STUDY SUMMARY

IMPACT OF STEPPING STONES ON INCIDENCE OF HIV, HSV-2 AND IPV IN RURAL SOUTH AFRICA

STUDY FINDINGS AT A GLANCE

This study evaluated the impact of Stepping Stones, a participatory group and community-based prevention programme, on sexual behaviours and sexual health outcomes— including HIV, Herpes Simplex Type 2 (HSV-2) and Intimate Partner Violence (IPV)—in rural villages in the Eastern Cape Province of South Africa. Villages were randomised to either receive the 50-hour intervention focusing on knowledge building, risk awareness, communication and critical reflection, or a 3-hour information session about HIV and safer sex.

This study found no evidence that the Stepping Stones intervention impacted HIV incidence, though incidence of laboratory-confirmed HSV-2 was reduced, as were self-reports of sexual risk behaviours among male participants, including lower levels of IPV perpetration. Female participants did not report fewer sexual risk behaviours nor lower levels of IPV victimisation.

BACKGROUND

Behaviour change is key strategy for HIV and IPV prevention. However, at the time of this study, limited attention had been paid to the development and rigorous evaluation of interventions for behaviour change. The impact of existing interventions had been mixed, and none had been shown to be effective in Sub-Saharan Africa.

Stepping Stones is probably the most widely used HIV and IPV prevention programme globally. While originally developed in rural Uganda, it has since been adapted for use in 100+ countries, diverse settings, and a wide variety of target populations. Its adaptations vary in fidelity to the original design and have not always been rigorously evaluated for impact. Prior to this study, outcome measures were limited to self-reported behaviours that were not supplemented by biological measures of HIV or other STIs.

This study describes the biggest stand-alone evaluation of the Stepping Stones programme. It was designed to evaluate the impact of one programme adaptation on sexual behaviours and health outcomes including IPV and laboratory-confirmed HIV and HSV-2 in a rural South African context.

CONTEXT

The study was set in a subsistence-farming region within 1.5 hours’ drive from the town of Mthatha in Eastern Cape Province, South Africa. The catchment area included 12 hospitals and many clinics. Households in this region are primarily supported by contributions from family members working elsewhere, grants, and pensions.

In this context:
- Baseline HIV prevalence was 11% in women and 2% in men.
- 44% of women reported IPV victimization – 24% physical only, 5% sexual only, and 10.5% both.
- 35% of men reported perpetrating IPV – 22% physical only, 3% sexual only, and 5% both.
- Transactional sex was highly prevalent among both men (27%) and women (22%).
- Other behavioural risk factors, such as multiple sexual partners, problematic drinking and drug use were highly prevalent among men, but not women, in these communities.
Stepping Stones was developed between 1993 and 1995, mainly in an interfaith, rural community in Uganda. It is a participatory HIV prevention programme focused on improving sexual and reproductive health knowledge, communication skills, and awareness of the influence of gender and gender dynamics on sexual health at the individual, interpersonal and community levels.

Stepping Stones begins with a public invitation to participate and it is delivered by trained facilitators to small, single-gender groups with a limited age range and similar life circumstances (typically: young women, young men, older women, older men). No special effort is made to recruit partners or people from the same family unit or intimate partnership.

The groups work through 13 facilitated, participant-led sessions in parallel, periodically coming together in three joint group sessions to compare experiences across genders and generations. Typically, there are also one to three opportunities for programme participants to present their reflections to the wider community and make action plans to resolve one or more identified issues. This amounts to about roughly 50-hours of programme content offered over 10-20 weeks.

Stepping Stones has been adapted for use in multiple diverse settings (e.g. schools, religious institutions, prisons) and various target populations.

In this South Africa adaptation (see diagram):

- Stepping Stones was implemented as 13 single-group sessions, three joint group sessions and one community meeting over 6-8 weeks. The control intervention was a single 3-hour session about HIV, safer sex and condoms derived from the larger Stepping Stones programme.
- Interventions were facilitated by project staff from Planned Parenthood Association of South Africa (PPASA). Those who delivered Stepping Stones attended a 3-week training session and facilitated two practice groups, before implementing the programme. Those delivering the control intervention were trained separately for four days.
- The intervention was only delivered to young women and young men with much more limited community engagement. These are key differences from the programme as originally designed and, as such, themes and outcomes related to inter-generational and community dialogue, broader norm change, and community action were not incorporated.
This study compared HIV, HSV-2, IPV and other behavioural risk factors among individuals who lived in communities randomised to receive Stepping Stones or a control intervention (a single 3-hour session about HIV, safer sex, and condoms).

With permission of key local figures, the study was explained to the wider community in a monthly community meeting. Project staff then conducted school visits to recruit young participants. Interventions were offered by trained facilitators to small groups in pre-randomised communities, mostly on school premises after school hours.

70 communities (64 villages & 6 townships) with a secondary school, >10 km from each other to minimize contamination between groups.

