

Knowledge, Attitudes, and Perceptions regarding Sexual and Reproductive Health among Adolescents in Bihar, India: Findings from an Adolescent-Led Peer Education Project

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Significance / Background

- The **Government of India is committed to supporting adolescent health and development** needs and does so through the Rashtriya Kishor Swasthya Karyakram (RKSK) program.
- The RKSK program aims to **ensure universal health coverage of essential services** (nutrition, sexual and reproductive health, mental health, injuries and violence, substance abuse, and noncommunicable diseases) **for adolescents aged 10 to 19** via clinical and community-based interventions.
- EngenderHealth's **TARUNYA project supports the sexual and reproductive health (SRH) component** of RKSK in the Sitamarhi district of Bihar, including through **identifying and training peer educators to facilitate group meetings, adolescent health days, and adolescent-friendly health clinics.**

Main Question / Hypothesis

- We hypothesized that supporting RKSK intervention strategies at individual and community levels using a **peer-led approach** would be effective in **increasing accurate knowledge and perceptions of SRH issues among adolescents aged 15 to 19 years.**
- Our study aimed to (1) examine changes in the **knowledge, attitudes, and perceptions** regarding SRH and (2) **identify the levers** of the project interventions responsible for such change.



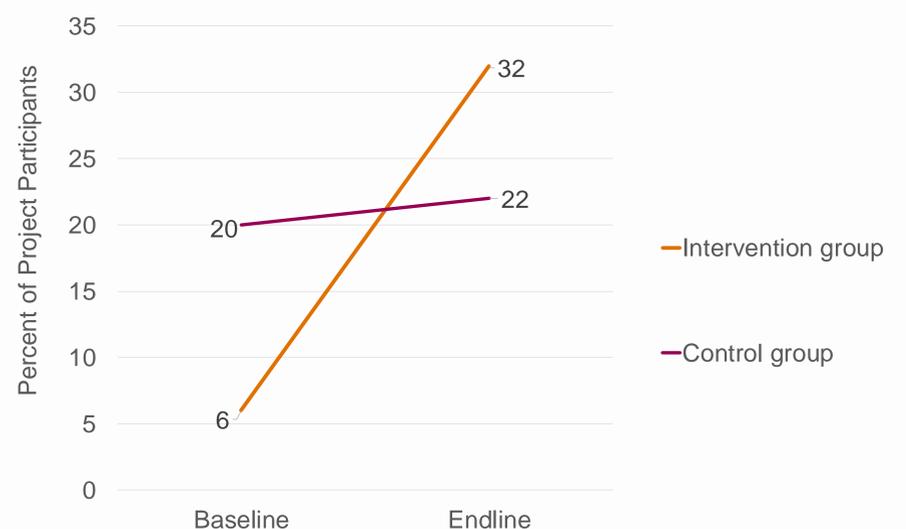
Methodology

- We implemented a two-armed, pre-post, quasi-experimental design to **examine the impact of the community-based peer education intervention.**
- We implemented **two rounds** (time 1: August 2019 and time 2: October 2020) of **population-level cross-sectional surveys** across 17 blocks of the Sitamarhi district.
- Our target population included adolescents aged 15 to 19, selected from intervention areas and control areas, and we used a **knowledge and perception metric** defined as correct responses to all the domain-specific questions.
- Our analysis included unadjusted summary statistics, bivariate analyses in the form of chi squares to **assess differences across demographics**, and project input variables at time 1 and time 2 by intervention group. We conducted a regression-adjusted difference-indifference model and implemented logistic regression models constructed with time, type of intervention, and time by type of intervention. We completed statistical analyses using STATA version 16.0.

Results / Key Findings

- We recruited an almost equal number of boys and girls in both survey rounds. The mean age of survey participants ranged from 17.1 years for boys to 17.8 years for girls (the mean age of the overall sample from both rounds was 17.4 ±1.0 years). A total of 10% of respondents from both rounds reported doing paid work in past 12 months.
- Findings suggest **positive change** across survey rounds **in all knowledge- and perception-based questions around SRH issues.** Absolute percent-point change in the knowledge questions around SRH issues between time 1 and time 2 ranged from 6% to 32% in intervention blocks. The difference-in-difference analysis showed a net impact change of 24% ($p < 0.05$) in the adolescent correct knowledge metric.
- Findings from the **perception-based questions** suggest an absolute percent-point change ranging from **12% to 40%.** The net impact change in the correct perception metric was 32% ($p < 0.05$).
- Adjusted multiple logistic regression analyses indicated that the increase over time in correct knowledge and perceptions of SRH issues among adolescents from intervention groups was greater than the nonintervention group. Respondents who had **interacted with peer educators had significantly higher correct knowledge of SRH issues** compared to those who did not interact with peer educators (adjusted odds ratio: 4.8, 95% confidence interval: 2.1–8.6). Similarly, **respondents who were aware of adolescent-friendly health clinics had significantly greater odds of practicing better menstrual hygiene management** than those who were unaware (adjusted odds ratio: 3.1, 95% confidence interval: 2.3–9.5).

Percentage Increase between Baseline and Endline in Correct Knowledge and Positive Perceptions of SRH Issues



Examples of improved knowledge:

- Knows where to obtain contraceptives
- Aware of HIV and AIDS
- Knows signs and symptoms of sexually transmitted infections
- Knows the recommended interval between a live birth and subsequent pregnancy is at least 6 months

Knowledge Contribution

- Peer-led interventions** at the individual and community levels can be effective in **increasing accurate knowledge and perceptions of SRH issues among adolescents** aged 15 to 19 in the Sitamarhi district.
- Different project interventions, such as peer interactions and awareness of the adolescent-friendly health clinics, positively affected adolescents' correct understanding and awareness of SRH issues.
- Community mobilization** may be an effective way to **create a positive enabling environment for adolescent SRH**, including in support of demand generation and quality service provision.
- Further research is required** to understand how an adolescent-led peer education program may contribute to SRH-related behavior changes building upon the improved knowledge and awareness among adolescents.

