Development of a theory based video to increase CPAP compliance

Kirahn M. Watson RPSGT, BS1
Rie Suzuki PhD1
Public Health and Health Science
University of Michigan - Flint

Abstract
Obstructive sleep apnea (OSA) is one of the most common sleep disorders, affecting an estimated 20 to 30 million Americans. Seventy percent of all patients with OSA are obese and eighty six percent of all obese patients with type 2 diabetes have OSA. The prevalence of OSA increases with age, with a higher prevalence in persons 65 years and older. However, few educational materials have targeted on the Aged Obese Diabetic OSA patient. The purpose of this project is to develop the theory based educational video for patients newly diagnosed with OSA at the University of Michigan Center for Sleep Disorders. The inclusion criteria encompasses patients aged 65 and older, a BMI >30, insulin dependent diabetic, and an apnea hypopnea index>15. The patients also have completed a baseline polysomnogram and are scheduled to return to the lab for a continuous positive airway pressure (CPAP) titration. Social Cognitive Theory was utilized for this project. The video will address not only the knowledge of OSA and diabetic nutrition but also the benefits and the strategies used to increase CPAP compliance and to increase healthy diabetic eating meals per day. Self-efficacy, outcome expectations, social support, and knowledge of OSA, how to use CPAP, and the contents of diabetic diet will be measured.

Purpose
The purpose of this project is to develop an educational video that explains how to diet, OSA, and CPAP in patients newly diagnosed with OSA.

Rationale
The previous video that was used for patient education at the University of Michigan Center for Sleep Disorders is now out dated and unavailable. The video focused on patient education and did not address any CPAP compliance issues. Patients not only need to be educated on what OSA and CPAP are, but also need to be aware of the severity, benefits, and how to address compliance issues. Patients with OSA also need to know how important it is to maintain a healthy BMI. When a patient maintains a healthy diet it can lead to weight loss, which can also lower CPAP pressure and improve compliance.

Target Population
- Patients age 65 and up
- Completed baseline polysomnogram
- BMI > 30
- Insulin dependent diabetic
- Diagnosed with obstructive sleep apnea
- Apnea hypopnea index >15
- Scheduled to return for CPAP titration
- Never tried CPAP in the past
- Not diagnosed with insomnia

Theories Used
Social Cognitive Theory

<table>
<thead>
<tr>
<th>Theories Used</th>
<th>&quot;Change in Diet behavior: A social cognitive analysis of dietary change&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td>Social cognitive theory and self-efficacy</td>
</tr>
<tr>
<td>Setting</td>
<td>Social cognitive theory and self-efficacy</td>
</tr>
<tr>
<td>Target group</td>
<td>Social cognitive theory and self-efficacy</td>
</tr>
<tr>
<td>Interventions</td>
<td>Social cognitive theory and self-efficacy</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Social cognitive theory and self-efficacy</td>
</tr>
</tbody>
</table>

References


Poster created by the Office of Research