EVALUATION ABSTRACT: NEED TO KNOW (N2K)

Grantee

The University of Texas Health Science Center at San Antonio, Department of Obstetrics and Gynecology

Principal Investigator: Kristen Plastino, M.D., plastino@uthscsa.edu

Evaluator

The University of Texas Health Science Center at San Antonio, Department of Epidemiology and Biostatistics

Jonathan Gelfond, M.D., Ph.D. gelfondjal@uthscsa.edu;

Nicole A. Dierschke, M.P.H. dierschken@uthscsa.edu

Intervention Name

Need to Know (N2K)

Intervention Description

The N2K program is a 3-year intervention consisting of 48 lessons (8 lessons per semester) designed for 9th-, 10th-, and 11th-grade students to be delivered in a group or classroom setting of up to 32 students. Each lesson lasts 25 minutes and can be taught in any typical class period. For the purpose of the evaluation, N2K was taught in core subjects (English and social studies). The lessons were taught by health educators who were selected and trained by the program developer and not by the classroom teacher or other school staff.

The program consists of the N2K curriculum, which differs across three grades and was developed by the Department of Obstetrics/Gynecology at the University of Texas Health Science Center at San Antonio School of Medicine. The 9th-grade course, N2K: Basics, encourages self-discovery and goal-setting and discusses human growth and development, adolescent risk behaviors, communication, sexually transmitted diseases (STDs), abstinence, contraceptives, teen dating violence, legal issues, responsible media use, refusal skills, and role-playing. The 10th-grade curriculum, N2K: Decisions, focuses on decision-making skills, clarifies values, promotes healthy relationships and the benefits of delaying sex, and reviews anatomy, contraceptives, STDs, and legal issues. In addition to the classroom lessons, N2K: Decisions offers 11 so-called webisodes that add narrative to the basic facts presented in class. Webisode 1 is viewed together during class, and students can view the additional webisodes online. Health educators refer to characters or situations from the webisodes to enhance students' understanding of concepts taught in the classroom. The 11th-grade curriculum, N2K: Relationships, reinforces the basic concepts taught in 9th and 10th grades.

In addition, a social media component consists of four Facebook posts per lesson, which are intended to enrich, reinforce, or answer a frequently asked question. There is also a teen advisory board (TAB) consisting of a subset of 10 to 30 teens who are nominated or volunteered and commit for at least one year. The TAB meets at least eight times per year to provide input on how to promote the N2K curriculum and they function as campus ambassadors. Lastly, parent–child interaction is encouraged during the parent–student night, held once per year at the beginning of the second semester on each campus. Health educators, assisted by the TAB members, present medical information regarding adolescent brain development, STDs, and pregnancy prevention during the 90-minute event.

Counterfactual

Business as usual.

Counterfactual Description

The counterfactual condition involves no specific program. The N2K program supplements the standard health education at the two high schools where the study occurs. Health class is available to both

treatment and comparison students but is not a requirement for graduation, and the content varies by teacher. In the absence of N2K, there is no systematic or regular sex education or pregnancy prevention instruction.

Primary Research Question(s)

At program completion, what is the impact of Need to Know on sexual initiation (vaginal intercourse) among virgins at baseline?

At program completion, what is the impact of Need to Know on engagement in risky sexual behavior for the full analytical sample?

Sample

Two high schools within the same South Texas school district were selected because they met the following criteria: large size, demographically diverse student population, interest in providing the intervention, and lack of participation in any other evidence-based sex education program during the intervention period.

Students were eligible for the evaluation sample if they were first-time 9th graders in the fall of their enrollment year. Students were excluded from the evaluation sample if they were enrolled in the LifeSkills class, which included students who were severely developmentally challenged and not mainstreamed in the core classes in which the program was taught. The final enrolled sample size was 856 for the treatment group and 761 for the comparison group. The analytical samples used to answer the primary research questions were 392 (314 virgins) treatment and 392 (314 virgins) comparison students, after propensity score matching.

Setting

The evaluation occurred in two South Texas high schools where there is no requirement for health class before graduation. At study start (2011), these two schools enrolled 3,455 and 2,229 students. In the school district in which the intervention took place, 63.9% of students were characterized as economically disadvantaged and 81.7% were characterized as minority (51.5% Hispanic, 24.8% African American, and 5.4% other minorities). The class of 2011 graduation rate for this district was 80.9 %, compared with a statewide graduation rate of 85.9%.

Research Design

This is a quasi-experimental design evaluation, with subsequent cohorts of students from two high schools in the same school district serving as the treatment and comparison groups. The comparison group was enrolled as 9th-grade students in fall 2011; the treatment group was enrolled in fall 2012. The N2K program was implemented for three years to the treatment group, beginning in fall 2012 and ending in spring 2015.

Every effort was made to consent all eligible 9th-grade students for the treatment and comparison cohorts, and a similar process was used for both the treatment and comparison groups. Written parental consent was required for participation. During the consenting process, parents and students were blind to the cohort's treatment status. Parents were mailed letters describing the evaluation and consent forms in July before their child's 9th-grade year. The study team recruited students for the evaluation during 9th-grade registration events in August and all parent open houses. In-school announcements, school visits, and telephone calls to parents were used to recruit students and remind parents to return consent forms. Teachers were provided with $25 gift card incentives and written reminders to assist in collecting signed consents from students. Consents were accepted until the baseline survey was administered approximately three weeks into the school year.

The baseline survey was administered at the beginning of the 9th-grade year for the treatment and comparison cohorts. For the treatment cohort, the baseline survey was administered before the start of N2K. For the purposes of the impact analysis, surveys were administered for both groups in the spring of their 9th-, 10th-, and 11th-grade years. The primary research questions for the study will be addressed using the final survey administered at the end of 11th grade.

Impact Findings

There was no evidence that N2K impacted the primary outcomes of sexual initiation or engagement in risky sexual behavior at program completion. There were no treatment effects detected at intermittent time points (after 1 year or after 2 years).

Implementation Findings

The same four health educators implemented 48 N2K lessons over the 3-year program in two high schools. There were no unplanned adaptations to program content or setting for program delivery; unplanned adaptations in program delivery were rare. Overall, the reported and observed fidelity for adherence to curriculum standards and quality of interactions and engagement with the program was consistently high throughout the implementation period. Attendance for the analytical sample was also very high across the three years of implementation. There were no observable external events that affected program implementation, and there was no other teen pregnancy prevention program occurring during the implementation period at either of the two schools.

Schedule/Timeline

Sample enrollment ended at the time of baseline survey, about three weeks into the start of the school year for the comparison group (fall 2011) and three weeks into the start of the school year for the treatment group (fall 2012). The 3-year program conducted follow-up data collection in the spring of 2012, 2013, 2014 and 2015.