Trauma, Psychiatric Disorders, Substance Use, and Smoking Among Women

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TRAUMA, PSYCHIATRIC DISORDERS, SUBSTANCE USE, AND SMOKING AMONG WOMEN

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Background

- Despite decreasing smoking rates among women in the general population, there remain subgroups of women characterized by high nicotine dependence, who remain less able to quit.
- One subgroup of women who continue to smoke at rates higher than the general population are those who have past experiences of trauma, are vulnerable to psychiatric disorders and have substance use problems/addictions.
- However, the prevalence of the co-occurrence of trauma, psychiatric disorders, and substance use problems/addictions, with smoking among women has not previously been synthesized.
- The purpose of this study is to conduct a comprehensive review to identify the prevalence of smoking among women with co-existing experiences of trauma, psychiatric disorders, and substance use problems/addictions.

Methods

- A comprehensive search of the COCHRANE Library, Medical Literature Analysis and Retrieval System Online (MEDLINE), and PsycINFO was performed using the following combinations of primary key words:
  - Trauma OR Sexual Assault OR Post-traumatic Stress Disorder; OR Addictions OR Substance Use OR Drug use; Mental Illness OR Mental Disorders OR Psychiatric disorders AND smoking OR Tobacco or nicotine OR cigarette AND/or psychiatric disorder; OR control AND therapy OR treatment OR intervention OR program OR counseling AND cognitive behavioral OR pharmacotherapy OR brief intervention AND bupropion/Walditab/Vyvanse OR nicotine replacement OR sertraline/oral/naproxine OR naltrexone
- The search was limited to articles:
  - a) that provided data for the prevalence of tobacco use among women with a trauma, and/or substance use and/or psychiatric disorder;
  - b) in the English language;
  - c) published between January 1990 and July 2010 (references in the authors’ personal files also were examined for potentially relevant articles).
- Of the 786 studies initially obtained from the search strategy, only 13 studies met our inclusion criteria. Although several studies have addressed smoking in relation to either experiences of trauma, or psychiatric disorders, or substance use disorders, we specifically included studies which assessed the prevalence of smoking among women with two or more co-morbidities (See Table).

Summary of Results

- The results from reviewed studies indicated a high prevalence of smoking among women with co-existing substance use disorders, psychiatric disorders, and/or experiences of trauma.
- Smoking rates ranged from 32%-58% among women with trauma histories.
- One study identified a 88% smoking prevalence among women with other substance use disorders, and another study found smoking prevalence ranging from 30.3%-49.4% among women with psychiatric disorders.
- We also found a high prevalence of smoking among pregnant women with co-occurring disorders, ranging between 35% and 88%.

Results from Reviewed Studies

<table>
<thead>
<tr>
<th>Author (Year) &amp; Country</th>
<th>Population</th>
<th>Source</th>
<th>Sample Size</th>
<th>Smoking History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azemar et al., (1996)</td>
<td>Physical and sexual assault; Co-Morbidities: PTSD, Depression</td>
<td>National Women’s Study</td>
<td>N = 3006</td>
<td>Assault victims: Current: 38.7%, Lifetime: 71%, PTSD: Current: 40.5%, Lifetime: 72.7%, Depression: Current: 41.3%, Lifetime: 67.2%, Assault victims with PTSD &amp; depression: Current: 54.9%</td>
</tr>
<tr>
<td>Dennis et al., (2007)</td>
<td>PTSD; Co-Morbidities: Major depression, alcohol, drug dependence/abuse, specific or social phobia</td>
<td>Medical center</td>
<td>N = 49 (women with PTSD = 32)</td>
<td>Women with PTSD: 20.1 cig/day, Women without PTSD: 19.2 cig/day</td>
</tr>
<tr>
<td>Dobbie et al., (2004)</td>
<td>PTSD; Co-Morbidities: Major depression, alcohol and drug problems, domestic violence</td>
<td>Veterans Affairs Medical Centre</td>
<td>N = 1206 (women with PTSD = 266)</td>
<td>Past year smokers: Women with PTSD: 39.5%, Women without PTSD: 22.9%</td>
</tr>
<tr>
<td>Lemon et al., (2002)</td>
<td>Physical or sexual partner violence (IPV) or psychological abuse; Co-morbidity: High risk alcohol use</td>
<td>Rhode Island Behavioral Risk Factor Surveillance System</td>
<td>N=1653</td>
<td>Current smokers: Physical/Sexual IPV: 44.9%, Psychological IPV: 34.8%, No IPV: 23.4%</td>
</tr>
<tr>
<td>McFarlane, Parker, &amp; Soeken, (1996)</td>
<td>Physical abuse; Co-morbidity: Alcohol use and drug use</td>
<td>Public prenatal clinics in Houston and Baltimore</td>
<td>N = 1203 (pregnant women)</td>
<td>Current smokers: 29.9%, Alcohol/drugs: 8.8%, Experienced abuse: 38.0%, Both: 13.4%</td>
</tr>
<tr>
<td>Weinbaum et al., (2001)</td>
<td>Intimate partner violence (IPV) Co-morbidities: Psychiatric</td>
<td>California Women’s Health Survey</td>
<td>N = 2983 (women with IPV = 267)</td>
<td>Current smokers: 32.0% (Women with IPV), 17.6% (Women without IPV)</td>
</tr>
</tbody>
</table>

SUBSTANCE USE

- Smokers seeking alcohol treatment Co-morbidity: Depression
- AlcohoL treatment programs N=47 (women) | Current smoking: 100% |
- Rapid dependence Co-morbidity: Depression
- Residential and outpatient program N=50 (pregnant women) | Smoking prevalence: 88% |

PSYCHIATRIC DISORDERS

- General psychiatric illness; Co-morbidities: Alcohol use and drug use | Survey of outpatient women veterans | N=1,257 | Smokers: Major depression: 39.6%, Panic disorder: 49.4%, Eating disorders: 30.3%, PTSD: 39.9%, Any psychiatric condition: 37.9% |
- General psychiatric illness; Co-morbidities: Drug abuse or dependence | Survey of women from WIC | N=133 (pregnant women) | Psychiatric disorder: 35%, Anxiety disorder: 20%, Effective disorder: 17%, PTSD: 11%, Drug/alcohol abuse or dependence: 7% |
- Binge eating disorder Co-morbidities: Mood disorder, anxiety disorder, substance use disorder | Baseline survey for treatment study | N=103 | Lifetime vs. daily smoking: Mood disorder: 53.8% vs. 65.1%, Anxiety disorder: 76.9% vs. 51.2%, Substance use: 94.2% vs. 25.8% |

Conclusions

- For more information, please contact Chizimuzo T.C. Okoli: okoli@cw.bc.ca

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The researchers involved in this project from the BC Centre of Excellence for Women’s Health are also part of ITAG, a research team committed to improved tobacco reduction and cessation interventions based on an understanding of gender influences on health behaviour

These findings:
- highlight that smoking prevalence is high among women with co-existing trauma, psychiatric disorders and substance use problems/addictions;
- point to the need to further understand the multidirectional relationships between smoking and the experiences of trauma/violence, psychiatric disorders and substance use disorders;
- suggest the need to intervene with support on smoking reduction/cessation in settings in which women (including pregnant women) are treated for trauma, substance use problems/addictions and mental health concerns;
- point to the need for practitioners to be informed as to how the experience of trauma, mental illness and substance use problems may make the goal of cessation particularly challenging for women smokers, when they are developing and implementing smoking interventions for women.