



Strategies for Effective Pedometer Use in Hispanic Adults

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Background

- Physical activity is an important aspect of diabetes self-management and prevention of type 2 diabetes (T2DM).
- Hispanic adults are likely to be inactive and not participate in regular physical activity or leisure time activity.
- Diabetes prevalence among Hispanic adults is 22.6% compared to 11.3% of non-Hispanic adults.
- Hispanic adults prefer walking as their form of exercise.
- Pedometers have been identified as a low literacy and motivational tool to promote physical activity.

Purpose and Sample

To describe methods used to promote pedometer use and identify strategies to overcome barriers to pedometer use among Hispanic adults with and without T2DM learned from conducting 8 week long diabetes education interventions with Hispanics with T2DM and their family members.

- Sample 182 Hispanic Adults
- 61% with T2DM
- 63% Female & Average age 45 years

Pedometer Selection

After consultation with a PhD prepared exercise physiologist and review of validity and reliability data that Omron HJ-112 pedometer was chosen. Considerations were:

- Ease of use: size, visual display, retrieval modes
- Memory retention: 7 days
- Accuracy
- Modes: Steps, kcal
- Participants not able to clear out or omit data purposely or inadvertently
- Ability to secure pedometer to clothing
- Availability and cost of pedometers and batteries

Modalities to Promote Use

- Information presented by a bilingual and bicultural Latina research assistant.
- Visual aids such as PowerPoints, hands on demonstration of proper pedometer placement, use of pedometer buttons.
- Explained the concept of “steps” and it’s correlation to physical activity.
- Self-monitoring: encouraged participants to monitor their daily number of steps to increase their physical activity.
- Friendly weekly phone call reminders to ask about pedometer concerns and remind participants to bring their pedometer to the next weekly session.
- Encouraged participants to track their weekly progress of number of steps.



Barriers to Use

Reasons reported for low step count or failure to wear pedometer included:

- “Pedometer does not work” or “count correctly”
- “I don’t like to wear it”
- “Wearing a pedometer is embarrassing”
- “Don’t wear because it falls off”
- “Forgot to wear it”
- “Don’t wear it at work because afraid it will break”
- “Don’t wear it on days I don’t exercise”

Overcoming Barriers

Planning for functionality issues:

- Battery replacement prior to beginning each group intervention
- Keep extra pedometers on hand in case of loss or breakage
- Keep extra attachment clips available
- Assess pedometers for wear and tear and replace as needed
- Friendly weekly phone call reminders
- Reassurance that participants cannot harm the pedometer by touching buttons

