What Can I Eat? Healthy Choices for People with Type 2 Diabetes

Cultural Adaptation of a Diabetes Nutrition Education Program for American Indian and Alaska Native Adults with Type 2 Diabetes

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Speaker Disclosure

No conflicts of interest to disclose
Learner Objectives

As a result of attending this session, attendees will be able to:

1. Describe the American Diabetes Association’s “What Can I Eat?” diabetes nutrition education program
2. Describe key findings being used to adapt an existing diabetes nutrition education program for the unique needs of American Indian/Alaska Native (AI/AN) adults with type 2 diabetes
Project Overview

• Collaboration between American Diabetes Association (ADA) and Shakopee Mdewakanton Sioux Community of Minnesota

• Adapt existing diabetes nutrition education program for American Indian/Alaska Native (AI/AN) adults with type 2 diabetes (T2D)
Need for AI/AN Version of a Diabetes Nutrition Education Program

• AI/AN populations suffer disproportionately from obesity, T2D, and food insecurity than general US population
• Limited access to registered dietitians (RDs)
• Scarcity of culturally tailored nutrition education programs for AI/ANs, especially for AI/ANs who do not receive care in the Indian Health system
• Need for culturally-tailored and evidence-based approaches, resources, and programs
Project Timeline

Year 1 - Planning
- Qualitative focus groups and interviews with key stakeholders
- Health literacy and graphic design review
- Recommendations for program adaptation

Year 2 - Development and Pilot
- Program development
- Training pilot site educators
- Pilot at 6 collaborating sites

Year 3 - Pilot and Evaluation
- Complete pilot at 6 collaborating sites
- Process and outcomes evaluation
- Redesign as needed and finalize program
Original “What Can I Eat?” Program

- Existing program, developed by the American Diabetes Association, is entitled “What Can I Eat? Healthy Choices for People with Type 2 Diabetes”
- Includes five 90-minute, interactive, nutrition-specific, diabetes education lessons led by registered dietitian
- Aim to answer the most common question people with diabetes ask their registered dietitian “What Can I Eat?”
- Complements Diabetes Self-Management Education and Support (DSMES) programs
Original “What Can I Eat?” Program

Lessons include

• Interactive diabetes nutrition education learning activity
• Physical activity
• “Me time” activity
• Peer-to-peer learning opportunities
• Family member involvement
• Goal setting
Original “What Can I Eat?” Program

Lesson topics

• Managing healthy eating in social and emotional situations
• Basic diabetes nutrition education (carbohydrates, calories, protein, etc.)
• Shopping and cooking
• Eating out and special occasions/celebrations
• Reunion session
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Needs Assessment and Formative Methods

Year 1 (May 1, 2018 – April 30, 2019)

- Comprehensive literature review
- Qualitative needs assessment with key stakeholders
- Comprehensive health literacy review of participant materials
- Recommendation report to funders: American Diabetes Association and Shakopee Mdewakanton Sioux Community of Minnesota
Qualitative Methods

• 8 Focus groups (n=52)
  • Communities
    • 4 unique AI/AN communities (2 rural and 2 urban) in the USA
Indian Health Care Resource Center of Tulsa

- Oklahoma has the second largest Indian population in U.S., with 38 federally recognized tribes
- 70% of Indian people live in urban areas
- Tulsa population: 401,800
- Intersection of the Cherokee, Creek & Osage lands
- About 6% Native American
- IHCRC is an ambulatory clinic serving about 12,500 clients, representing over 130 different tribes
- 10% of patients have diabetes
- Medical, dental, optometry, Behavioral Health, Health Education & Wellness, pharmacy, radiology, mammography, & lab
Lake County Tribal Health

- Rural Lake County, located about 100 miles north of San Francisco. Mountains, lakes, bad roads, and distances isolate residents.
- 6-local federally-recognized tribes. Members from over 100 other recognized tribes live in Lake County, uniquely diverse tribal community.
- 25% of County residents live below the Federal Poverty Level ("FPL").
- About half (46%) of low-income households are food insecure.
Qualitative Methods

Focus groups

• 4 focus groups (1 at each site) with AI/AN adults with type 2 diabetes
• 4 focus groups (1 at each site) with family members of AI/AN adults with type 2 diabetes
• IRB approved moderator guide; trained facilitator in qualitative inquiry
• Note taker present for all focus groups
Qualitative Methods

Community-based key informant interviews

- 2-3 at each site
- Included: Tribal Elders & Leaders, RD/CDEs, LCSW/CDE, RN/CDEs, health administrators, clinic support staff
- In-person interviews with IRB-approved moderator guide and trained facilitator

Content expert interviews

- Conducted via Zoom
- Included: RD/CDEs, experts in food insecurity, AI/AN health education program development and dissemination
Qualitative Methods

Sample moderator guide questions:

