

What Is the Impact of Integrating HIV with Maternal, Neonatal, and Child Health Services?

KEY MESSAGES

- Expanding access to both HIV and maternal, newborn and child health (MNCH) services will be crucial to reaching the health-related Millennium Development Goals (MDGs)
- There is growing interest within the global health community in integrating HIV and MNCH services into a single delivery setting
- Such integration could address patients' multiple needs at once, and may enhance program effectiveness and efficiency
- A review of the evidence on integrating HIV and MNCH programs shows that integration is feasible but there is little high quality evidence on effectiveness and efficiency
- The *Integration for Impact* conference (integration2012.org), on September 12–14, 2012 in Nairobi, Kenya, will lay out the latest research on integrating HIV, MNCH, and reproductive health services, including the results of the first two cluster randomized trials of such integration

BACKGROUND

The burden of the global HIV epidemic falls heavily upon women and children. Half of all HIV-infected people in sub-Saharan Africa are women of reproductive age, HIV/AIDS is the leading cause of mortality among women in this age group, and every day about 1,000 children under the age of 15 years acquire HIV infection.¹

Fortunately, coverage of key HIV interventions that have an impact on women's and children's health has increased very rapidly in recent years—as a result, the world is making very good progress towards MDG 6, the goal of halting and beginning to reverse the spread of HIV/AIDS, TB, and malaria.² However, progress towards the child and maternal health goals (MDGs 4 and 5) has been slower. While there has been a

significant reduction in child deaths, the world is still only half way towards reaching the target of cutting the child mortality rate (CMR) by two-thirds by 2015 (MDG 4), while the neonatal mortality rate is falling even more slowly than the CMR.² And with only three years to go until 2015, the world is not even half way to reaching MDG 5, the goal of reducing the maternal mortality ratio (MMR) by three quarters.²

This slow progress on MDGs 4 and 5 is due in part to low coverage with key preventive and therapeutic MNCH interventions. The need for intensified action on MNCH goals has prompted the global health community to consider innovative ways to dramatically increase intervention coverage. This Policy Brief examines one such innovation: the integrated delivery of multiple HIV and MNCH interventions in a single delivery setting.

A ROLE FOR INTEGRATION?

The WHO HIV/MNCH Technical Working Group defines integration as:

the organization, coordination, and management of multiple activities and resources to ensure the delivery of more efficient and coherent services in relation to cost, output, impact, and use (acceptability).³

Integrating services for HIV, family planning (FP), and MNCH—and delivering them in a single setting—would address patients' multiple needs at once, and could potentially enhance program effectiveness and efficiency. By maximizing the use of available human resources, integration may be more cost-effective than delivering separate programs in different settings. These potential efficiencies are particularly important in the context of a maturing global response to HIV—one that focuses less on emergency measures and more on ensuring long-term sustainability and integration of HIV programs with other programs and health systems.

Is integrating HIV and MNCH services feasible, does it improve health outcomes, and is it cost effective? This brief gives an initial summary of the evidence to date, and lays out future challenges and research gaps. We do *not* examine studies of integrating FP with HIV, since there have been a large number of policy briefs previously published on this topic. Our approach was to review individual studies pooled in systematic reviews published on the integration of HIV and MNCH services from 1990 to 2012.

SUMMARY OF THE EVIDENCE ON INTEGRATING HIV AND MNCH SERVICES

Summary Points

- We identified four relevant studies, all of which were conducted in sub-Saharan Africa in clinic/hospital settings
- We found no published randomized controlled trials of integrating HIV and MNCH services, although two trials are underway and will report in summer 2012
- Taken together, the studies suggest that integration is feasible across a variety of integration models, settings, and target populations—antenatal clinics, child malnutrition services, and post-abortion care
- Two non-randomized studies compared integration of HIV treatment into antenatal clinics with non-integrated services; one study found that integrated services were associated with higher treatment rates, and the second found that integration was linked with earlier treatment initiation
- Studies did not have sufficient follow-up to measure long-term effects of interventions
- Studies did not target men or couples
- Studies did not report on mortality, pregnancy, or adherence outcomes

RESULTS OF INDIVIDUAL STUDIES

Two studies found that antiretroviral therapy (ART) can feasibly be integrated into antenatal clinics (ANCs); one found that integration was associated with higher treatment rates, the other found that integration was associated with earlier treatment initiation:

- **Killam and colleagues** evaluated the integration of ART services into public ANCs in Zambia.⁴ They compared such integrated services to non-integrated referral for ART care (in the non-integrated group, HIV-positive women were referred for HIV treatment in a different setting, outside the ANC). The integrated strategy was associated with a significantly higher proportion of treatment-eligible pregnant women initiating ART during pregnancy (32.9% vs. 14.4%). However, integration had no effect on the timeliness of ART initiation or on the 90-day retention rate in clinic.

