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

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 on days I don’t exercise"
- "Don’t wear it on days I don’t exercise"

Barriers to Use

Modalities to Promote Use

- Information presented by a bilingual and bicultural Latina research assistant.
- Visual aids such as PowerPoint, 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.

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 keep pedometer to the next weekly session.
- Use appropriate pedometer included:
- Steps, kcal
- Facilitate participants to track their weekly progress
- Distracted participants to track their weekly progress
- Follow up prompts

Overcoming Barriers

- 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
  - Favor 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 the 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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References