Reinforce pedometer use education throughout the program

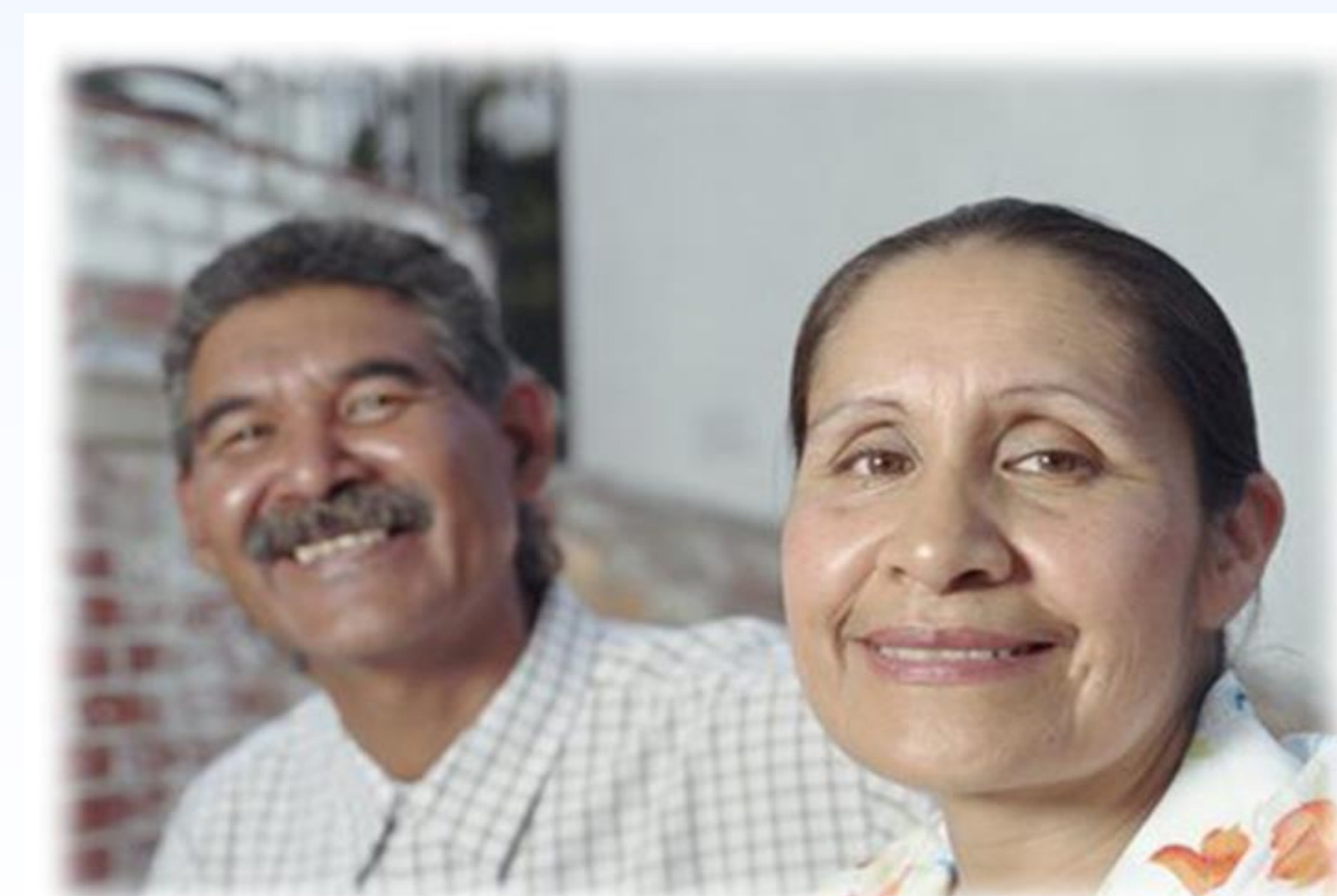
Develop individualized strategies for pedometer placement. For example:

- Encourage Hispanic women who wore dresses to wear a belt or dress with pockets
- Suggested inconspicuous methods for people too embarrassed to wear a pedometer

Seeking support/ accountability to family members to wear pedometers

Behavioral Strategies to promote physical activity:

- Encourage self-monitoring
- Focusing on success for positive reinforcement
- Follow up prompts

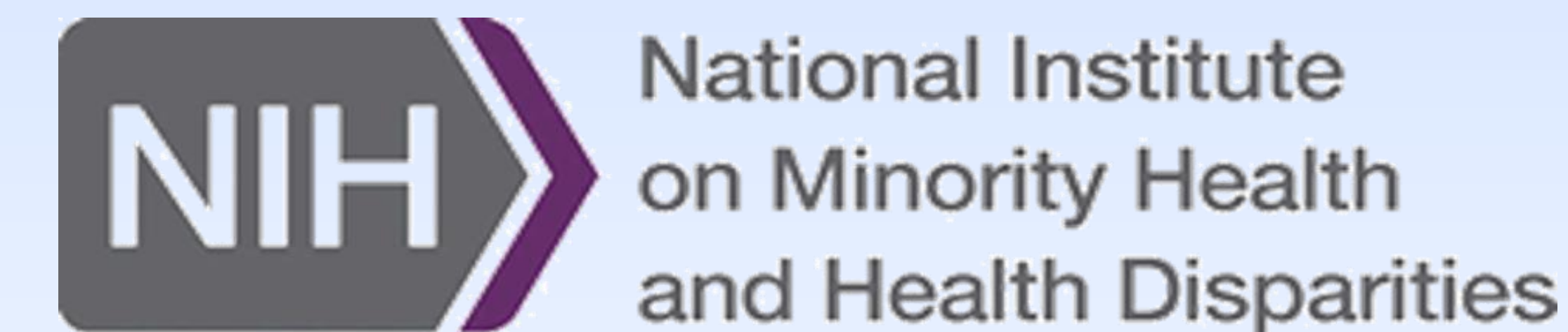


Conclusions & Implications

- Pedometers can be used to motivate Hispanic adults with and without T2DM to be more physically active.
- Multiple modes of education and behavioral strategies are helpful such as:
 - Showing them their progression of steps
 - Friendly reminders
 - Providing reassurance
- Researchers, nurses, public health officials can utilize the lessons learned here to inform future research studies or lifestyle behavioral programs using pedometers.

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