ENHANCING SOCIAL SUPPORT FOR SELF MANAGEMENT

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Importance and Challenges

• Self-management of activities of daily living and symptom management of illness conditions are crucial skills for health promotion and maintenance.

• Methods to enhance these behaviors in different populations remain variable and individualized.

• Social support associated with healthy eating, physical activity, and weight loss,* but there is a need for specific information on how different types of support apply to different populations.

Aim of Symposium

• To present two reviews and one study of different social support factors and interventions which play a role in enhancing self and symptom management in different populations with chronic conditions.
Overview of Methods

• Conditions included in these abstracts are:
  – Overweight and obesity in adolescents
  – Chronic illness and conditions, specifically diabetes, cardiovascular disease, neuromuscular disease
  – Psychological disorder

• Reviews include interventions related to social parental support, peer support, and group exercise support.
Summary Results

• Social support activities found
  – Different parental components affect nutrition consumption and meal planning, skill enhancement, and problem solving
  – Positive effects on quality of life and physical function, and blood pressure as a result of dance
  – High satisfaction with the support group, increased self-efficacy, knowledge, and attitudes in a peer support format
Conclusion/Implications

• Positive role modeling and specific motivational techniques have an impact on adolescent health behaviors
• Social activity such as dance can have positive effects on improving the quality of life and clinical and psychological symptoms
• Peers who have the same condition can effect positive changes through a group intervention
• Global implications for future study include a need to determine if these social network effects are similar for different populations and could influence how social support may be effective in different cultures
Self-management and Weight Loss in Adolescents:
A Systematic Review

Diane Thomason, PhD, MN, RN
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University of Nevada, Las Vegas
Learning Objectives

• Identify important parental roles in obese or overweight adolescent's weight loss management
Background

• Prevalence of obese youth 34.5%\(^1\)
  – Unmanaged leads to negative metabolic changes\(^2,3,4,5,6\)
  – Obese youth become obese adults\(^7\)
• Annual cost 3 Billion\(^8\)
• Past reviews
  – Did not include SM strategies\(^9,10\)
  – Lacked outcome measurements & results\(^10\)
  – Only looked at electronic interventions\(^9\)
  – Behavioral with pharmacological intervention\(^11\)
  – Found high attrition\(^9,10\)
Purpose

To develop a better understanding of effective self-management (SM) weight loss strategies for overweight and obese adolescents
Methods

• Self-management (SM) defined as
  – Setting goals, planning, taking action
• Search retrieved 64 studies with 10 meeting inclusion criteria
• Inclusion criteria: English, aged 10-18 years, RCT aimed at weight loss or weight maintenance
• Excluded drug, surgical, qualitative, reviews
• Studies published 2010-2014
• Jadad Scoring System
  – 11 item instrument; Max 13 points
Results

• Average age 13 years old
• 62.6% Female
• Intervention methodologies varied widely
  – Family/parent involvement
    • Computer based, home based with clinic visits
  – Cognitive Behavioral Therapy (CBT)
  – Motivational Interviewing (MI)
• Combined dietary, physical activity (PA) in 90% of studies
Quality of Studies

• None fulfilled all scoring quality requirements
• Range: 7-11 ($M = 9.2$, $SD = 1.13$)
• Power calculations stated for 50%
• High attrition
  – Dropouts/withdrawals not stated for 20%
  – Those with power calculations lost power at various stages of study through attrition (40%)
Outcome Measurements

• 90% included one or more for primary outcomes
  – BMI, zBMI, percent over BMI, BMI percentile, waist to hip ratio, or waist circumference

• Secondary outcomes varied widely
  – psychosocial or behavioral (e.g. dietary, physical activity (PA) knowledge change, peer acceptance, qol)
  – Anthropometric or biological (waist circumference, BP, lipids, percent body fat)
Intervention Setting Types

- Out of 10 studies 8 had a family component
- Treatment types
  - Family based lifestyle \( (n = 4)^{12,13,14,15} \)
  - Group lifestyle & family component \( (n = 2)^{16,17} \)
  - School based \( (n = 1)^{18} \)
  - CBT \(^{19} (n =1)\)
- Multicomponent in 70% of studies reviewed
  - Goal setting, planning, taking action
  - Combined diet and PA, parental role modeling, encouraging, supporting behavioral change
Outcomes

• Studies with family component
  – Primary outcomes significant for 7/8 studies
    • Many secondary outcomes significant
    • Effects disappeared in studies of shorter duration
  – Components with family included
    • Role modeling of the parent (diet and PA)
    • Helping with goal setting
    • Setting family goals
    • Dietary and PA skill support
    • Supporting behavioral change
    • Providing positive feedback
    • Boundary setting
    • Booster sessions
Outcomes

