

# Positive Choices Abstinence Education Longitudinal Program: Year 2 Results

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## Introduction

The overall goal of Positive Choices is to reduce sexual activity, sexually transmitted diseases, pregnancies, and births in teenagers residing in Lucas County. The purpose is to provide teenagers with accurate information and practical skills related to the social, psychological, and health gains of abstaining from sexual activity until marriage. The target population of Positive Choices is one cohort of 523 students, from three Toledo Public Schools, who were followed from seventh through tenth grade. The targeted districts were chosen based on high-risk student populations, high minority representation, and some of the highest teen pregnancy rates in Lucas County. Students assigned to the in-school abstinence program received eight hours of abstinence education sessions and were invited to participate in summer and after-school programs. The purpose of this evaluation was to determine the short and long-term effectiveness of the program by comparing students' norms, attitudes, self-efficacy, intentions to abstain from sexual behavior until marriage, and their self-report of past and current sexual behavior related to group assignment and amount of intervention received.

## Methods

This evaluation is a longitudinal quasi-experimental cohort study to assess the increased effectiveness of yearly in-school abstinence education from seventh through tenth grade compared to those students not receiving this education. Approximately one-half of the students receive abstinence education each year and one-half do not (comparison group) assigned by classroom. The study received Institutional Review Board approval from St. Vincent Mercy Medical Center before enrolling subjects and has obtained annual renewals.

In addition to using the Core Evaluation instruments designed by OAPP, additional questions were used to assess information directly related to this study's hypotheses. The hypotheses are that after participating in the in school abstinence program the students' norms about abstinence, attitudes, self-efficacy in refusing sex, and intentions to abstain will be more favorable when compared to their scores before participation and to those not receiving the abstinence education. Students who receive abstinence education yearly will be more likely to abstain from sexual intercourse compared to students who had the education inconsistently or not at all. Those students who attend after school and summer programming will have more favorable results.

The evaluator used repeated measures analyses of variance with abstinence education assignment as a between factor and attendance as a between factor covariate to assess the effect of the abstinence intervention on students' norms, attitudes, self-efficacy, and intentions to abstain from sexual behavior. Chi-square analysis was used to assess the effect of in-school abstinence education on students' refraining from having intercourse during the previous two months and logistic regression was used to include in-school attendance as a covariate.

## **Results**

During the first year descriptive information was available from 510 seventh graders with an average age of 13.0, 48.4% boys, and 47.3% African American/black. 460 students took the pretest and 428 the post-test with 353 taking both assessments; approximately 50% of the students were designated to the intervention and control groups respectively. The cohort of 523 changed in year two with an additional 139 students in the three schools and the loss of 190 students from year one; 333 students participated in the study both years.

The hypotheses related to the amount of hours of interventions and type of intervention (in-school, after school) impacting norms about abstinence, attitudes about abstinence, intentions to avoid having sex, and self efficacy in refusing sex were all non-significant in repeated measures ANOVA comparing differences between the intervention (N = 152) and control (N = 155) groups. All students responding to whether they had sex during the previous two months on the post-test, were compared for the effect of abstinence education: 16.3% (N = 28) of those taking abstinence education reported having sex during that period, while 19.3% (N = 35) in the control group reported having sex, a non-significant difference between groups ( $X^2 = 0.56$ ,  $P > .45$ ). For most outcome variables, similar non-significant results were discovered that incorporated the first two years of the data collection. A significant time by abstinence group interaction was evident only for the attitude toward remaining abstinent variable. Further post hoc analyses indicated that this was due to a significant attitudinal change across time for students who had received abstinence education during both years. Year 3 results will be included in the poster.

## **Discussion**

The sample size each year was approximately two-thirds of those originally anticipated due to inaccurate class lists, frequent relocation, and large absenteeism. In order to account for the attrition, new students or those previously absent for pre/post testing will be included in the study. Plans to impute missing data from students may be a key in the continued analysis. The results obtained from comparing the abstinence-educated and control students on the norms, attitudes, self-efficacy, and intentions to avoid sexual activity did not follow the preliminary positive results in the first year. The intervention and comparison groups are determined through assignment of classrooms within the same school and same grade. The lack of significant results in comparison of the two groups could be from cross contamination.

## **Implications**

The involvement of parents is critical to implementation of a successful abstinence education program. This requires flexible, creative engagement strategies. Home visits to obtain informed consent/assent also provide an opportunity for the educators to develop relationships with the parents and engage them in the work for abstinence until marriage. Abstinence until marriage education is effective even in the most violent, crime ridden schools with gang activity, low retention, and alcohol and drug use if it is culturally appropriate, taught by educators who are experienced and able to develop personal relationships with the youth. For the work to be effective, it requires intensive interventions over time, including mentoring.

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