Assessing Behavioral Change Among Parent-Child Dyads of a Pediatric Obesity Prevention Study

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Background

- The Centers for Disease Control and Prevention report that 17% (~12.5 million) of youth ages 2-17 are considered obese [1].
- The prevalence of obesity for both children ages 2-5 and adults doubled between the early 1970s and 2008 [2].
- Parental involvement in obesity prevention is vital to modeling and reinforcing appropriate health behavior for children [3].
- Behavioral change theory incorporates goal setting, self-monitoring, and problem solving strategies towards making health-related changes [4].
- To date, the research that addresses the barriers and facilitators encountered by parents while engaged in pediatric obesity prevention programs is incomplete [5].

Aim

- To identify how often goals are set and met within key topic areas (Nutrition, Physical Activity, Sleep, Media Use, and Engaged Parenting) among parent-child dyads of the Growing Right Onto Wellness (GROW) Trial.
- To identify common barriers and facilitators to goal achievement.

Methods

Setting and Participants

- Participants for this study are currently enrolled in the intervention arm of the 7-year, randomized controlled trial (RCT) known as The Growing Right Onto Wellness (GROW) Trial, which recently launched in Dec. 2012.
- GROW is a family-based, community centered study tailored towards the prevention of pediatric obesity.
- Participants are minority and/or socio-economically disadvantaged parent-child dyads within Davidson County of Nashville, TN.

GROW consists of 3 phases:

1. Intensive Phase: 24 months
   - Monthly phone call coaching
   - Monthly GROW activities based on a curriculum
   - 3 months: home-based activities
   - 9 months: internet/mail coaching
   - 9 months: maximum needs to support engagement
   - 3 months: maintenance
2. Maintenance Phase: 24 months
   - 6 months: phone call coaching
   - 6 months: GROW activities based on a curriculum
   - 12 months: internet/mail coaching
   - 6 months: maximum needs to support engagement
3. Sustainability Phase: 2 years
   - 6 months: phone call coaching
   - 6 months: GROW activities based on a curriculum
   - 12 months: internet/mail coaching

Results

- Qualitative Analysis
  For intensive phase participants (N=7), goal tracking data were obtained from GROW health coach notes. For maintenance phase participants (N=11), data was retrieved from audiotapes (coach captured vocalizations) and the corresponding notes reflecting participant responses verbally to open-ended questions by GROW health coaches.
  - Analysis of barriers and facilitators was guided by applying grounded theory, which examined the data and extracted common themes.
  - Variables of goals set and met were used based on the existing topics of the GROW curriculum.

Discussion

- Among the parent-child dyads, goals were most commonly set around nutrition.
- Goals were met with a completion rate of 70% or greater for all topic areas, with the exception of physical activity.
- “Self-discipline” was a common facilitator for participants in both the intensive and maintenance phases but was one of the most common barriers to participants in the intensive phase.
- “Time” was also a common barrier for participants in the maintenance phase.

Limitations

- There was a small sample size of 18 parent-child dyads, from which 180 goals were set over the period studied (3-6 months), given that GROW is in the early stages of its implementation.

Conclusion

- Goal setting, self-monitoring, and problem solving strategies embedded in the behavioral change theory can be useful to maintaining high goal achievement by parent-child dyads.
- The examination of both barriers and facilitators to goal achievement can provide additional insight into problem-solving strategies that can be beneficial to establishing sustained behavior changes.

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References