The impact of quitting smoking on depressive symptoms: Findings from the International Tobacco Control Four-Country Survey

Cooper, J., Borland, R., Yong, H.H., & Fotuhi, O.

Abstract
Aims: To determine whether abstinence or relapse on a quit attempt in the previous year is associated with current depressive symptoms.

Design: Prospective cohort with approximately annual waves. Mixed effect logistic regressions tested whether Time 2 (T2) quitting status was associated with reporting symptoms at T2, and whether Time 1 (T1) symptoms moderated this relationship.

Setting: Waves 5 to 8 of the Four Country International Tobacco Control Study: a quasi-experimental cohort study of smokers from Canada, USA, UK and Australia.

Participants: 6978 smokers who participated in telephone surveys.

Measurements: T1 and T2 depressive symptoms in the last 4 weeks assessed with two screening items from the PRIME-MD questionnaire. Quitting status at T2: 1) No attempt since T1; 2) Attempted and relapsed; 3) Attempted and abstinent at T2.

Findings: Compared with no attempt, relapse was associated with reporting T2 symptoms (OR = 1.46, 95% CI:1.33,1.59). Associations between T2 quitting status and T2 symptoms were moderated by T1 symptoms. Relapse was positively associated with T2 symptoms for those without T1 symptoms (OR = 1.71, 95% CI:1.45,2.03) and those with T1 symptoms (OR = 1.45, 95% CI:1.23,1.70). Abstinence was positively associated for those without T1 symptoms (OR = 1.37, 95% CI:1.10,1.71) and negatively associated for those with T1 symptoms (OR = 0.74, 95% CI:0.59,0.94). Age significantly moderated these associations. Relapse did not predict T2 symptoms for those aged 18 to 39 irrespective of T1 symptoms. The negative effect of abstinence on T2 symptoms for those with T1 symptoms was significant only for those aged 18 to 39 (OR = 0.61, 95% CI = 0.40, 0.94) and 40 to 55 (OR = 0.58, 95% CI = 0.40, 0.84). The positive effect of abstinence on T2 symptoms for those without T1 symptoms was significant only for those aged over 55 (OR = 1.97, 95% CI = 1.35, 2.87).

Conclusions: Most people who stop smoking appear to be at no greater risk of developing symptoms of depression than if they had continued smoking. However, people over age 55 who stop smoking may be at greater risk of developing symptoms of depression than if they had continued smoking.

Recommended Citation