.

Greater potential for HIV prevention through combining these services can be achieved through non-clinic based programmes, and particularly condom social marketing and community-based health programmes with SRH components. This is because non-clinical SRH programmes are much more likely than clinic-based services to be able to engage with those most at risk if HIV transmission, that is, men, adolescents (both male and female), and the economically and socially

vulnerable. Opportunities to integrate BCC messages and condom promotion should be actively pursued through such programmes because condom use does seem to be increasing, and safer sex practices improving, among those at highest risk in high HIV prevalence settings, young women<sup>24</sup>. Moreover, as the only currently available technology to offer dual protection every opportunity should be taken to extend this “combination” method.

***VCT combined with FP:*** Several studies are underway currently in Africa to test the effectiveness of integrating family planning messages and services into VCT services, and of integrating or linking VCT services into family planning services. The former combination seeks primarily to reduce unintended pregnancies among HIV positives, thereby increasing HIV prevention through mother to child transmission; it is also a means for reaching men and adolescents attending VCT with FP messages. A recently completed study in Kenya<sup>25</sup> found that although this type of integration was feasible and acceptable, the service model tested was not effective in increasing contraceptive use, and so efforts need to be made to strengthen the provision of FP services during VCT. Although focused primarily on contraception provision, such services must respect and advocate for the child-bearing rights of HIV positive people, and should include information about PMTCT for those seeking to become pregnant. Integrating or linking VCT into FP services seeks to enhance FP clients’ awareness of their HIV status so that appropriate preventive behaviours can be taken. Preliminary findings suggest that offering VCT services for women attending for FP services in South Africa and Kenya does not adversely affect the quality of FP service, and may actually improve some elements, and does increase access to VCT<sup>26</sup>.

***FP for HIV positives:*** Preventing perinatal transmission of HIV through reducing unintended pregnancies among HIV positive women is a strategy with widespread support<sup>27, 28</sup>, but at present there is little experience of how best FP services can and should be provided to HIV positive women. Efforts to link FP services with VCT and with ANC / PMTCT services as means for reaching women who know they are HIV positive have been discussed above. Extending the duration of contact with HIV positive women through strengthening postpartum services during the period after delivery is another strategy for increasing access to FP services currently receiving attention and for which results should be available shortly. In all three combination strategies, the rights of

people living with HIV/AIDS to have or to not have children must be respected. This is proving challenging, especially in societies where HIV is still heavily stigmatised, including among health workers; consequently, there is often an assumption that HIV positive women and couples should not be “allowed” to become pregnant, and reports of providers’ unwillingness to discuss birth spacing options with HIV positives are frequent.

Another combination currently being assessed is to link FP services with existing ARV services, because the quality of life that is gained through using ARVs appears to rekindle interest in sexuality and in having children. A recent focus on HIV positives has been to address the FP needs of adolescents who were born HIV positive, as they start to become sexually active, form relationships and consider marriage and child bearing. Current research is seeking to understand their aspirations, desires and needs prior to developing and testing interventions to combine FP with other services to prevent transmission of HIV to others<sup>29</sup>.

## **Prioritising Resources**

Even as and when various service combinations are shown to be feasible and effective, ensuring that resources are allocated for implementing linked services for HIV prevention is problematic. In part this is because the purpose of linking services is to increase access to and use of SRH services, and yet there is already a huge unmet need for SRH services, much of which can be attributed to inadequate resources for meeting the latent or actual demand. Funding for SRH services and systems has stalled globally, or decreased and been diverted to HIV, malaria, TB and other priorities. Even within the HIV field, treatment and care continues to predominate in resource allocations over prevention. In some influential quarters there is also social and political unease concerning prevention of sexual transmission of HIV, as this requires recognizing, and explicitly allocating resources to address, a range of sexual activities that usually occur before and outside of marriage. Consequently, resources are more easily allocated to the less sensitive linkages, such as strategies to prevent perinatal transmission of HIV which, while very important, is not the major mode of HIV transmission.

## CONCLUSIONS

There is no doubt that efforts to link and integrate SRH and HIV services to strengthen HIV prevention enjoy widespread support, at least in terms of international declarations and pilot-testing of innovative approaches, especially in Sub-Saharan Africa. Several different combinations of services have been shown to be feasible and acceptable in pilot situations, but there remains a lack of conclusive evidence as to their effectiveness in changing behaviours and in preventing HIV transmission. Because of this, there is also limited experience with scaling up successful models, so that those responsible for national level policy, programming and resource allocation have yet to develop ways of ensuring that integrated or linked services are offered and supported routinely. Clearly there is a need to move beyond this focus on the service level and to consider system-level changes that will enable successful configurations of linked services to be implemented effectively and sustained routinely. In deciding on which services to combine, whether through linking or integration, the limitations of using clinic-based infrastructures to reach the most vulnerable, including bridging and core populations, need to be recognized at the pilot-testing stage. Community-based and other forms of non-clinical outreach models that create demand for services and motivate appropriate health-seeking behaviours should be tested to address this constraint. For this Asian countries can learn much from the work that has been undertaken in Africa over the past decade when prioritising between models, albeit ensuring that significant adaptations are made to adjust for differences in health systems, socio-cultural norms and other key factors.

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