

Gender Differences: Smokers With and Without Substance Abuse History

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Previous research suggests that individuals with chemical dependence history experience more intense nicotine addiction, and during smoking cessation may be more likely to demonstrate increased negative affect and unfavorable scores on psychometric assessments. It is unknown how men and women may differ in their susceptibilities to such undesirable outcomes. From 1992-2004, The Indiana University Nicotine Dependence Program (IUNDP) treated over 1200 patients using a Mayo Clinic-based protocol which assesses the behavioral, social, and physiological aspects of nicotine dependence. The IUNDP was instituted at Fairbanks Hospital's addictions center to address tobacco use among the patients and staff. Charts of individuals who completed nicotine dependence treatment (1992-2011) were selected from IU School of Dentistry and Fairbanks Hospital for retrospective analysis. Chart selection criteria consisted of the availability of complete pre-and post quit measures for a minimum of four total appointments and two post-quit appointments. Reviewed were 107 charts from patients without a history of chemical dependence (ND) and 123 from those with a chemical dependence history (CD), including 120 men and 110 women. Student researchers used a standardized protocol to capture 16 tobacco use and demographic variables and 12 post-quit measures. Comparisons between CD and ND groups were made using Pearson chi-square tests for binary data, Wilcoxon rank sum tests for all other data, and Wilcoxon signed rank tests for changes between time periods. Despite similarities among CD and ND smokers, males and females appear to face distinct challenges. Results suggest CD males are significantly more negative in mood, and are more likely to have increased withdrawal symptoms at the end of treatment. Males were also more likely to experience adverse events with NRT. Both CD males and females experienced more increased appetite than their ND counterparts. Females scored higher on addiction-related sensorimotor manipulation and may have increased propensity for psychological dependence.

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