Starting in 2011, the Alexandria Regional Centre for Women’s Health and Development implemented a two-year program, “Reproductive Health Awareness Program Among Female Youth in Secondary Schools in Alexandria.” The program’s goal was to raise awareness about the needs of adolescent girls for age-appropriate reproductive health (RH) information and to identify the existing gaps in the school system for meeting such needs.

Ten secondary schools in Alexandria Governorate were randomly selected to participate. The program included research components—both qualitative and quantitative—and an intervention to assess the impact of school-based RH education on the knowledge and attitudes of adolescent girls. The program began by collecting data on the knowledge and attitudes of teachers, school doctors, and social workers through focus group sessions; the goal of this qualitative research was to identify the barriers these professionals face and ways to strengthen their potential role in communicating RH information to girls. The key findings from this part of the program were presented in Minding the Gap: Talking to Girls in Schools about Reproductive Health, published online in 2012 by the Population Reference Bureau in both English and Arabic (www.prb.org).

This article covers the segment of the program dealing with the RH intervention and the quantitative research that accompanied it. The data gathered show that the school-based RH education program was effective in increasing knowledge and improving attitudes among girls about RH (see Figure 1). For example, following the training, girls were more likely to accurately identify the signs of puberty and agree that “understanding how sexually transmitted infections (STIs) are contracted and prevented is important for health.”

Figure 1
Changes in Scores Measuring Knowledge and Attitudes Before and After Reproductive Health Training

Knowledge Change

<table>
<thead>
<tr>
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<th>Before Training</th>
<th>After Training</th>
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<tr>
<td></td>
<td>13</td>
<td>21</td>
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<tr>
<td>Attitude Change</td>
<td>8</td>
<td>7</td>
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NOTE: Total possible score for knowledge change was 23; for attitude change it was 8.

MAY M. TAWFIK participated in a joint PRB-Alexandria Regional Centre for Women’s Health and Development (ARC) training on policy communication held at ARC’s headquarters in Alexandria in November 2012. She is research and training specialist at ARC. Assisted by PRB staff, Ms. Tawfiq and her colleague Omneya Galal El-Sharkawy (research specialist) took the lead in preparing this article. The policy communication training and the production of this article were funded by the Ford Foundation office in Cairo. Ms. Tawfiq can be reached at maytawfik79@yahoo.com and Ms. El-Sharkawy at monygalal@gmail.com.
Importance of School-Based Reproductive Health Education

Adolescents, often termed the “generation of hope,” play a vital role in the health status of any country. Their behaviors, attitudes, and beliefs are shaping the societies of the future. Thus, it is imperative to promote healthy practices during adolescence and to prepare them for the transition to adulthood. In Egypt, however, health education is weak and the public school curriculum offers little to educate students about health in general and about reproductive health in particular. This represents a missed opportunity for the country, since the great majority of adolescents in Egypt are enrolled in school.

Evidence from both developed and developing countries shows the importance of sexual and reproductive health education programs in improving the overall health of young people and preparing them for their transition to adulthood. Youth are often reluctant to ask elders for details about sexuality, fearing that questions might raise suspicions of illicit activity. Elders, on the other hand, may wish to discuss sexuality with young people but are not equipped to do so. The end result is that young people are left in the dark and lack access to reliable information. If unaddressed, this situation can put the health and well-being of adolescents at risk.

Schools are a safe place for adolescents to learn about RH matters in age-appropriate ways. The Alexandria Centre’s Reproductive Health Awareness Program Among Female Youth in Secondary Schools in Alexandria, funded by the Ford Foundation office in Cairo, is an important step toward understanding the need for improved RH awareness among female adolescents and helping build evidence for how best to meet such a need.

The School-Based Intervention

The school-based intervention consisted of a 16-week training program (two sessions per week) and two rounds of qualitative research, which involved surveying 2,000 female students about their RH knowledge and attitudes. Girls were similar in age, school grade, and socioeconomic background. To assess the training program’s impact, they were asked to answer the same questionnaire before and after the training.

QUESTIONNAIRE DEVELOPMENT

The questionnaire was developed to adequately collect the needed data from both the pre- and post-intervention phases of the project. It was self-administered by participants and completed on site. In a pilot assessment, the questionnaire was tested to identify the average time required to complete it, any ambiguous questions, difficulties respondents faced during completion, any potential data collection problems, and respondents’ perceptions and attitudes toward the topic.

