Across the developing world, adolescents only recently have been recognized as a distinct group with needs that differ from those of adults or children. In India, the health needs and rights of adolescent girls, particularly those who are unmarried, are inadequately addressed. Social norms and restrictions deprive adolescents of access to information about their rights and their bodies, leaving them unable to make informed reproductive health choices.

Swaasthya conducted sexual behavior research among unmarried adolescents in Tigri, Delhi between July 1996 and December 1997 in response to requests from adolescents to address their needs. Based on research findings, an intervention study was undertaken to develop, implement and evaluate a community-based program that used a life skills approach to improve adolescents’ reproductive and sexual health and decision-making skills in Tigri, a poor migrant area in Delhi. The life skills approach was successful on several fronts.

Evaluation Methodology and Findings
Swaasthya undertook two cross-sectional surveys of unmarried girls (ages 12-22); one survey at the beginning of the intervention (S1) and another 18 months later (S2). For each survey, a different sample of the same size (401) was drawn using a simple random sampling technique. In both S1 and S2, data were collected on social and demographic variables and on two final outcomes of interest: self-determination, defined as adolescents’ perception of their ability to participate in marriage decisions; and menstrual hygiene behavior. Swaasthya also was interested in three intermediate outcomes: (1) knowledge of reproductive and sexual health; (2) perceptions of support from key gatekeepers such as mothers-in-law for information and access to reproductive health services; and (3) an improvement in girls’ positive perspective on life. In S2, questions on exposure to the Swaasthya interventions were included. Bivariate and multivariate analysis assessed the effect of Swaasthya interventions on outcomes. Qualitative data included focus group discussions and in-depth interviews.

Effect of girls' intervention participation on reproductive knowledge, support perceptions and life perspective: The intermediate outcomes as defined above improved for the unmarried girls who participated in Swaasthya's program, though the degree of impact varied by outcome and by intervention element. Participation in a skills-building module was the most consistently effective for the intermediate outcomes, though the Swaasthya didi (community field worker), who helped educate and disseminate information to girls, also was quite effective. Unmarried girls who participated in the social support group networks experienced improvements in their reproductive and sexual health knowledge but not in their support perceptions or life perspectives.

**Figure 2: Effect of Swaasthya Interventions on Outcomes**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Self-determination</th>
<th>Menstrual Hygiene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swaasthya didi</td>
<td>1.76*</td>
<td>1.60*</td>
</tr>
<tr>
<td>Skills-building module</td>
<td>7.51*</td>
<td>1.99</td>
</tr>
<tr>
<td>Social support</td>
<td>0.33*</td>
<td>0.70</td>
</tr>
<tr>
<td>Gatekeeper support</td>
<td>1.66*</td>
<td>3.95**</td>
</tr>
<tr>
<td>Reproductive and sexual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health knowledge</td>
<td>3.60**</td>
<td>2.13**</td>
</tr>
<tr>
<td>Positive perspective</td>
<td>1.34*</td>
<td>0.90</td>
</tr>
</tbody>
</table>

N=401   *p<0.05   **p<0.001
Logistic regression, odds adjusted for age and education
Source: Swaasthya-ICRW

Effect of intervention and intermediate variables on changes in girls' perceived self-determination and menstrual hygiene behavior: Changes in girls' perceived self-determination and menstrual hygiene behavior varied based on their specific intervention participation and whether they experienced improvements in their reproductive health knowledge, support perceptions and life perspective. On the whole, interpersonal communication with girls and building their knowledge were critical for determining changes in both behavior (menstrual hygiene) and self-determination, while more normative and skills-building inputs were important for girls' perceived self-
determination but not their behavior. As such, Swaasthya didi exposure, gatekeeper support and knowledge of reproductive and sexual health were significant determinants of both the attitudinal outcome (perceived self-determination) and the behavioral outcome (improved menstrual hygiene).

Although participating in the skills-building module and having a positive perspective were associated with girls' improved self-determination, they were not associated with girls' improved menstrual hygiene. Follow-up qualitative interviews with girls who attended the skills-building module showed that this module was particularly effective in strengthening girls' negotiation skills on issues such as marriage. Finally, social support showed mixed results, which need to be further investigated.

“When I developed a friendship with one boy…my father started hitting me. Then I talked confidently to my father… the way I answered my father was possible only due to skills-building module training… I even told my father… your daughter also has some wishes like the choice of partner.”

Unmarried adolescent girl, skills-building module participant

Building Life Skills to Improve Adolescent Girls' Reproductive and Sexual Health, Tigri, Delhi (1998-2001)

Objective: Enhance the reproductive health and decision-making abilities of adolescent girls by using a participatory, community-development approach.

Structure:
- Skills-building modules included a set of seven training modules to build girls' understanding of self and increase their capacities and life skills to deal with real-life situations in both social and health spheres.
- Communication-education package disseminated information through interpersonal communication with trained Swaasthya field workers (didi) and indigenous videos aired on local television.
- Social support created support networks for the girls by forming women's and adolescent community groups that met monthly to increase understanding between mothers and daughters.

Target group: Unmarried girls, ages 12-22.

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About Swaasthya and ICRW's Adolescent Reproductive Health Program in India

Swaasthya is a nongovernmental organization that works in urban slums and poor areas in Delhi, India, with adolescent girls and adult women. The 1998-2001 intervention study co-funded by the MacArthur Foundation and the Ford Foundation was part of a broader multi-partner program, led by the International Center for Research on Women (ICRW), aimed at improving girls' reproductive and sexual health. That research program, the Adolescent Reproductive Health Program in India, was funded by the Rockefeller Foundation.