

Outcomes of Dissemination and Implementation of a Lay Health-delivered Intervention with African-American Churches

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Background

- ❖ Health disparities among African Americans (AAs) in the Southeast are extreme. Poor dietary intake and limited physical activity are two behavioral factors contributing to observed disparities. Community-ready, evidence-based interventions with trusted partners are needed to address disparities.
- ❖ Dissemination and Implementation of a Diet and Activity Community Trial In Churches (DIDACTIC) is a community-engaged project with African-American churches to implement a lay health educator (LHE)-delivered, evidence-based, diet and physical activity intervention, consisting of 12 weekly sessions and 9 monthly booster sessions over one-year. The intervention – Healthy Eating and Active Living in the Spirit (HEALS) – was developed with and for the African-American faith community and tested in a randomized controlled trial previously. (Figure 1)

The purpose of the study was to examine preliminary outcomes of the dissemination and implementation phase of the HEALS intervention.

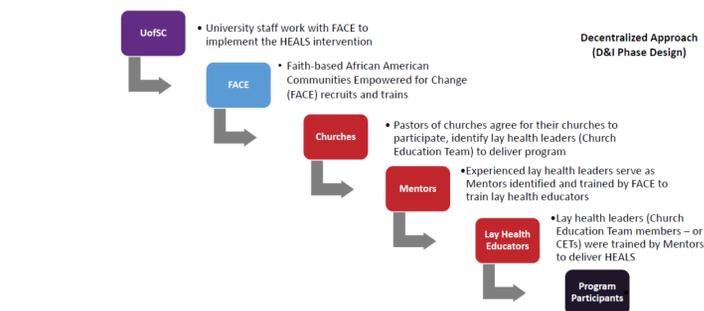


Figure 1. HEALS Intervention Delivery

Methods

- ❖ HEALS intervention enrollment has been completed and has exceeded goals. (Figure 2)
 - ❖ Thirty-four churches were enrolled on a rolling basis (27 active, 7 dropped)
 - ❖ 18 Mentors (10 active, 8 dropped)
 - ❖ ~3 LHEs (n=91) per church
 - ❖ 742 participants
- ❖ Through seven waves of implementation, 259 participants completed pre-, 12-week post, and 1-year post-intervention questionnaires (e.g., diet and physical activity behaviors, psychosocial factors, health history) and had anthropometric assessments (e.g., blood pressure, waist-to-hip, BMI).
- ❖ Data were managed in Access[®] 2010 and analyzed using SAS[®] 9.4.

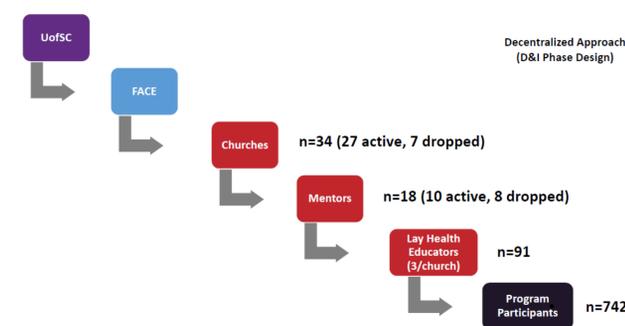


Figure 2. HEALS Intervention Enrollment

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Results

- ❖ Table 1 shows preliminary results for the main outcomes of the intervention.
- ❖ Mean BMI and mean waist-to-hip ratio remained relatively stable across all three time points while mean systolic blood pressure (BP) decreased slightly (143/81 mm Hg to 140/81 mm Hg) from the first to third time point.
- ❖ There were mean increases in aerobic exercise and in strength and flexibility scores from baseline to the second time point, and slight decreases at the third time point.
- ❖ Dietary data were inconclusive. Fruits and vegetables consumption as measured by stage of change did not demonstrate any movement. The majority of participants were in the contemplation or preparation stages across all three time points.
- ❖ Preliminary intervention satisfaction data showed that 60% of participants reported the intervention to be very helpful, 69% were very satisfied with intervention delivery, and 95% would recommend the intervention to others.

Table 1. Preliminary Results: Main Outcomes

	Time Point 1	Time Point 2	Time Point 3
BMI (kg/m ²)	34.60 (7.85 SD)	34.53 (7.94 SD)	34.67 (10.20 SD)
Systolic BP (mm Hg)	143.31 (20.31 SD)	140.73 (19.81 SD)	139.79 (20.68 SD)
Diastolic BP (mm Hg)	80.76 (11.45 SD)	79.90 (11.98 SD)	80.70 (11.78 SD)
Waist-to-Hip Ratio	0.90 (0.08 SD)	0.89 (0.07 SD)	0.90 (0.07 SD)
Aerobic (RAPA)	3.89 (1.23 SD)	4.43 (0.85 SD)	4.36 (0.99 SD)
Strength and Flexibility (RAPA)	0.86 (1.15)	1.58 (1.22 SD)	1.51 (1.23 SD)
Fruits & Vegetables Stage of Change	Contemplation and Preparation	Contemplation and Preparation	Contemplation and Preparation

Implications for D&I Research

- ❖ Preliminary results showed marginally positive changes in systolic blood pressure but no other observable improvements.
- ❖ Participants reported modest satisfaction with the LHE-delivery in church settings.
- ❖ Accumulating data from additional waves will inform future dissemination.
- ❖ Process and outcome evaluation continue as the current dissemination and implementation phase continues through early 2018.
- ❖ Additional evaluation will be critical to understanding the application of a more decentralized approach to implementation.