The questionnaire consisted of 42 close-ended questions (multiple choice or true and false) designed to explore the girls’ source of RH information, their preferred information sources, their previous experience (if any) in attending RH training, their interest in increasing their RH knowledge, and their perception of the consequences of increasing their knowledge about RH and STIs, including HIV. At the end of the questionnaire, the students were asked to agree or disagree with statements that measured their RH knowledge and attitudes; eight questions assessed attitudes and 23 assessed knowledge.

COLLECTING BASELINE DATA

From each of the 10 secondary schools participating in the program, 200 girls enrolled in the first year were selected to participate in the study. The information gathered on their knowledge and their attitudes before the intervention was used as the baseline.

Before the training, more than three-quarters of the respondents (77 percent) said that they knew little or nothing about RH. Only 4 percent reported they knew a lot about RH, and only 16 percent had ever attended a RH training. When the students were asked if they wanted to receive RH information, the great majority (four in five) responded positively, expressing their desire to know more. They preferred to receive RH information mainly through discussion sessions, followed by formal training (see Figure 2). When girls were asked about the consequences of increasing their knowledge about RH, STIs, and HIV, two-thirds...
(67 percent) said it would prepare them to be better wives and mothers, and one-quarter (27 percent) said that it was their right to know. Only one in 10 said that increased knowledge could lead them to risky behaviors.

DEVELOPING THE CURRICULUM

A RH curriculum was developed by experts, informed by the data gathered from the girls. It covered the following topics:

- Basic knowledge and information on adolescent girls and puberty.
- Adolescent girls' future role as adult women.
- Health issues affecting adolescent girls, including nutrition, exercise, smoking, STIs, and risky behaviors.
- Female genital mutilation.

Teachers were trained to lead the sessions and a variety of different materials were used in the training, including slide presentations, handouts, pamphlets, posters, classroom exercises, and flip charts.

SCORING AND RESULTS

Correct answers were each given a score of 1 and incorrect answers were given 0. Scores for a respondent’s RH knowledge could range from 0 to 23, and for RH attitudes from 0 to 8, reflecting the number of questions in each of these categories. The averages were calculated before and after the intervention (see Figure 1, page 1).

The results indicated that the intervention was effective and significantly improved girls’ reproductive health knowledge and attitudes. Their average score for RH knowledge increased from 13 (pretest) to 21 (post-test), and their average scores on attitudes increased from 5 before the training to 7 after. These results show that the RH training succeeded in increasing girls’ overall RH knowledge by 60 percent and improving their attitudes by 46 percent.

Conclusions

The Alexandria study shows that adolescent girls in Egypt believe they know too little about RH, want to know more, and welcome RH education that is part of school curricula. The study also showed that school-based RH education can be effective and significantly improve girls’ RH knowledge and attitudes—important for protecting their health and well-being as they grow older, take on responsibilities as adults, and form families of their own.

PRB’s Middle East and North Africa (MENA) Program

PRB’s MENA program, initiated in 2001 with funding from the Ford Foundation, responds to the region’s need for timely and objective information on population, socioeconomic, and reproductive health issues. The project explores the linkages among these issues and provides evidence-based policy and program recommendations for decisionmakers in the region. Working closely with research organizations in the region, the project team produces a series of policy briefs (in English and Arabic) on current population and reproductive health topics, conducts workshops on policy communication, and makes presentations at regional and international conferences.

In 2008, PRB invited researchers from the MENA region to participate in its summer policy communication workshop. Later, PRB and Assiut University, Egypt, held joint policy communication workshops in Assiut (December 2009) and in Hurghada (October 2011). In addition, PRB held a workshop in Alexandria (November 2012) in collaboration with the Alexandria Regional Centre for Women’s Health and Development and two workshops in Cairo (March and September 2012) in collaboration with the United Nations Fund for Population Activities, Arab States Regional Office. The workshops (conducted in English) helped researchers identify the policy implications of their research findings, understand how research can influence the policy process, and communicate findings. Selected participants from the workshops summarized their research findings as part of PRB’s MENA Working Paper Series. The papers are available in English and Arabic at www.prb.org.

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