Global Systematic Review of Peer Support for Complex Health Behavior

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Peers for Progress

- *Peers for Progress* is a program of the [American Academy of Family Physicians](http://www.aafp.org) dedicated to promoting peer support in health and health care around the world.

- Challenge in global promotion of peer support: How to standardize across cultural, system and population differences?
Peer Support

- **Peer support** is social support shared among people living with a chronic condition or sharing a health need or objective.

- **Peer support** enhances other health care services by facilitating the emotional, social and practical assistance necessary for ongoing disease management.

- **Peer support** can take the form of phone calls, text messaging, group meetings, home visits, going for walks together, or grocery shopping.
The Four Key Functions of Peer Support

1. Assistance in daily management and living with a chronic disease
2. Social and emotional support
3. Linkage to clinical care
4. Ongoing support, extended over time

Note: Key Functions are a “Work in Progress” …The model should evolve!

WHO Report 2007; Solomon 2004; Boothroyd 2010; http://fampra.oxfordjournals.org/content/vol27/suppl_1/
Previous Research

• Existing reviews have tended to look within disease categories, for example:
  – Cancer (Hoey et al 2008; Macvean et al 2007; Tilkeridis 2005; Campbell et al 2004)
  – Asthma (Postma et al 2009)
  – Cardiovascular disease (Collela & King 2004; Brownstein et al 2007; Mattson-Koffman 2005)
  – CHWs generally (Swider 2002; Norris 2005)
Current Review Aims

• To our knowledge, no reviews of peer support interventions to date have reviewed *across* disease categories and health behaviors—only within

• Our review broadly addresses the question “does peer support work?”
Search Strategy

• NCBI PubMed search 01/01/2000-12/31/2009
• Search terms:
  ● Peer support ● Promotora ● Doula ● Coach ● Community Health Worker ● Lay Health Worker ● Lay Health Adviser ● Natural Helper ● Peer Educator ● Community Health Aide ● Health Worker ● Health Advocate ● Community Health Promoter ● Community Health Representative ● Outreach Worker ● Dumas ● Embajadores ● Consejeras ● Peer provider
• PubMed search limits activated:
  ● Clinical Trial ● Randomized Controlled Trial ● Evaluation Studies
Exclusion Criteria

Studies were excluded for:

1. Implementation by Professional Provider
   - “Professional” defined as post-B.A. training in health care (e.g. kinesiology grad students)

2. Peer Implementation of Group Class

3. Not Involving Complex Behavior Extended over Time
   - Not single behavior, e.g., mammography, immunization, flu vaccination
Sampling Flow Chart

- 628 Excluded for:
  - “Coach” for Sports, Prof. Development
  - No Abstract
  - Discussion Paper (Not Research)
  - Not “Support” in Sense Intended

- 357 Excluded for:
  - Professional Provider
  - Single Behavior (not extended over time)
  - Peer Implementation of Group Class
  - Peer Support as Outcome

- 1027 Articles Identified from PubMed Search
- 399 Articles Considered
- 42 Articles Considered
- Final Sample n=48
- 6 Additional Articles Identified from References
Review Methods

• Our methodological strategy for characterizing the quality of peer support interventions was informed by:
  – Merzel & D’Afflitti, 2003
  – Zaza et al, 2000
  – CDC’s Community Guide to Preventive Services
Characterization of Articles

8 Countries

- USA (25)
- Canada (8)
- UK (6)
- Pakistan (3)
- Bangladesh (3)
- Brazil (1)
- Mozambique (1)
- New Zealand (1)

14 Conditions

- Pre/Post-Natal Care (15)
- Diabetes (7)
- Asthma (5)
- Cardiovascular Disease (5)
- HIV (4)
- Smoking Cessation (2)
- Mental Health (2)
- Drug Use (2)
- Other (6)
Characterization of Articles by Study Design

• **37 (77%)** Randomized Controlled Trials
• **5 (10%)** Non-Randomized Repeated Measures Design with Control Group
• **5 (10%)** Non-Randomized Repeated Measures Design without Control Group
• **1 (2%)** Non-Randomized Post-test Only Design without Control Group
Categorizing Study Measures

• “Objective Measures”
  – e.g., HbA1c, BMI, Blood Pressure

• Standardized Measures
  – Validated Scales, e.g., Beck Depression Inventory

• Non-Standardized Measures
  – Non-validated questionnaires designed specifically for an individual study
### Characterization of Articles by Outcomes

<table>
<thead>
<tr>
<th>Quality of Measure</th>
<th>Significant Between-Group</th>
<th>Significant Within-Group*</th>
<th>Non-Significant Differences</th>
<th>Totals</th>
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<tbody>
<tr>
<td>Objective Measure</td>
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<td>6</td>
<td>3</td>
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<tr>
<td>Standardized Measure</td>
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<tr>
<td>Non-Standardized Measure</td>
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<td>Totals</td>
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### Significant Between- and Within-Group Results

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\[ \frac{39}{47} = 83\% \]
### Significant Changes: Objective or Standardized Measures

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## Significant Changes: Objective or Standardized Measures that Compared ≥2 Groups

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\[
\frac{19}{33} = 58\% 
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## Significant Changes Among RCTs

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30/37 = 81%
Example Study

• Rahman et al (2008): Cluster RCT “Lady Health Worker” intervention to prevent postnatal depression in rural Pakistan
• “Thinking Healthy Program”
  – Active listening, family collaboration, homework, questioning beliefs thought to engender depression
  – Weekly in last month pre-delivery, 3x in first prenatal month, 9 monthly sessions thereafter
Rahman et al Study Findings

• At 6 mos, significantly fewer mothers in the intervention (23%) than control (53%) groups met the DSM-IV criteria for major depression (OR=0.22; 95% CI 0.14, 0.36; p<.0001).

• Effects were sustained at 12 months (27% v. 59%, OR=0.23; 95% CI 0.15, 0.36; p<.0001).
Conclusions

• Across 8 countries and 14 conditions, there is substantial and strong evidence that peer support works as a chronic disease-management strategy.
Next Steps

• Subsequent analyses will evaluate characteristics of interventions that may be responsible for benefits
• Ongoing work will define a consistent set of core measures for documenting the effects of peer support
Thank you!

To view a complete summary of the preliminary results, please click here.
To view the abstract of this presentation, please click here.