EVALUATION ABSTRACT

The Evaluation of the Pono Choices Pregnancy and STI Prevention Program in Hawai'i

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Intervention Name
Pono Choices

Intervention Description
Pono Choices is a program that seeks to provide adolescents with the knowledge, attitudes, and skills necessary to reduce their risk of sexually transmitted infections (STIs) and unintended pregnancy. It incorporates medically accurate information, character education, and the traditions and practices of the Hawaiian host culture. Pono Choices is delivered in group sessions to 7th- and 8th-grade middle school students (ages 11–13) as part of the regular middle school health curriculum. Pono Choices is a 9.5-hour program made up of 10 modules. It can be delivered on a flexible schedule (from one to five times per week), depending on the schedule of the implementation site. Because classes and bell schedules vary greatly across school sites, the curriculum was constructed to be delivered across varied numbers of sessions, as long as all 9.5 hours of content are delivered continuously, in sequential order and all activities are covered within a semester.

Pono Choices program content covers the following topics:

- Setting long- and short-term goals
- Identifying characteristics of healthy and unhealthy relationships
- How to communicate effectively
- Making good decisions about one's sexual health
- Knowledge of how STIs are transmitted and prevented
- Knowledge of birth control methods, including abstinence
- Hormonal and barrier birth control methods
- Knowledge of refusal skills, and application of refusal skills through scenarios
- Knowledge of correct condom use, through a teacher and student demonstration

The program contains a scripted teacher/facilitator curriculum manual and teacher/facilitator program kit that includes PowerPoint presentations, videotapes and audio recordings, student workbooks, and other materials needed for each lesson.

Counterfactual
Business as usual.

Counterfactual Description
The counterfactual condition in control group schools is the business-as-usual sexual health instruction that takes place in regular 7th- and 8th-grade health classes. The state of Hawai'i does not use a standard sexual health curriculum across schools, and the Hawai‘i Department of Education does not specify a level of dosage. Classes range from one or two sessions to six weeks of classes or, occasionally, sessions scattered throughout the semester. The department does not clearly specify program content. Topics covered may include reproductive anatomy, pregnancy prevention, STI prevention, refusal skills, and condom demonstration.

Primary Research Question(s)
What is the impact of Pono Choices, relative to business as usual, on engagement in high-risk sexual behavior (defined as intercourse with neither condom nor effective method of birth control) among youth as measured 1 year after baseline?

Additional Outcomes
Reduction in the initiation of sexual activity, increased knowledge of pregnancy and STI prevention, improved attitudes toward healthy sexual behavior, increased skills in managing relationships and choices, increased intention to engage in safe-sex behavior.

Sample
The sample consisted of 36 randomly assigned middle schools. All public regular and public charter middle schools in Hawai‘i were eligible to participate, except those that included 6th grade (which were being considered for another study). In the first year of the project (Fall 2011), 19 schools were recruited and randomly assigned. In May 2012, an additional 17 schools were recruited and randomly assigned. Of the 36 schools recruited and randomized into treatment and control groups, 34 participated in the study. Prior to random assignment, each participating school identified one health teacher to participate. In schools where the participating teacher taught more than two periods of sexual health, the first two classes of students were enrolled in the study.

The target sample for impact analyses was defined as all students who were enrolled in the target health education classes in study schools from Spring 2012 to Spring 2013 whose parents consented to their participation in the study. The study included 1,783 students across three semester cohorts.

Setting
The study was conducted in middle schools across the state of Hawai‘i on O‘ahu, Maui, Hawai‘i, Kaua‘i, and Moloka‘i islands.

Research Design
The evaluation of Pono Choices uses a cluster random assignment design in which schools are the unit of random assignment and students within schools are the unit of analysis. Schools were assigned using restricted randomization, in which schools were blocked or stratified to ensure that the resulting allocation of schools in the treatment and control groups was balanced in the number of schools and key school characteristics. The two school characteristics used as stratification criteria were: (1) public regular versus public charter school and (2) island. The basic analytic approach to impact analyses uses an intent-to-treat model to draw statistical inferences on the effects of a randomized offer of Pono Choices on student outcomes.

Students in participating sexual health classes were asked to have their parents provide consent and were asked to assent before completing a baseline survey prior to beginning the sexual health curriculum. Random assignment occurred before the parent consent process so that teachers in treatment schools could be trained in delivering the curriculum before the beginning of the semester. However, parents were not informed of the schools' treatment status before their consent to participate was obtained.

Data collection included assessments of the fidelity of implementation using facilitator logs and independent observations, as well as baseline, 1-year post baseline follow-up surveys of students. Student surveys were collected in person in group administrations, using a consistent script across schools. When students could not participate in group administration, individual surveys were administered by mail with telephone, email, and repeat mail follow-ups. In addition, program staff interviewed teachers at the end of the semester for feedback on the curriculum (from the program schools) or information on business as usual (from control schools).

Impact Findings

The study did not find a statistically significant impact on engagement in high-risk sexual behavior 1 year after baseline (defined as intercourse with neither condom nor effective method of birth control). The study also did not find a statistically significant impact on the initiation of sexual activity 1 year after baseline. Exploratory analyses found that the treatment group students scored statistically significantly higher than the control group on the knowledge assessment about pregnancy and STI prevention 1 year after baseline. No significant effects were found on other non-behavioral measures of skills, attitude or intention.

Implementation Findings

The Pono Choices program was implemented with high fidelity and quality. Teachers completed 98 percent of intended activities across all three semesters of implementation, and a comparison of teachers' reports vs. observer assessment showed 98 percent concurrence. Ninety-eight percent of students completed at least 75 percent of the curriculum and the average attendance was 94 percent across all three semester cohorts. From 128 classroom observations (22% of total lessons), the average quality rating was 4.25 on a scale of 1 to 5, where 5 is excellent. The average student engagement score was 4.6 on a scale of 1 to 5, where 5 is excellent. The percentage of lessons with a student engagement score of 4.0 or higher was 84 percent.

Schedule/Timeline

Three semester cohorts of the students (Spring 2012, Fall 2012, and Spring 2013 cohorts) were enrolled in the study. The intervention period began in January 2012 with the Spring 2012 cohort and ended in June 2013 with the Spring 2013 cohort. The 1-year follow-up data collection began in January 2013 and ended in June 2014.