- **Van der Merwe and colleagues** evaluated an intervention that brought ART staff to ANCs for ART provision in South Africa.⁵ These integrated services were associated with a significantly shorter time from HIV diagnosis to ART initiation when compared to pre-integrated care (before integration, the median time was 56 days, and after integration it was 37 days). Integration was also associated with a significantly shorter time to receiving a CD4 result (the median was 50 days before integration, compared with 29 days after).

One study found that HIV testing can feasibly be integrated into child malnutrition services:

- **Bahwere and colleagues** evaluated the effects of offering HIV testing to caregivers and children enrolled or recently graduated from a community-based therapeutic care program for malnutrition in Malawi.⁶ The program offered basic medical care (vitamin A, de-worming, anemia treatment, malaria prophylaxis, and antibiotics) and community-based nutrition rehabilitation for children with severe acute malnutrition. The study found high rates of uptake of voluntary counseling and testing (VCT) for HIV among children (94%) and parents (61%). It also found that 59% of HIV-infected children recovered to satisfactory nutritional status. There was no comparator group.

HIV testing can feasibly be integrated into post-abortion care:

- **Rasch and colleagues** evaluated the effect of offering HIV testing to women seen at a municipal hospital for incomplete abortion in Tanzania.⁷ All women were offered counseling about FP, sexually transmitted infections, HIV, contraceptive provision, and HIV testing. Further counseling and contraceptive services were also provided at follow-up. About 6 in 10 women took up HIV testing. Among those accepting VCT, 73% accepted condoms. Furthermore, those accepting VCT were twice as likely to report using a condom than women who did not accept VCT.

RESEARCH GAPS

- **There has been a lack of rigorous studies**—particularly randomized studies—to evaluate integrated HIV and MNCH services, including processes and impact, particularly comparative assessments of integrated delivery of services versus nonintegrated delivery of the same services.
- **There is a lack of data on key outcomes**, such as health indicators (unintended pregnancies prevented, HIV positive births averted, increase/continuance in contraceptive use, etc.), reduction in stigma, cost-effectiveness, and trends in access to services.

POLICY CHALLENGES

- The lack of a clear, standardized definition of integration has hindered progress. Policy and technical guidance on integration refers variously to MNCH and HIV “synergies,” “linkages,” “convergence,” “mainstreaming,” and “integration,” with all of these terms referring to slightly different care delivery strategies.
- A related challenge is the wide range of services that potentially fall under the umbrella of MNCH, making it difficult to define the scope of linkages.
- There is no validated tool for reporting on the degree of service integration, making it difficult to state how integrated the services are at a specific site.
- Donors have expressed their interest in developing a series of measurements to capture reporting indicators on FP use and pregnancy.
- Poor representation of MNCH stakeholders in national HIV policy and coordination structures, such as national AIDS commissions and the Global Fund’s country coordinating mechanisms, reduces opportunities to develop integrated policies and programs.
- Long-term funding streams have contributed to the siloed provision of HIV and MNCH care, although newer strategies, such as the U.S. Global Health Initiative, have the potential to catalyze HIV and MNCH integration.⁸
- Recent funding trends show significant sums earmarked for HIV/AIDS, while funding for MNCH has declined in relative terms. Funding for HIV/AIDS rose from 3% of total development assistance for health (DAH) in 1990 to 26% of total DAH by 2008; in contrast, the share of funding for RH/MNCH fell from 17% in 1990 to 13% in 2008.²

NEXT STEPS

Integration for Impact (integration2012.org), an international conference in Nairobi, Kenya, will provide a picture of the current status of integrating MNCH, FP, and HIV services in sub-Saharan Africa. This meeting (see Box below for meeting hosts and sponsors) will help policymakers, program implementers, donors, and researchers to understand the current developments, practices, and latest evidence on integration.

The timing of the conference (September 12–14, 2012) corresponds with the planned dissemination date for two cluster randomized-controlled trials—a trial of integrating FP into HIV care and treatment, and a trial of integrating HIV services into the MCH clinic. Both trials were conducted in Kenya, by researchers from the Kenya Medical Research Institute (KEMRI) and the University of California, San Francisco (UCSF). The conference will provide an opportunity to discuss the scientific findings of these two trials, the policy implications of the findings, and other new study results.

Integration for Impact Conference

- Supported by the Bill & Melinda Gates Foundation and the World Health Organization.
- Co-hosted by the Bixby Center for Global Reproductive Health at the University of California, San Francisco; the Kenya Medical Research Institute; and the Kenyan Ministry of Public Health and Sanitation, Ministry of Medical Services, National AIDS and STI Control Program, and the Department of Reproductive Health.

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COMPETING INTERESTS

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