Assessment of nicotine dependence and its determinants among tobacco users in Davangere Taluk- A Cross-sectional study

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ABSTRACT

Introduction: Tobacco use accounts for most of the preventable death and disability. Assessment of severity of nicotine dependence is the first step in providing tobacco cessation services. The objectives of this study were to assess nicotine dependence and its determinants, to assess severity of nicotine dependence using FTND scale (Fagerstrom test for Nicotine Dependence) and find attitude towards quitting. Methods: This was a community-based, Cross-sectional study of 617 tobacco users (age >10 years of age) in urban and rural areas of Davangere taluk, Karnataka. Interviews were conducted by using a structured, pre-tested questionnaire by house-to-house visits. Results are presented using percentages, Chi-square test, and multiple logistic regression analysis. Results: Among current users, 71.5% (95% CI 67.5% - 75%) were nicotine dependent, and 12.8% (95% CI 10.3% - 15.7%) showed harmful use. Together ‘high’ and ‘very-high’ dependents were more among males compared to females (63.5% vs 45.6%, $X^2=107.64$, $P<0.001$). A higher proportion of ‘high’ and ‘very-high’ dependents was seen in beedi smoking group (76%) compared to cigarette smokers (64.1%), smokeless tobacco users (51.7%) and mixed users (54.6%), $X^2 = 41.61$, $P<0.001$). Frequency of use ($X^2=49.386$, $P<0.001$) and duration of use ($X^2=66.554$, $P<0.001$) were significant determinants of nicotine dependence in multivariate analysis. A significant proportion of tobacco users expressed desire to quit (61.5%). Conclusion: Nicotine dependence is quite high in the community and a significant proportion of tobacco users are already suffering from high and very-high severity nicotine dependency. Frequency of tobacco use, and duration of use are important determinants of nicotine dependency and its severity.

Key word: Nicotine dependence, FTND, Tobacco, smoking, smokeless, Quit.