

Comparative Effectiveness of Diabetes Self-Management Education Interventions for Marshallese Type 2 Diabetes Patients: A Randomized Controlled Trial

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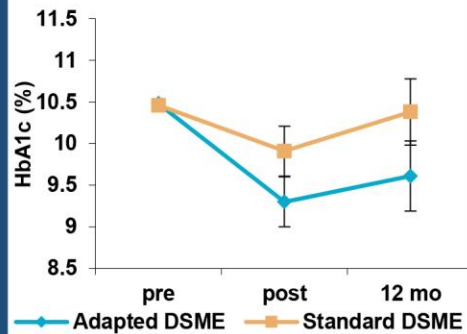
INTRO

- Marshallese Pacific Islanders in Arkansas experience extremely high rates of T2D and face multiple barriers to self-care
- Prior DSME studies failed to document changes in HbA1c among Marshallese

METHODS

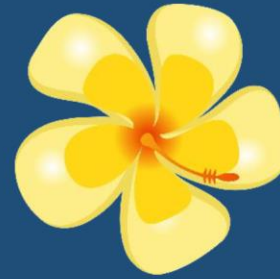
1. A culturally-adapted DSME that included participants' family members was developed and compared with standard DSME in a randomized controlled trial
2. Participants (n=221) were randomized and provided data at pre-intervention, post-intervention, 6 months, and 12 months
3. Data were analyzed via linear mixed effects regression models, adjusting for baseline covariates

RESULTS



DISCUSSION

- The reductions in HbA1c for the adapted DSME are likely to be clinically meaningful
- Results highlight the importance of family and culture in disease management



Marshallese participants receiving culturally-adapted DSME with family showed significant reductions in mean HbA1c at 12 months compared with those receiving standard DSME.



Scan the QR code or visit doi.org/10.2337/dc18-1985 to download the published article

STRENGTHS

- Community engagement throughout the entire research process
- High participant retention at 12 months post-intervention (78%)
- Results remained robust after multiple imputation of missing data
- First RCT ever conducted with a Marshallese community
- First DSME with Marshallese to document success reducing HbA1c

WEAKNESSES

- Only conducted with Marshallese in Arkansas, limiting generalizability
- Unique effects of specific adaptations (cultural adaptation, delivery language, inclusion of family) could not be separated
- No data gathered past 12 months
- Subgroup analysis based on baseline HbA1c was not conducted
- Cost-effectiveness data not gathered

Mean HbA1c (%) at each time point, by study arm (after adjusting for baseline covariates)

HbA1c	Adapted DSME	Standard DSME	P value
Pre	10.48	10.46	0.955
Post	9.30	9.91	0.038
6 mo	9.81	10.26	0.139
12 mo	9.61	10.38	0.013

DESCRIPTION OF THE ADAPTED DSME

- Family members attended sessions
- Lessons delivered by a Marshallese community health worker
- Utilized "talk story" as a culturally preferred way of sharing knowledge
- Collective interviewing and family goal setting
- Used analogies common to Pacific Islander culture
- Used culturally-specific concepts