Linking family planning with HIV/AIDS interventions: a systematic review of the evidence

CRD summary
The authors concluded that interventions linking family planning and HIV (human immunodeficiency virus) services were generally considered feasible and effective, although the overall study quality was low. The review had some methodological problems, but the authors’ conclusions are suitably cautious and appear appropriate.

Authors’ objectives
To assess the effectiveness, optimal circumstances and best practices for strengthening the linkages between family planning and HIV (human immunodeficiency virus) interventions.

Searching
PubMed, EMBASE, and CINAHL were searched between 1st January 1990 and 31st December 2007 for articles in any language. Search terms were not reported. Reference lists of retrieved articles, 14 journals, other key documents, and websites were handsearched. Experts in the field were also contacted.

Study selection
Published studies of family planning HIV linkage interventions were eligible for inclusion. Family planning interventions were defined as contraceptive service/commodity provision, counselling and education. Studies on abortion were also considered. Published studies were restricted to those reporting post-intervention evaluation data, or pre/post or multi-arm comparisons of intervention versus control. Promising practices were restricted to studies (including grey literature) that presented evaluation data or lessons learned from family planning HIV-linkage interventions, or studies implementing the intervention in low or middle income countries. Studies of HIV services were excluded if they only included prevention, education, and/or condom provision linked with family planning.

The included studies considered six types of family planning-HIV linkage interventions: family planning services provided to voluntary counselling and testing clients; family planning and voluntary counselling and testing services provided to maternal and child health clients; family planning services provided to people living with HIV; family planning and HIV services provided by community health workers; voluntary counselling and testing provided to family planning clinic clients; and voluntary counselling and testing and family planning provided to women receiving post-abortion care. Included study designs were cross-sectional, randomised controlled trials (RCT), and pre-post studies. The outcomes reported included condom use, contraceptive use, uptake of HIV testing, quality of services, and cost.

The authors did not state how many reviewers performed study selection.

Assessment of study quality
Study quality was assessed using a 9-point scale adapted from HIV behavioural intervention studies that included factors relating to study design, randomisation, control of potential confounders and follow-up.

The authors did not state how many reviewers performed quality assessment.

Data extraction
Data were extracted on condom use, contraceptive use, uptake of HIV testing, quality of services and cost.

Two authors independently extracted data from the published studies, and one author, checked by a second author, extracted data for the promising practices studies.

Methods of synthesis
A narrative review was undertaken, grouping studies according to outcome reported. Interventions were categorised as
having a positive effect, mixed effect or negative effect.

**Results of the review**

Sixteen studies were included in the review: ten published studies and six promising practices. Sample sizes were not reported. Fourteen studies were conducted in low-income countries, mainly Africa, and two studies were conducted in Europe. The average quality score was 3.25 (range 1 to 8).

**Uptake of HIV testing** (three studies): All studies found positive effects of family planning HIV-linkage interventions on the uptake of HIV testing.

**Condom use** (four studies): One study found positive effects of family planning HIV-linkage interventions on condom use; three studies found mixed effects.

**Contraceptive use** (four studies): Two studies found positive effects of family planning HIV-linkage interventions on contraceptive use; two studies found mixed effects.

**Quality of services** (four studies): Three studies found positive effects of family planning HIV-linkage interventions on various measures of process; one study found mixed effects.

**Cost information**

Three studies reported cost data. One study reported an up-front investment of US dollars $5,000-7,000 per clinic for training. One study reported a cost of $351 per staff person trained. One study reported an annual cost of $2,157 per person-year for adding anti-retroviral treatment at two clinics.

**Authors’ conclusions**

Interventions linking family planning and HIV services were generally considered feasible and effective, although the overall study quality was low.

**CRD commentary**

Inclusion criteria for the review were broadly defined. Several relevant data sources were searched for both published and unpublished data, without language restrictions. Two authors independently undertook data extraction, which minimised error and bias, but it was not clear whether study selection and quality assessment were also conducted in duplicate.

The quality assessment was not based on a validated tool, but indicated the general poor quality of the included studies, which the authors acknowledged. Studies were narratively synthesised, which was appropriate.

The authors’ conclusions are suitably cautious and appear appropriate.

**Implications of the review for practice and research**

**Practice**: The authors did not state any implications for practice.

**Research**: The authors stated that more rigorously designed studies are needed. This would include direct comparison studies of linked versus unlinked services, random allocation of participants, more detailed data collection, and better reporting. They also stated that research should also aim to evaluate HIV incidence, sexually transmitted infection incidence, unintended pregnancies, stigma reduction, and cost-effectiveness of linked services.

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**Bibliographic details**
