Inclusive Intervention: Can Individuals with and without Disabilities be a part of the Same Interventions?

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Objectives

- Review Diabetes Prevention Program (DPP)
- Discuss implementation of DPP
- Review Universal Design for Learning (UDL)
- Discuss modifications to DPP using UDL
Is Diabetes A Big Deal?

In 2018:

• 34.2 million Americans (10.5% of the population) had diabetes
• Of the 34.2 million people with diabetes, 26.8 million were diagnosed, and 7.3 million were undiagnosed
• 14.3 million (26.8%) American seniors (65+) had diabetes

1.5 million Americans are diagnosed with diabetes every year

(National Diabetes Statistics Report, 2020)
What Is DPP?

• Program developed to make it easier for people at risk for type 2 diabetes to participate in evidence-based lifestyle change programs to reduce their risk of type 2 diabetes
DPP Curriculum

- All participants have two set goals:
  - To achieve and maintain a weight loss of 7% of their initial body weight
  - To achieve and maintain an energy expenditure of 700 kilocalories per week through physical activity

- There are 16 sessions that are created to guide the implementation of the program

- Appendix A: Scripts for Core Curriculum Sessions
- Session 1A: Welcome to the Lifestyle Balance Program
- Session 1B: Getting Started Being Active
- Session 1B: Getting Started Losing Weight
- Session 2 or 5: Move Those Muscles
- Session 3 or 6: Being Active: A Way of Life
- Session 4 or 2: Be a fat Detective
- Session 5 or 3: Three Ways to Eat Less Fat
- Session 6 or 4: Healthy Eating
- Session 7 or 8: Take Charge of What’s Around You
- Session 8 or 7: Tip the Calorie Balance
- Session 9: Problem Solving
- Session 10: Four Keys to Healthy Eating Out
- Session 11: Talk Back to Negative Thoughts
- Session 12: The Slippery Slope of Lifestyle Change
- Session 13: Jump Start Your Activity Plan
- Session 14: Make Social Cues Work for You
- Session 15: You Can Manage Stress
- Session 16: Ways to Stay Motivated
Does It Work?

- Diabetes Prevention Program Research Group published a randomized clinical trial (RCT) in 2002
  - Lifestyle intervention was shown to be more effective than medications
    - The incidence of diabetes was 11.0 (placebo), 7.8 (metformin), and 4.8 (lifestyle) cases per 100 person
      - The lifestyle intervention reduced the incidence by 58 percent
      - Metformin by 31 percent
      - As compared with placebo; the lifestyle intervention was significantly more effective than metformin
Does It Work In The Community?

- Systematic review of translation research on the Diabetes Prevention Program was conducted in 2011
  - DPP was implemented in four settings
    - Hospital outpatient
    - Primary care
    - Community
    - Work and church
  - Varied outcomes in terms of settings due to:
    - Knowledge of people implementing program
    - Instructor to support the program
    - Diverse groups of people who access the program
Were People With Disabilities Included?

- No mention of people with disabilities being recruited in the RCT
  - Did mention that they considered race/ethnicity when recruiting
- Manual uses ableist language and does not mention how to accommodate people who may have a disability
  - “It doesn't really matter at this point exactly what it is or for how long you're active. You might take a walk in your neighborhood. Play ball with your children. Ride on an exercise bike. Walk to the store or at the mall.”
Should People With Disabilities Be Included?

- About 1 in 6 people with disabilities (16.7%) in the United States in 2018 had been diagnosed with diabetes, compared to 1 in 14 people without disabilities (7.4%)

(CDC, 2020)
Can People With Disabilities Be Included?

Yes!

• And there is not a reason why they should not be

Many people with disabilities have greater difficulty participating in various types of health promoting behaviors like Physical activity

• Lack of access to preventative care in general is often a barrier for people with disabilities to promote their overall health

(Rimmer & Rowland, 2008)
• Developed by Center for Applied Special Technology
  • Inspired by Universal Design
• Defined as a theoretical framework to aid in developing curricula that meet the needs of all students
• The ultimate goal of UDL is to create “expert learners”
  • An expert learner is defined as a student who is resourceful, knowledgeable, strategic, goal directed and motivated

Kennedy & Yun, 2019
Principals of UDL

- multiple means of representation (what material is taught)
- multiple means of action and expression (how material is taught)
- multiple means of engagement (why the material is taught)
Components of UDL

