

OBSERVATIONS

Pathobiology of Prediabetes in a Biracial Cohort (POP-ABC): Retention Strategies

The Pathobiology of Prediabetes in a Biracial Cohort (POP-ABC) study is a prospective evaluation of incident prediabetes among African American and Caucasian offspring of parents with type 2 diabetes (1). Recruitment occurred over 3.4 years, with metabolic assessments during 2.1–5.5 years of quarterly follow-up. In studies that offer lifestyle intervention or medication, the potential health benefit is a strong motivation for retention (2,3). However, there is limited information on strategies for retaining healthy subjects in long-term observational studies requiring frequent, extensive metabolic assessments. This report describes retention strategies used among the 376 subjects (217 African Americans and 159 Caucasians) enrolled in the POP-ABC study.

Anticipating known retention threats (4,5), our strategies focused on participant motivation, amelioration of barriers related to clinic visit logistics, and community-building activities. All participants received clear written directions (including a map) to the research center and a free parking space ahead of scheduled visits. The quarterly clinic visits were scheduled in a flexible manner within a 4-week window, and participants received reminder telephone calls. The repeated metabolic assessments (1), usually in the fasting state, which varied in length and complexity, also posed retention threats. Therefore, the assessments were staggered across visits based on the duration and complexity of the interventions, and meals were provided. To recognize their contribution, a Certificate of Appreciation was awarded to participants after the hyperinsulinemic-euglycemic clamp procedure, the lengthiest assessment in the study (1).

Community-building initiatives included the publication of a bimonthly newsletter; distribution of T-shirts, baseball hats, and diaries bearing the study logo and insignia; maintenance of a study

website; commemoration of participants' birthdays and other milestones; holiday greeting cards; and an annual retention retreat. Each newsletter had a motivational message from the principal investigator and a personal essay written by a study participant, in addition to other pertinent study-related news items. Community building was further consolidated during annual half-day retention retreats, during which study participants received motivational messages from the investigators and peers. The retreats also featured a breakout poster session, during which the investigators presented and explained selected posters from interim study results that have been presented at recent scientific meetings.

Furthermore, annotated, signed copies of all laboratory results were sent to each participant, a practice that was greatly appreciated. Finally, procedures were developed for identifying out-of-window participants and triaging them to a graded hierarchy of dropout prevention and recovery processes. Table 1 summarizes some of the retention strategies used in the POP-ABC study.

With these comprehensive strategies, retention rate in POP-ABC was >90% during a period spanning 5.5 years. Of the 376 participants, 9 women who became pregnant took temporary leave from the study (the study protocol permitted reenrollment 12 months after delivery), 4 subjects died of causes unrelated to the study, 7 subjects relocated (of whom 3 commuted for annual assessments), and 26 withdrew consent or were lost to follow-up. Thus, a multifaceted approach was effective in achieving a high retention rate among healthy African

Americans and Caucasians enrolled in the POP-ABC longitudinal observational study.

SOTONTE EBENIBO, MBBS, MPH
CHIMAROKÉ EDEOGA, MBBS, MPH
ANN AMMONS, BS

NONSO EGBUONU, MBBS

SAMUEL DAGOGO-JACK, MD, FRCP
FOR THE PATHOBIOLOGY OF PREDIABETES IN A
BIRACIAL COHORT (POP-ABC) RESEARCH
GROUP

From the Division of Endocrinology, Diabetes and Metabolism, Department of Medicine, University of Tennessee Health Science Center, Memphis, Tennessee.

Corresponding author: Samuel Dagogo-Jack, sdj@uthsc.edu.

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S.E., C.E., and A.A. collected data and reviewed and revised the manuscript. N.E. collected data and reviewed the manuscript. S.D.-J. was the principal investigator, developed the study concept and design, and wrote the manuscript. S.D.-J. is the guarantor of this work and, as such, had full access to all the data

Table 1—Retention initiatives used in the POP-ABC study

Convenient scheduling and staggering of metabolic assessments
Clear written directions and a map to the research center
Convenient and free parking arrangements
Presentation of Certificate of Appreciation at the end of the clamp procedure
Community-building initiatives
Distribution of T-shirts and baseball hats bearing the study logo and phone number
Distribution of tote bags bearing the study logo and phone number
Recognition of birthdays and milestones with greeting cards signed by investigators
Distribution of customized holiday cards signed by investigators
Maintenance of a study website at www.uthsc.edu/endocrinology/prediabetes.php
Sending get well cards, sympathy cards, and flowers during illness or bereavement in the family
Publication and distribution of bimonthly newsletter, with a guest column written by a study participant
Distribution of pocket diaries for noting scheduled visits
Recognition of longevity in the study and enrollment anniversaries
Holding of the annual retention retreats and poster sessions on study progress reports

in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.



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