

Texas Dance for Health: An Upstream Older Adult Health Intervention

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Benefits of Dance

- Incorporates all aspects of physical fitness: aerobic, strength, flexibility, and agility
- Improves cardiorespiratory endurance, muscular strength and endurance, balance, and walking distance
- Integrates movement, music, and social interaction
- Improves emotional wellbeing

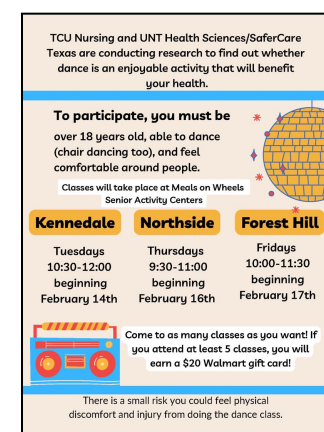
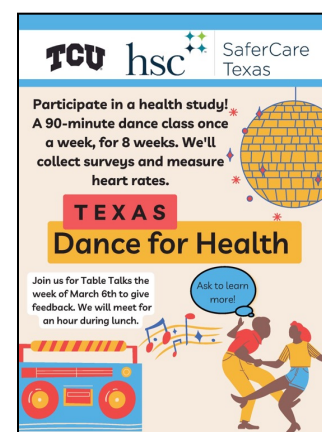
Dance and Diabetes

- Primary prevention: Prevent diabetes onset
- Secondary prevention: Address pre-diabetes and diabetes early to halt progression
- Tertiary prevention: Lesson or manage complications

Preventing or delaying diabetes and its complications improves quality and years of life and lowers health care costs

Purpose

- Plan and implement 8-week pilot of Texas Dance for Health
- Evaluate mixed methods with RE-AIM framework



Sample

Overall Demographics (n=105)

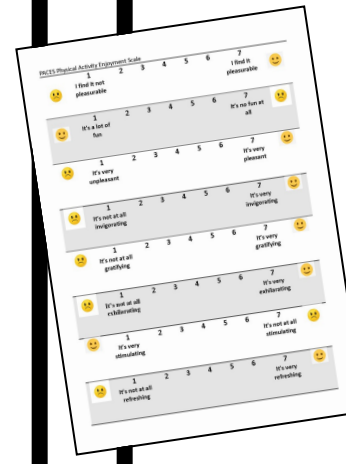
- Black/African American (25%), White (73%), Asian (2%)
- Hispanic (57%)
- Mean age 73.9 years; range 53 to 97 years

Subsample Demographics (n=50)

- Completed high school or higher (88%)
- Living with diabetes or pre-diabetes (50%)
- Household income below poverty (48%)

Methods

- Collaborated with three Meals on Wheels Adult Activity Centers
- Centers provided space and helped recruit participants
- Dance offered weekly at each site before lunch
- Participants dance standing and/or sitting in chair
- Quantitative data collected weekly (HR, PACES)
- Qualitative data collected (Table Talks) Weeks 4 and 8
- Research team made observations and field notes
- Participants attending \geq five classes received \$20 Walmart gift card



Measures

Maximum Heart Rate (max HR)

- Target HR for moderate intensity activity ~ 50 to 75% of max HR

Physical Activity Enjoyment Scale (PACES)

- Five-point Likert scale (1=strongly disagree to 5=strongly agree)
- Reliable and valid in adult samples; requires < 5 minutes to complete

Table Talks (Qualitative)

Conversations at Weeks 4 and 8 to explore participants' perceptions of exertion, learning, enjoyment, and sustained behavior change.

Table Talk Themes and Exemplars

Content analysis of Table Talks transcripts revealed three themes of wellbeing: **Physical**, **emotional**, and **social**

It also makes you feel better on the inside; it gives you a good self esteem about yourself

My coordination is really hard, I could finally get on track and pace to do it. I didn't know I could do it in the chair to learn moves

I like dancing compared to walking because I get to move all my muscles. I feel more energized.

It elevates the mood. It elevates your ability to bring in oxygen and hydrate yourself. The movement itself is healthy for the body as well as the spirit.

When you are with people and you have friends around you, that motivates you more and that gets everyone involved and keeps you involved

It is better because some of us do not always talk to other persons. We do not always laugh but now we laugh together, not at each other, but with each other.



RE-AIM	Measures	Results
Reach	<ul style="list-style-type: none"> • Attendance 	<ul style="list-style-type: none"> • 23.8% attended all 8 classes • 41.9% attended 5 to 7 classes • 81.1% attended 3 or more classes
Effectiveness	<ul style="list-style-type: none"> • % participants reaching > 50% max HR • Mean score PACES • Participant feedback during Table Talks, Weeks 4 and 8 	<ul style="list-style-type: none"> • Across 8-week program, 68-84% participants reached > 50% max HR • Week 8, mean PACES = 6.7 (of 7) • Content analysis of Table Talks revealed three themes: Positive physical, emotional, and social wellbeing
Adoption	<ul style="list-style-type: none"> • Engagement and participation of participating Centers 	<ul style="list-style-type: none"> • Center staff assisted with interpretation and translation, promoted program on activity calendars and reminded participants, welcomed new guests
Implementation	<ul style="list-style-type: none"> • Logistics: marketing, scheduling, activity class administration • Cost: time and resources 	<ul style="list-style-type: none"> • Senior Adult Activity Centers marketed and provided space for Dance for Health • Estimated cost \$5,000
Maintenance	<ul style="list-style-type: none"> • Sustainability beyond pilot 	<ul style="list-style-type: none"> • Dance instructors paid > market rate as sustainability incentive • Participants asked for program to continue • Community partners agreed to support program into summer

Diabetes Care & Education Specialists: Key Takeaways

1. Dance for Health provided a fun physical activity that did not “feel” like exercise
2. Dance for Health catalyzed foundational relationships within a community on which to scaffold other healthy lifestyle interventions
3. Dance for Health was feasible in terms of logistics and costs

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