

Effect of Ramadhan fasting on nicotine dependence among smokers

ABSTRACT

Smoking is widespread among Malaysians. It has become one of the negative health behaviour that brought in health and social problems into the community. Smoking also increased the burden of national economy, particularly an increase in funding to provide public health services. The effects of smoking can be decreased by promoting smoking cessation. One of the approaches that provide opportunity for smoking cessation intervention is focusing on supportive environment that can be naturally found during the month of Ramadan where every Muslim is obligated to fast which includes abstaining from smoking. This study used a one group pretest-posttest study design to evaluate the effect of Ramadan environment on nicotine dependence using Fagestrom Test for Nicotine Dependency (FTND) and saliva cotinine among a group of smokers working in Selangor. It aims to identify the changes in the smoker's nicotine dependency score by using FTND and saliva cotinine level from before Ramadan to during Ramadan and after Ramadan. A total of 61 male and current smokers were recruited. Their mean age was 32 (\pm 6.6) years old. By using paired sample t-test, the results of the study revealed a significant positive change of FTND score from before Ramadan to during Ramadan and from before Ramadan to after Ramadan ($p = 0.001$, $p = 0.002$). Similarly, there was a significant positive change in the saliva cotinine level from before Ramadan to during Ramadan ($p = 0.001$). The findings suggest that there are significant effects of fasting in reducing smoker's nicotine dependency. Results of this study clearly show that fasting gave various positive effects on the mind and body of the smokers. Thus, smokers should take these advantages of fasting during Ramadan to quit smoking.

Keyword: Nicotine dependence; Fasting; Ramadan environment; Male; Smokers