

Enhanced Healthy Generations Program

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Introduction

The District of Columbia has the highest rate in the nation of births to teenage mothers. It also has among the highest rates of infant mortality, low birth weight infants, single parent homes and children living in poverty (Casey Foundation 2004).

Healthy Generations, at Children's National Medical Center, provides comprehensive primary health care for adolescent parents and their children through a multidisciplinary approach. The goals of the Healthy Generations program are (1) to reduce rapid repeat pregnancies and increase responsible sexual behavior among adolescent parents, (2) to increase access to health care for adolescent mothers and fathers and their children. Current OAPP funding has enabled Healthy Generations to implement and evaluate a supplemental intervention, based on the principles and techniques of Motivational Interviewing, for adolescent mothers 19 years of age and under with a child under 12 months of age.

The supplemental intervention has three main components: (1) enhanced case management services that incorporate seven motivational interviewing sessions which focus on goal setting, decision-making and support of healthy behaviors; (2) mental health assessments for all adolescent mothers, and home-based mental health services for those mothers and their families in need of such services; and (3) enhanced outreach to increase father and family involvement in clinic visits and in child care. The evaluation will assess the program's implementation of each component and compare outcomes for teens enrolled in the supplemental services as compared to those receiving only standard clinic-based services.

We propose three evaluation hypotheses, closely tied to the program-identified goals: (1) We hypothesize that compared to the control group; the intervention group will have significantly improved health and developmental outcomes.

Specifically the intervention group will have improved adherence to medical appointments, immunization rates, completion of EPSDT requirements, and improved availability to community services. (2) We hypothesize that, compared to controls, the intervention group will have significantly lower repeat pregnancy and birth rates at 12 and 24 months following the index child's birth. Specifically, the intervention group will be more motivated to avoid a repeat birth, more likely to work toward school completion, more likely to use condoms consistently, more likely to use consistent hormonal contraception, and more likely to use high quality primary care in the two years following the birth of the index child.

(3) We hypothesize that, compared to controls, the intervention group will be more likely to have improved mental health scores; and will have increased family support and adolescent father involvement. Specifically, adolescent fathers and/or other family members of teens in the intervention group will be more likely to attend primary care visits and be involved in mental health interventions. Further, compared to controls, the intervention group will be more likely to receive consistent mental health treatment.

Methods

Study Design

The evaluation is a randomized controlled trial. Recruitment is the same for all eligible teens and random assignment should result in a control group that is similar to the intervention group in terms of demographics and baseline characteristics. The control group does not receive the enhanced program services, but is still eligible to receive the standard Generations clinic-based services.

Recruitment and Data Collection

Adolescent mothers 19 years of age or younger, with a child who is 12 months of age or younger, are eligible to participate in the study. Potential participants are recruited by the Healthy Generations research assistant during regular clinic visits. The research assistant visits those mothers who express an interest in participation in their homes. They complete an informed consent and assent (for adolescent mothers under age 18 the consent is completed by the mother's parent or guardian), and then complete the baseline interview. After the baseline interview, the mothers are randomly assigned to either the intervention or control group. The research assistant completes follow-up interviews at 6 months, 12 months, and 24 months post-baseline. This study has been approved and is monitored by the Institutional Review Board at Children's National Medical Center.

Interviews include the "AFL Care Programs Core Questionnaire for Parenting Clients" as well as other assessments of demographic information, maternal life course and wellbeing, family relationships, partner relationships, parenting, and access to care. In addition, clinic medical records are reviewed so data on patient adherence to medical appointments and immunization protocol as well as EPSDT completion, STD diagnosis, repeat pregnancy and birth can be documented.

Data Analysis

The analysis will have five aspects: 1) assessing the baseline comparability of the study groups, 2) measuring intervention implementation, 3) assessing overall program impact on outcomes, 4) testing the role of hypothesized mediators

(proximal outcomes) in achievement of distal outcomes, and 5) testing the role of baseline family attributes and fidelity of implementation to impact.

Results

Because the study is only midway through data collection, it is too early to conduct the analyses detailed above. At this stage, preliminary data analysis offers an early description of our sample at baseline, and of services received by our intervention group. Through 9/24/08, 97 mothers were enrolled in the study and were randomized into the intervention or control group. Of these, 48 were enrolled in the intervention group, and 49 were in the control group. Demographic characteristics reported here are for the full sample (N = 97), and were collected at baseline, prior to the beginning of the 3 supplemental intervention. However, most were already obtaining Healthy Generations clinic-based services. Of the full sample, 66% reported using contraception (including Norplant, Depo Provera, pill/patch, IUD, and/or condoms). Forty-eight percent (48%) reported being in a relationship with the father of their child, defined as married, cohabitating, or dating. Forty percent (40%) of mothers scored above the clinical cutoff for depression, and of those with a current partner, 3% reported domestic violence. At the time of the interview, 72% of mothers were currently in school or had graduated from high school, and 11% reported being employed.

Across the 48 intervention group participants, there have, to date, been 169 medical appointments, 294 case management contacts, 122 mental health contacts, 149 outreach contacts, and 185 completed Motivational Interviewing sessions. To date, only 27 of the intervention group mothers (56%) have completed at least one of the Motivational Interviewing sessions. Of the 48 mothers in the intervention group, 25 (52%) have received 2 or more mental health sessions with the Healthy Generations Mental Health Provider. An additional 4 (9%) have had one session. Our limited sample size at this stage precludes analyses of statistical significance to test baseline differences between intervention and control group participants, or between participants and nonparticipants on baseline characteristics. Such tests will be included in final analyses.

Discussion

Preliminary analysis of our baseline sample indicates high rates of depression among mothers participating in our study. Consistent with this finding, the majority of participants have received some mental health intervention. Unfortunately, our mental health provider left the program in June, and our new provider was not able to start with the program until September. This gap in staff accounts in large part for the lower than anticipated numbers of participants who have received mental health services. Our new mental health provider is now meeting and assessing all study mothers when they come to clinic, and participating in the MI sessions for those mothers in the intervention group. Approximately two-thirds of the mothers are using a reliable form of contraception, and just under half are in a relationship with the father of their infant. Rates of reported domestic violence are low. Rates of educational participation are high, but rates of employment are low, perhaps because so many mothers are in school.

Implications

While clinical reports indicate that many intervention group mothers are enjoying the Motivational Interviewing sessions, the data indicate that many others have not begun them. This finding is consistent with results from previous Healthy Generations studies as well as many other published studies of interventions with this population which indicate that adolescent mothers, as a group, are extremely difficult to engage in regular intervention. We continue to use a number of strategies to engage mothers while also trying to respect their wishes to be left alone.

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