• Family component
  – Separate from child\textsuperscript{14,16,17,18}
    • Group of parents
  – Individual family\textsuperscript{13,15}
  – Or combination\textsuperscript{12,19}

• Duration
  – 3 sessions to 16 weeks
    • Weekly, biweekly, monthly
    • Length of sessions: 15 min (web) - 75 min/session

• Booster/Maintenance sessions\textsuperscript{16,17}
  – Quarterly
Outcomes

- No study reported the effect of the parent or parental support on the outcomes of child weight
- No study reported the child’s perceptions of parental support
Study Limitations and Strengths

• Limitations
  – Comparing results complicated
    • Various methodological differences

• Strengths
  – Current knowledge provided through rigorous review of RCTs
  – Consistent positive relationships between SM of diet, PA, and weight management
    • Most successful when incorporating a family component
Conclusion

• Incorporating parent or whole family
  – Well established in children-lacking evidence in adolescents\textsuperscript{20}
  – Facilitates dietary, PA, and behavior change\textsuperscript{21}

• Multicomponent
  – Combined diet, PA, parent role modeling, goal setting, planning & action for parent/family & adolescent

• Measure family effects on study outcomes
Co-Authors

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Jennifer Kawi
Kirsten Connelly
Jillian Inouye
Bruce Leonard
References


References


Effects of Dance in Chronic Illness: A Systematic Review

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Tricia Gatlin, PhD, RN
Jillian Inouye, PhD, APRN, FAAN
Reimund Serafica, PhD, RN

University of Nevada, Las Vegas
School of Nursing
Learning Objectives

• Discuss the physiological and psychological benefits of dance in chronic illness

• Increase understanding of dance on enhancing self-management and social support in chronic illness
Background

• Social and physical activity

• Used therapeutically for thousands of years

• Thought to influence healing
Background

- It is unknown whether dance impacts health-related outcomes of individuals with chronic illness

- Need to evaluate empirical studies to determine the effectiveness of dance as evidence-based intervention
Purpose

• This systematic review explored studies on dance and its impact in chronic illness
Methods

- Literature search via PubMed, EBSCO, and CINAHL

- Inclusion criteria: (a) randomized controlled trial, (b) written in English, (c) published between 2005 and 2014

- Keywords: “dance,” “chronic illness,” “chronic disease,” “diabetes,” “cardiovascular disease”
  - 147 studies found
  - Only 10 articles met the inclusion criteria
Methods

• Jadad scale - used for reporting the quality of published studies

• 3 faculty researchers reviewed the studies separately and reached consensus using the Jadad scoring criteria
## Jadad scoring criteria

<table>
<thead>
<tr>
<th>Article</th>
<th>Jadad Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article 1</td>
<td>5</td>
<td>Randomized controlled trial, double-blind, placebo-controlled.</td>
</tr>
<tr>
<td>Article 2</td>
<td>4</td>
<td>Randomized controlled trial, double-blind.</td>
</tr>
<tr>
<td>Article 3</td>
<td>3</td>
<td>Randomized controlled trial, single-blind.</td>
</tr>
<tr>
<td>Article 4</td>
<td>2</td>
<td>Random placebo-controlled trial.</td>
</tr>
<tr>
<td>Article 5</td>
<td>1</td>
<td>Observational study, non-comparative.</td>
</tr>
<tr>
<td>Article 6</td>
<td>0</td>
<td>Observational study, non-comparative.</td>
</tr>
</tbody>
</table>

**Additional notes:**
- **Randomized controlled trial:** Includes a comparison between two groups, one of which receives the intervention and the other a placebo or standard treatment.
- **Double-blind:** Neither the participants nor the personnel administering the intervention know which group receives the intervention and which receives the placebo.
- **Placebo-controlled:** Includes a comparison between the intervention group and a placebo group.
- **Observational study:** Studies the relationship between exposure and outcome in naturally occurring circumstances, without any intervention.
## Jadad scoring criteria

<table>
<thead>
<tr>
<th>Articles</th>
<th>Total score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baptista et al., 2012</td>
<td>9</td>
</tr>
<tr>
<td>Belardinelli et al., 2008</td>
<td>10</td>
</tr>
<tr>
<td>Eyigor et al., 2009</td>
<td>9</td>
</tr>
<tr>
<td>Foster et al., 2013</td>
<td>8</td>
</tr>
<tr>
<td>Hackney &amp; Earhart, 2009</td>
<td>9</td>
</tr>
<tr>
<td>Kaltsatou et al., 2014</td>
<td>10</td>
</tr>
<tr>
<td>Mavrovouniotis et al., 2010</td>
<td>7</td>
</tr>
<tr>
<td>Merom et al., 2013</td>
<td>9</td>
</tr>
<tr>
<td>Pinniger et al., 2012</td>
<td>11</td>
</tr>
<tr>
<td>Sandel et al., 2005</td>
<td>8</td>
</tr>
</tbody>
</table>
Results

