Dyadic Internet-Based Psychosocial Interventions: A Scoping Review

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Background & Objectives

• Patients' physical and mental health conditions also affect family members and close friends, who often help provide care to patients
• Dyadic interventions are equally effective as patient-only ones, while also potentially benefitting support persons
• Internet interventions offer a convenient way to deliver care to multiple individuals
• Aims of this systematic scoping review are:
  ✓ What are the dyadic Internet interventions that have been studied?
  ✓ For what populations have these interventions been used?
  ✓ What outcomes have been assessed from these interventions?

Methods

• A comprehensive literature search was conducted across 5 databases for English-language studies for all available dates through January 2018
• Three broad concept categories searched were: dyads, mobile health, and behavioral medicine
• Eligibility criteria:
  ✓ Population: Informal dyads in which one individual has an identified mental or physical health condition
  ✓ Intervention: e/mHealth psychosocial intervention (Protocols eligible)
  ✓ Comparison: [no restriction]
  ✓ Outcome: Studies must collect psychosocial, health, and/or feasibility metrics

Results

<table>
<thead>
<tr>
<th>Identification</th>
<th>Records identified through database searching (n=6180)</th>
<th>Additional records identified through other sources (n=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening</td>
<td>Records screened after duplicates removed (n=5170)</td>
<td>Records excluded (n=4673)</td>
</tr>
<tr>
<td>Eligibility</td>
<td>Full-text articles excluded (N=415)</td>
<td>83 Total studies</td>
</tr>
<tr>
<td>Included</td>
<td>Papers to be included in qualitative synthesis (n=82)</td>
<td>67 Published studies</td>
</tr>
</tbody>
</table>

Patient health condition:

- Cancer
- Diabetes
- Obesity
- Pain
- Mental health
- Other

Targeted relationship of support person to the patient in published interventions:

- Adults: 22% spouses
- Pediatrics: 100% parents

Study locations:

1 each in: Spain, UK, Germany, Netherlands

Technological components for content delivery:

- Browser
- Human phone calls
- Asynchronous portal
- Human emails
- In-person sessions
- Automated emails
- Videoconferencing
- Synchronous chat room
- Mobile Sensors
- CD-ROM/DVD
- Automated phone calls
- EMR Link

Of studies publishing efficacy data, almost half did not report outcomes for support persons

Conclusions

• No published dyadic Internet interventions have used mobile apps; there are 3 pediatric protocols but 0 adult protocols proposing to use mobile apps
• No interventions (published or protocol) targeted geriatric individuals
• >2/3 required therapist contact, limiting dissemination potential
• Studies frequently did not report outcomes for support persons, limiting our knowledge of how these interventions may affect this population

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