Predictors of Smoking Behavior and Readiness to Quit in Addiction Treatment

Arturo Soto-Nevarez, BA1, Joseph Guydish, PhD2


2013 UCSF Summer Research Training Program

Abstract

Background: Prevalence of tobacco use is 3 times higher for those seeking substance abuse treatment than those in the general population. Clinical practice guidelines recommend addressing smoking cessation. This population has more difficulty quitting than the general population. Methods: This paper analyzes predictors of smoking behavior and readiness to quit in patients enrolled in addiction treatment programs. Data from six substance abuse treatment centers was collected. A total of 235 clients were surveyed on their smoking attitudes and behaviors. Results: Survey data from 139 current smokers was analyzed. In logistic regression analyses predicting readiness to quit smoking, and controlling for cigarettes per day, and demographic variables, smoking attitudes, perceived risk of lung cancer and awareness of FDA tobacco regulations were significant predictors. Only smoking attitude was significant, controlling for demographic variables, when predicting cigarettes per day. There was an inverse relationship with FDA awareness when predicting readiness to quit. Future analyses will be needed to look at FDA awareness and readiness to quit since this was not an expected outcome. Conclusions: Smoking attitudes and perceived self-risk for lung cancer were significant predictors of readiness to quit and cigarettes per day. Improving attitudes toward smoking cessation and increasing perceptions about health risks may help programs address quitting in this population.

Purpose

The purpose of this study was two fold. First, to measure use of alternative tobacco products other than cigarettes. Second, to explore predictors of cigarettes per day and readiness to quit. With these findings treatment programs may use these predictors to better address smoking cessation.

Introduction

This study was conducted to measure the effect NY policies and taxes had on the smoking behaviors, tobacco knowledge, attitudes, and services that were received by clients in addiction treatment.

Hypotheses

1. Cigarettes per day (cpd) will be an inverse predictor of readiness to quit. With these findings treatment programs may use these predictors to better address smoking cessation.
2. Perceived risk of lung cancer will be a inverse predictor of cigarettes per day.
3. Education will be an inverse predictor of cigarettes per day.

Methods

Six randomly selected New York programs funded by the state (OASAS): 3 residential, 2 outpatient, 1 methadone maintenance

Clients (n=235)

- Eligible clients were those in treatment a minimum of 10 days
- Anonymous survey handouts
- Knowledge, attitudes and services in regards to smoking
- $20 gift card reimbursement for participation

Results

Demographic characteristics of clients in addiction treatment

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>36.2%</td>
<td>86</td>
</tr>
<tr>
<td>Hispanic</td>
<td>21.7%</td>
<td>53</td>
</tr>
<tr>
<td>Asian</td>
<td>10.3%</td>
<td>25</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>10.3%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school</td>
<td>32.8%</td>
<td>77</td>
</tr>
<tr>
<td>College-degree or diploma</td>
<td>29.4%</td>
<td>68</td>
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<table>
<thead>
<tr>
<th>Cigarettes per day (cig/day)</th>
<th>%</th>
<th>N</th>
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<tr>
<td>1-19</td>
<td>38.3%</td>
<td>89</td>
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Multiple Linear/Logistic Regression

- Analysis for significance was at <.05
- All variables that were significant at <.01 for the univariate analysis were grouped together
- Smoking attitudes and perceived self-risk for lung cancer are significant predictors of readiness to quit

Conclusion

* Smoking attitudes are the best predictor for cigarettes per day and readiness to quit.
* Self-risk for lung cancer is a significant predictor for readiness to quit.
* Clinicians may address attitudes toward smoking cessation as part of their client's treatment plan to decrease smoking rates. Staff can have discussions with clients about reducing or quitting smoking. Higher perceived self-risk for lung cancer can help clients in treatment be ready to quit. Education on the health risks of smoking and/or using other tobacco products may increase clients to be ready to quit. More analyses needs to be explored with FDA awareness since it was not expected to be an inverse predictor of readiness to quit.

References


Contact Information

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Acknowledgements

NIDA SP05 DA009253 Support from: Adam Carrico, PhD, Barbara Tajima, Edith, Thao Le (statistics), and Emma Passalacqua

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