Low Theoretical Fidelity Hinders the Effects of Health Coaching on Opioid Reduction: A Systematic Review

Natalie A McNerney SPT, Michael J Losensky SPT, Madison M Lash SPT, Kendal R Rozaiieski SPT, Daniela Ortiz SPT, Alessandra N Garcia, PT, PhD, Zachary D Rethorn, PT, DPT

Background

• In 2017, there were 47,600 deaths related to opioid use
• The CDC urged for alternative treatment options

No previous systematic review has looked at the efficacy of health coaching interventions on opioid reduction

Purpose

1) Evaluate the effects of health coaching on patients’ reduction of opioid usage and opioid discontinuation
2) Investigate the effects of health coaching on pain intensity, physical function, and quality of life

Methods

Data Sources included PubMed, Embase, Scopus, and PsycINFO

Inclusion Criteria
• One aspect of health coaching
• Studies published in English, Portuguese, or Spanish
• Adults 18 and over currently using opioids

Outcomes
• Opioid usage before and after intervention
• Physical function, pain intensity, quality of life
• Predefined short, intermediate, and long term follow up

Quality Assessment
• Revised Cochrane risk-of-bias tool for randomized trials (RoB2)
• Grading of Recommendations, Assessment, Development, and Evaluation (GRADE)

Interventions
• Health coaching: a patient centered process that is based upon the behavior change theory and is delivered by health professionals with diverse backgrounds (Fig. 1)

Results

11 studies (n=4,516 participants), 64% male, mean age of 38 years
45.5% of studies had a high risk of bias

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<thead>
<tr>
<th>Health Coaching vs. Treatment as Usual</th>
<th>6 studies</th>
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<tbody>
<tr>
<td>• No significant differences in overdose risk behaviors</td>
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<tr>
<td>• No significant differences in physical and psychological health (6 months)</td>
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<tr>
<td>• Health coaching and CBT improved physical function (12 months)</td>
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<td>• Quality of evidence: low to very low</td>
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<tr>
<th>Health Coaching vs. Education</th>
<th>3 studies</th>
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<tr>
<td>• Health coaching had greater reduction in opioid use (6 months)</td>
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<tr>
<td>• Other studies reported no significant differences in opioid reduction</td>
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<td>• Quality of evidence: low</td>
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<tr>
<th>Health Coaching vs. Monthly Diaries</th>
<th>1 study</th>
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<td>• No significant differences between groups (6 months)</td>
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<th>Health Coaching vs. No Intervention</th>
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<td>• Health coaching had a significant reduction in substance use (6 months)</td>
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Conclusions

There is limited, low to very low quality evidence to conclude health coaching reduces opioid usage in opioid-dependent patients

Clinical Relevance

Further research should utilize theoretically robust health coaching interventions using all four of the theoretical constructs

Limitations

• Behavioral interventions are difficult to control
• All of the included studies only looked at motivational interviewing as a theoretical construct
• No included study investigated the effects of health coaching on pain intensity or quality of life

Acknowledgements / References

The authors would like to acknowledge the assistance of Karen Barton, medical librarian. For a full list of references and results, please visit:

Contact email: natalie.mcnerney@duke.edu

Fig. 1

Elements of Health Coaching

Transtheoretical Model
Motivational Interviewing
Self-Determination Theory

Inclusion Criteria

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