Interventions for enhancing adherence to pharmacological treatment should be included in the smoking cessation process

**Hot topic**

Former studies have shown that, in clinical trials, early (12 weeks) smoking cessation rates were largely increased among adherent versus nonadherent smokers, independently of the prescribed pharmacotherapy [1].

In a large trial comparing web-based counselling, proactive phone-based counselling and integrated web and phone counselling, all three associated with varenicline, 6-month abstinence rates were not significantly different, high (33%) and similar in the three arms and similar with those observed when varenicline was combined with in-person counselling [2].

The present study is a secondary analysis of the same population, centred on the role of adherence to varenicline treatment on the 6-month cessation rates in a real-world context.

**Methods**

Enrollers were recruited through brochures placed in clinics, physician referrals and through a Quit-line programme.

They were adults smoking at least 10 cigarettes-day⁻¹ over the past year, with internet and telephone access, medically appropriate for varenicline use, without serious diseases, and without current use of bupropion or nicotine replacement therapy. They were 1,161 enrolled, interviewed and followed up by phone 21 days, 12 weeks and 6 months after the target quit day date. They received a prescription for a free 12-week supply of varenicline to start 1 week before the target quit date.

The results were self-reported adherence to varenicline treatment and 7-day point prevalence abstinence at 6 months, those lost to follow-up being considered as smokers.

**Results**

The mean age of the participants was 47.3 years; they smoked an average 19.7 cigarettes-day⁻¹, their mean Fagerström test for tobacco dependence was 5.0 and 83% had used nicotine replacement therapy previously and 49.2% had used bupropion. The self-reported average total number of days with varenicline was 63.3, less than the 84 prescribed and also somewhat lower than the mean 69.4 days obtained from data issued from the pharmacists.

More than half (52.2%) of those who reported taking at least 80% of the medication...
were abstinent at month 6, compared with 25.4% of those taking less than 80%. More than half of ex-smokers and further smokers who stopped varenicline at week 12 reported side effects as a reason for stopping.

Multivariate predictors associated with greater adherence at 12 weeks included older age, male sex, greater self-efficacy feeling for varenicline adherence and lower initial medication side effect severity.

EDITORIAL COMMENTS

These results in a large real world cohort show the main impact of adherence to varenicline treatment on the 6-month cessation rate, and the fact that adherence was not optimal with a limited telephone support and even with a free treatment.

Enhancing adherence could be obtained by suggesting the smoker to pair medication intake with a regularly occurring daily activity, by insisting on self-monitoring of his smoking behaviour and on the usefulness of full treatment duration.

Repeated health professional behavioural interventions during the initial treatment phase of the cessation process, insisting on usually transitory character of the side effects and on the major importance of treatment adherence can be expected to improve both adherence and cessation rates.

Since the adherence with NRT and bupropion observed in other studies also are insufficient, the recommendations apply to all currently available pharmacotherapies.

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References
