Title:
Telephonic Health Coaching by an Advanced Practice Nurse in a Factory Workplace: Clinical Case Study

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Abstract Summary:
A clinical case study implementing a telephonic health coaching intervention in the factory setting by an Advanced Practice Nurse to improve success with smoking cessation, blood pressure control, and decreased BMI over the course of six months.

Learning Activity:

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<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
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<td>1. Identify the impact of a telephone health coaching interventions on health risk factors as reported by a factory worker</td>
<td>Discuss results pertaining to weight, blood pressure control, and smoking status</td>
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<td>2. Identify how behavioral change techniques based on Transtheoretical Model of Change are useful in motivating behavioral change.</td>
<td>Discuss options for change based on where participant falls within the health belief model.</td>
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Abstract Text:

Purpose: There is evidence suggesting that interventions implemented through the workplace targeting body weight and smoking can have a positive impact, especially with 1:1 health coaching over a period of at least 6 months. However, such a project involves additional costs for an employer to implement factory-wide. Therefore, for this project, telephonic health coaching interventions were piloted by an advanced practice nurse (APN) in the factory setting via a clinical case study with one individual, in an effort to promote improvements in body mass index (BMI), smoking cessation, and blood pressure control.
**Method:** A case study approach was used with one participant in an occupational health setting. Health coaching phone calls lasting approximately 20-30 minutes were initiated and conducted by the APN at baseline, and then approximately every 2 weeks thereafter for a period of six months. In-person measurements of blood pressure, body weight, and smoking status were recorded at baseline and monthly thereafter during regular visits with the employee health program’s primary care provider. Standard of care, evidence based guidelines, as well as the application of the Transtheoretical Model of Change framework were important aspects utilized by the APN to conduct this program intervention.

**Results:** The participant was able to increase physical activity implemented throughout their workday by using daily mandatory breaks and lunchtime to walk in safe areas around the plant. After 13 weeks, and clearance from a back operation, the participant had progressed to going to a gym three times a week for 35-40 minutes, and at 15 weeks, he was going every other day for 40-45 minutes of treadmill and stationary bike activities. He reported improvements in his diet throughout the intervention through intake of decreased fried fatty foods, using salt substitutes, intake of more water and less soda, and use of recipes that were provided to him. Weight had frequent variations, possibly related to activity level, as the participant had to have a surgical procedure mid-way through the project. Participant’s weight ranged from 295lbs to 317lbs, with most recent weight of 309lbs. Smoking cessation was reported to be more difficult, with weeks of cessation as well as relapse, related to stress per self-report. Setting bi-weekly goals to wean down the number of cigarettes seemed to help initially, but during stressful situations, this method was reported as not effective. During week 9, QUITLINE information was provided. At week 16, participant had resumed smoking, decided not to use QUITLINE but initiate pharmacotherapy with the primary care provider. Blood pressure readings varied greatly based on compliance of taking medications as prescribed; by week 9 blood pressure was controlled based on guidelines, week 14 participant reports compliance with taking blood pressure medication daily. Blood pressure demonstrated improvement at week 16.

**Conclusion:** The participant stated that he valued this intervention, and found it helpful, inspiring, and it made him feel like someone cared. He also stated that there were no downsides or inconveniences to participating in a health coaching program. This intervention was able to provide accountability, support, and resources to aid in the success of weight loss, smoking cessation, and blood pressure control. Bi-weekly telephone calls allowed for consistent follow up and made for clear, self-driven goal setting. This appeared to be a valuable intervention to augment the standard of care with the primary care provider.