20 men & 20 women were recruited from each community, for a total of 1416 women & 1360 men (715 women & 694 men from communities randomised to receive the Stepping Stones programme). Planned eligibility criteria included: age 16-23, community resident, and sufficient maturity to consent. Actual age range was a bit wider, but the majority were 15-19. 9.8% of men & 6.3% of women had a primary partner in the study at baseline.

The study took place between 2003-2009. Participants were surveyed and had a blood test at 3 time points: baseline, 1 year, and 2 Years following the intervention. Stepping Stones was implemented over 6-8 weeks; the control intervention was implemented in a single session.

- Laboratory-confirmed HIV incidence and HSV-2 incidence.
- Self-reported IPV victimization and perpetration as well as other behavioural risk factors for HIV were also analysed and reported.
- Generalised linear mixed regression models were used to compare the adjusted incidence rate ratio for HIV, HSV-2 and prevalence of IPV and other behavioural risk factors between intervention and control clusters.

- 60% of Stepping Stones programme participants attended ≥75% of sessions and 26% attended all sessions offered in the 8-week intervention period; 66% of control participants attended the single session intervention. Those attending ≥75% of sessions did not differ from those with worse attendance by age, HIV status, SES, or number of partners.
- In terms of the data collection, 23% of study participants were lost at one year and 25% at two years. Follow up rates were similar in the intervention and control groups as well as to other, similar community trials.
- Participation in the Stepping Stones programme had no effect on the proportion of women reporting repeated incidents of physical or sexual IPV victimization in the previous year at either one or two years after the intervention. At both time points, ~30% fewer men participating in Stepping Stones reported repeated incidents of IPV perpetration in the previous year, but this effect did not reach statistical significance.

- Participation in the Stepping Stones programme had no effect on HIV incidence.
- 33% fewer new HSV-2 infections were observed among Stepping Stones programme participants. This translates to about 35 new infections prevented over a two-year period per 1000 programme participants.

### Biological Outcomes 2 Years Post-Intervention

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV</td>
<td>-5%</td>
</tr>
<tr>
<td>HSV</td>
<td>33%</td>
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A higher proportion of women who participated in the Stepping Stones programme reported transactional sex at one year, but not at two years after the intervention. Other behavioural outcomes among women were not impacted.

Men who participated in the Stepping Stones programme reported fewer HIV risk behaviours; however very few effects were statistically significant or consistent over time. At one year, these men were less likely to report transactional sex or problem drinking. At two years, a lower proportion of men reported more than one incident of IPV perpetration.

IMPLICATIONS FOR POLICY, PROGRAMMING AND/OR RESEARCH

- Participation in the Stepping Stones programme did not reduce new HIV infections, but did reduce new HSV-2 infections and had a positive impact on some behavioural risk factors in a high-risk, Sub-Saharan African context.
- Men’s reports of IPV and other behavioural risk factors were more impacted than women’s. This could be due to reporting differences, but qualitative findings suggest that differences in agency and control play also play a role. In this context, women may be less able to act on new knowledge or utilise new strategies. Authors suggest pairing Stepping Stones with other, more structural interventions to better enable change.
- The adaptation used in this context differs from the original Stepping Stones programme as it did not include older adults in the community or multiple groups as per the original design. The impact of the full programme may have therefore been different in this context.
- It is possible that targeting similar aged men and women may have reduced effectiveness in a context with large age differences between partners. Recent research suggests that approximately 36% of relationships among South African youth have an age gap of 5+ years.
- Because the Stepping Stones programme is designed to be tailored to the needs and realities of the participants, generalising the results of a given workshop to other contexts is challenging.
- Behavioural effects were not consistent or sustained over time. Stepping Stones is intended to be part of a long-term process of norm change. Policies and programmes that hope to reduce HIV, IPV and/or other behavioural risk factors for negative sexual and reproductive health outcomes using Stepping Stones should consider the need for multiple, repeated or on-going sessions and organized efforts to enable broader diffusion.
- The study had several limitations including:
  - Randomising before recruitment, which may have impacted who was willing to participate;
  - Issues related to the reliability of people's reports about their own behaviours and experiences. This may be particularly pertinent to reports of “improved” behaviour by men as social desirability bias, or the desire for approval, may have been a strong incentive to report behaviour in line with researchers’ goals; and
  - Limited power to detect differences in low-prevalence outcomes between groups (e.g. HIV among men, substance use among women).
- For more insights on lessons learned for programming from Stepping Stones, see the Prevention Collaborative's Programme Brief on the Stepping Stones intervention.

SOURCE DOCUMENTS


OTHER REFERENCES


The Prevention Collaborative works to strengthen the ability of key actors to deliver cutting edge violence prevention interventions informed by research-based evidence, practice-based learning and feminist principles. For more information go to www.prevention-collaborative.org

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