• Based on Jadad scoring system, scores ranged from 7-11 out of 13 points

• Among individuals with fibromyalgia and congestive heart failure, dance had positive effects on:
  - quality of life (QOL),
  - pain,
  - fatigue,
  - functional capacity
Results

• Among individuals with depression, anxiety, and Parkinson’s disease, dance had positive effects on:
  - QOL,
  - balance,
  - physical function

• Among individuals with hypertension, dance ↓ blood pressure and resting heart rate
Limitations

- Small sample
- Some studies were not blinded, process of randomization not described
Implications/Conclusions

• This systematic review provides a summary of the current state of research on the effects of dance in chronic illness.

• This review suggests that dance may be a safe and effective intervention in improving QOL, physical function, blood pressure, heart rate, fatigue, depression, and anxiety in different populations worldwide.
References


The Effects of a Diabetes Support Group Among Underserved: A Feasibility Study

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University of Nevada, Las Vegas
Background

- Diabetes is a global health care problem with increasing numbers in all countries.
- Underserved diverse individuals in the United States are among the hardest hit by diabetes, having higher rates of diabetes and poorer outcomes (1-6).
- Good self-management can improve glucose control and improve diabetes complications.
- However, this can be challenging to achieve due to multiple factors among the underserved (1-6).
- Peer support has been shown to improve glucose control and provide an avenue to develop self-care activities to promote health (7-9).
Purpose of Study

• To test the feasibility and examine the effects of a diabetes support group on underserved individuals with type 2 diabetes at a Federally Qualified Health Care Clinic.
Methods

• The study used a pretest/posttest design to examine diabetes knowledge, diabetes attitude, and empowerment, after a 6-week support group intervention.

• Feasibility and acceptability of the support group intervention was assessed by examining ease of recruitment, retention rates, and overall satisfaction.
Intervention

Recruited from a Federally Qualified Healthcare Center

Weekly meetings at the clinic for 6 weeks with educational topics:

- Exercise
- Diet and Nutrition
- Emergencies
- Foot and Wound Care
- Medications
- Dental
## Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female (total n = 10)</td>
<td>70%</td>
</tr>
<tr>
<td>Mean age</td>
<td>52.80 (sd = 9.25)</td>
</tr>
<tr>
<td>Years Diagnosed</td>
<td>6 (sd = 8.86)</td>
</tr>
<tr>
<td>Mean BMI</td>
<td>30.53 (sd = 8.30)</td>
</tr>
<tr>
<td>Married/Domestic Partner</td>
<td>60%</td>
</tr>
<tr>
<td>Test Blood Sugar</td>
<td>50%</td>
</tr>
<tr>
<td>Insulin Use</td>
<td>70%</td>
</tr>
<tr>
<td>HTN</td>
<td>60%</td>
</tr>
</tbody>
</table>
# Results

<table>
<thead>
<tr>
<th></th>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diabetes Knowledge Test</strong></td>
<td>10.7 (sd =3.06)</td>
<td>18.9 (sd =1.79)</td>
<td>.000</td>
</tr>
<tr>
<td><strong>Diabetes Attitude Scale</strong></td>
<td>3.65 (sd = .35)</td>
<td>4.05 (sd = .27)</td>
<td>.006</td>
</tr>
<tr>
<td><strong>Diabetes Empowerment Scale</strong></td>
<td>3.84 (sd = .61)</td>
<td>4.60 (sd = .55)</td>
<td>.000</td>
</tr>
</tbody>
</table>
Results

• Recruitment
  – Total of 14 participants were recruited by the clinic

• Retention
  – Total of 10 participants completed all 6 classes
    • 1 was lost to an out of state move
    • 1 was lost to hospitalization
    • 2 were lost for unknown reasons (they were a couple)

• Overall Satisfaction
  – 100% Very satisfied with the overall process of the program
  – 100% Very satisfied with the content of the sessions
  – Suggested meeting once per month
  – Like least was that weekly sessions were over
  – Like most was the social/peer interaction
Conclusion

• Findings from this feasibility study suggest that a diabetes support group can have a positive effect on underserved individuals and may result in increased diabetes knowledge, positive changes in attitude over the disease and increased empowerment/self-efficacy. Also, peer support programs can have global implications by improving diabetes self-care.
References