Goals
- What needs to be achieved or mastered

Methods
- Various approaches, procedures and/or routines that are implemented

Materials
- The content and/or tools used

Assessments
- Methods used to evaluate progress
• UDL was intended for curricular modifications in school, however, there is application in any educational setting
• DPP curriculum contains the core components of goals, methods, materials and assessments
  • They need to be updated to reflect the core principals of UDL to promote inclusion
    • Multiple means of representation
    • Multiple means of action and expression
    • Multiple means of engagement
      • This allows for proactive modification
Session 1B: Getting Started Being Active

Objectives:

In this session, the participant who has chosen to focus on the physical activity goal will:
- Be given an initial physical activity goal of “doing something to be physically active” on 3 to 4 days next week.
- Be encouraged to attend the Lifestyle Balance activity sessions.
- Be assigned self-monitoring of physical activity.

Give the participant an initial activity goal of “doing something physically active” on 3 to 4 days next week.

You’ve decided to focus on the physical activity goal first. So to get you started, you will do several things during the coming week. They’re listed on this week sheet called “To do next week.” At every session you’ll get one of these week sheets with a list of what to do. There are square boxes beside each item (indicate boxes) so you can put a check beside each one after you do it. That way you’ll have a record of what you still need to do before the next session.

Okay, for next week:
- On 3 to 4 days next week, simply do something to be physically active.

We want to encourage you to start being active as part of your daily routine. So it’s important to do something you like to do. It doesn’t really matter at this point exactly what it is or for how long you’re active. You might take a walk in your neighborhood. Play ball with your children. Ride an exercise bike. Walk to the store or at the mall.

We suggest brisk walking. It’s easy to do and good for you. What other activities might you like to do? [Record a few ideas on the worksheet.] Don’t do anything too strenuous. We want you to start off very slowly.

Encourage the participant to attend the Lifestyle Balance activity sessions.

- Come to the Lifestyle Balance activity sessions!
  
  We’ve planned activity sessions every week, so you can have support and company while you’re being active. These sessions are very important, especially at the beginning to help you get started. At the sessions, you will:
  - Have company and support while you’re being active.
  - Walk or do other physical activity together. This will help you reach the weekly activity goals that we will be setting during the coming weeks. (Over time it will be up to you whether you continue to come to the sessions. But in the beginning, you’re expected to come.)
  - Also, we plan to have fun.
  - And the staff will be there to help you. They can answer your questions about some of the other activities you might like to try.
  
  So, get on your walking shoes. And join us! As with all of our sessions, you’re welcome to bring a friend or family member if you’d like.

  The activity sessions will be held (fill in the location, days, and times on the work sheet and give the participant a map).

Assign self-monitoring of physical activity.

- Write down your physical activity in the Keeping Track book.

Give the participant two Keeping Track books and indicate where in the books to record physical activity.

Include the Lifestyle Balance activity sessions. And for now, just ignore the sections for writing down what you eat. Here’s an example of how to Keep Track.

Review the example. Make sure the participant understands. If necessary, have the participant record an example.

Finally, remember to:

Discuss appointment schedule.

We will meet every week for the first 8 sessions. On this “Lifestyle Balance Update” page, that we’ll keep in the front of your notebook, I’ve used a pencil to write down some possible appointments for this same time and this same day of the week. Is this a good time for us to keep meeting?

If not, make changes to the penciled-in dates and on your copy of the Lifestyle Balance Update.

For sessions 9 through 16, we’ll meet [explain the frequency that your clinic has decided to hold these sessions; whether every week or every other week.] And then, after session 16, we’ll meet once every month or two months.

Any questions?
Modifications

Goals

• Goals are fixed within the program but are specific to the individual because they serve as their own baseline
  • Adding in additional personal goals are appropriate

Methods

• Emphasis on walking as the standard of physical activity
  • There should be more examples of different physical activities that emphasize various modes of ambulation
Modifications (Con’t)

Materials
• All education materials should be available in various mediums, e.g. paper handouts and electronic documents

Assessments
• There should be various ways to assess outcomes that are specific to the individual.
• There are standardized goals so much cannot change there
• You can provide multiple ways to track progress, instead of just having a log, they should be able to use an electronic device like a tablet as well.
In Conclusion

This can be done, however the ableism continues to perpetuate this idea of people with disabilities being an afterthought
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