1. Can you tell me what it’s like to take care of your diabetes?
2. Can you tell me about traditional foods or traditional cooking in your community?
3. Can you tell me about any experiences where you have learned about healthy eating and diabetes?
4. How do you learn best about things like diabetes and healthy eating?
5. What makes it hard to eat healthy when you have diabetes?
Qualitative Methods - Analysis

• All focus groups and interviews were digitally recorded and transcribed verbatim using professional transcription company
• Coding was facilitated by Atlas.ti (Mac Version 8.0)
• Codebook was established using inductive and deductive coding techniques
• Analysis was conducted using constant-comparison methods to construct themes across all transcripts
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<th>Site</th>
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<th>Focus Group AI/AN Adult Family Members</th>
<th>Community-Based Key Informants</th>
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Key Qualitative Findings and Recommendations

Heterogeneous Audience

• Vast differences between regions, tribes, and urban vs. rural AI/ANs need to be accommodated regarding traditional foods and barriers to healthful eating

• Education/resource needs and barriers to healthful eating vary depending on ‘stage of life' of AI/AN adults and urban/rural settings
  • Caring for children, cooking for 1, food security, access to healthy food, access to fast food, access to traditional food

Recommendations:

• Develop more than 5 lessons so the facilitator and participants can determine which lessons pertain to their situation

• Include placeholders for sites to tailor to their cultural needs
Strengths and Facilitators to Healthful Eating

- Traditional foods should be included in AI/AN nutrition education, but realistic recommendations on how to incorporate them into the diet are important.
- Tying traditional foods to culture and history regarding healthy, strong, active ancestors is a motivational technique.
- Community-based education approach works best - consider extended family and community-based goals – think outside of individual health.

Recommendations

- Include examples of traditional foods, history of traditional foods, and how they can (feasibly) be included in modern diets.
- Invite extended family/support to classes.
- In several classes, include time for intentional discussion about region/tribe specific cultural foods.
Key Qualitative Findings and Recommendations (cont.)

Social Norms and Tradition
- Food is important for social gatherings and celebrations, but foods served are often not very healthy
- Gatherings and events happen frequently
- Need help translating healthful eating practices outside of class and beyond people with T2D

Recommendations
- Include advocacy in the curriculum
- Include alternatives for food-based gatherings, tips for healthful eating at gatherings
Key Qualitative Findings and Recommendations (cont.)

Barriers to Healthful Eating

Environmental
  • Food security/access to healthful foods
  • High cost of healthy foods
  • Limited access to supermarkets
  • Too much access to fast food and processed food

Lack of Nutrition Education
  • Lack of education on cooking/food preparation and healthy eating on a budget
    o Especially true for younger parents

Lack of Time
  • Focus on ‘convenient foods’ due to lack of time to shop/prepare/cook at home
Key Qualitative Findings and Recommendations (cont.)

Barriers to Healthful Eating

Recommendations

• Program should include these topics:
  • Food resource management
    o Meal planning, shopping, cooking, preparation, storage
  • Use of commodity foods in healthful meals
  • Healthful eating while away from home or “on the go”
  • Time management (i.e., cooking once a week)
Key Qualitative Findings and Recommendations (cont.)

Class Format
• Educator:
  • RDs are not available in many communities
  • Should be AI/AN community member. If not AI/AN, should be a well-trusted member of the community (who has lived there for many years).
  • Supportive, non-judgmental, non-shaming education approach; “meeting participants where they are”

Recommendations
• Develop a scripted curriculum for non-RD
• Provide facilitator with access to an RD for questions
• Consider use of technology to provide ‘access’ to RD
Key Qualitative Findings and Recommendations (cont.)

Class Format

- Experiential learning, hands-on (including cooking, meal prep, tasting demonstrations)
- Include drawing, visual tools, multi-media (videos)
- Include time for peer-to-peer sharing, storytelling, support, problem-solving
- Nutrition education should help people make healthy changes gradually

Recommendations

- Include cooking demonstration in each class, opportunities to draw (perhaps in conjunction with peer-to-peer discussion)
- Include time for peer-to-peer discussion
- Include facilitating group discussions as part of educator training
Key Qualitative Findings and Recommendations (cont.)

Recruitment and Retention
- Recruitment should be personalized and active
- Attrition is a concern
- Incentives are valuable for retention

Recommendations
- Community-based educator should be heavily involved in recruitment
- Recruitment “toolkit” should be developed for guidance
- Cooking demonstrations at each class (serve as incentive)
- Gift card incentives (to offset cost of gas, etc.)
Key Qualitative Findings and Recommendations (cont.)

Technology

• Access to the Internet is no longer a barrier for most AI/AN adults
• Consider use of technology, social media, videos as a means to expand reach of the program
• Hybrid program including in-person and online resources could be valuable

Recommendation

• Obtain additional funding to develop and pilot test online resources and lessons that could enhance the curriculum
Questions or Comments?
If you have additional comments/ thoughts/ recommendations or suggestions please email Sarah

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Acknowledgments

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