

Lack of smoking cessation in patients with coronary artery disease: a common worldwide problem

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Smoking is a major modifiable risk factor for arterial vascular disease that is associated with significant health and economic burdens. The lethal effect of smoking and the benefits of smoking cessation have been exhaustively addressed in public awareness initiatives and prevention strategies in international medical guidelines.¹⁻³ There is overwhelming evidence that smoking cessation interventions are among the most effective and economical ways to prevent recurrent cardiovascular events in patients who have survived an arterial thrombotic event.⁴⁻⁶ Despite this fact, persistent post-event smoking occurs frequently worldwide and smoking cessation interventions are underutilized. Overall, the fatal effects of smoking and the benefits of smoking cessation are poorly explained to the patient globally. An example of the poor explanation comes from a recent European study of 8000 patients who experienced a coronary event.⁷ In this study, 16% of the participants were smokers at 6 months after an index event, and 49% were persistent smokers 1 month prior to the index event. While the majority of the patients were prescribed standard secondary prevention medications, such as lipid- and blood pressure-lowering drugs, specific smoking cessation counseling was provided to only 19% of the patients, among whom only 20% were offered smoking cessation agents, such as bupropion or varenicline.⁷ Another recent study⁸ demonstrated that the rates of cardiovascular events were lower within 5 years of smoking cessation among former heavy smokers than in those who continued heavy smoking. This study has also revealed that 10 to 15 years of no smoking are needed to reduce the elevated cardiovascular disease (CVD) risk among former heavy smokers to the level of risk observed in never-smokers. Thus, the reduction in the risk of CVD with smoking cessation is a very long process.

Ramotowski et al⁹ elegantly addressed the realities of smoking cessation in patients undergoing percutaneous coronary interventions (PCIs) in a study conducted at a major postgraduate medical education institution in Poland. The aims of the study were to estimate the proportion of patients who declared successful quitting of smoking and to identify the determinants of and factors influencing smoking cessation. In this study, 1 in 4 contacted patients (921/3719) was an active smoker at the time of PCI. The investigators were able to contact 241 smokers 6 months after PCI, among whom nearly half had the procedure performed for an acute coronary syndrome, and 51% intended to stop smoking at the time of PCI. However, at 6 months, approximately 67% were still smoking. Only 27% of the smokers received some form of nicotine substitute therapy. More than 90% indicated that health issues were the main reason for smoking cessation. Successful smoking cessation was found to be independently associated with 4 important variables: 1) 4 or more days of hospitalization (odds ratio [OR], 3.62), 2) the Fagerström score (a marker of nicotine dependency) equal to or below 4 points (OR, 1.96), 3) a scheduled second hospitalization (OR, 2.54), and 4) a smoking load equal to or greater than 51 pack-years (OR, 2.28). Interestingly, sociodemographic factors linked to poor smoking cessation outcomes, such as low level of education, low income, and the lack of a partner were not associated with smoking cessation.⁹

What is the take-home message from the study by Ramotowski et al?⁹ It is sobering to witness that only half of the patients ever intended to stop. Despite numerous initiatives, studies have shown low overall global rates of specific support measures, such as behavioral counseling, self-help materials, nicotine substitute therapies, and continued follow-up discussions with the patient.^{10,11} Moreover, there may be considerable

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differences in specific smoking cessation strategies used across countries that influence the success rates. Finally, as worldwide time constraints imposed upon care providers increase and organizational resources and manpower support become more limited, it will be increasingly challenging to achieve the goal of smoking cessation. On a patient level, lack of willingness to accept counseling and medications are other major barriers. In the current study, some of these factors are highlighted and help us better understand the reality of achieving smoking cessation. The findings of Ramotowski et al⁹ should serve to further motivate care providers and clinicians to reduce the frequency of this powerful risk factor.

ARTICLE INFORMATION

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