

# Patients who gave up smoking before surgery had half as many complications afterwards

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More than a third of patients who took part in an eight-week smoking cessation programme before and after planned surgery were able to give up and most of them were still smoke free after a year, according to research in the March issue of *Anaesthesia*.

They also experienced half as many complications after [surgery](#) as the [patients](#) who did not receive help to give up [smoking](#), with 21 per cent experiencing problems as opposed to 41 per cent.

Researchers randomly assigned 117 patients who were due to undergo general or [orthopaedic surgery](#) to an intervention and control group.

"The intervention group attended weekly meetings or received telephone support and were provided with free [nicotine](#) replacement therapy, while the control group just received standard pre-operative care" says lead author Dr Omid Sadr Azodi from the Karolinska Institute in Stockholm, Sweden.

"Patients were then assessed at regular intervals before and after surgery and after 12 months.

"One interesting thing to emerge from the study was the high refusal rate. A further 76 patients declined to take part in our research because they were unwilling to give up smoking or were stressed by their forthcoming surgery."

Key findings from the study included:

- Twenty of the patients in the intervention group (36 per cent) abstained from smoking for the minimum period of three weeks before their operation and four weeks after surgery, compared with one patient in the control group (two per cent). The figures peaked at 58 per cent one week before surgery.
- People in the intervention group were more than twice as likely to be smoke free at 12 months than those in the control group. Eighteen of the intervention group (33 per cent) were still smoke free and nine members of the control group had given up (15 per cent).
- Patients with a lower level of nicotine dependence - who scored less than four on the zero to ten Fagerstrom scale - were 3.4 times more likely to be smoke free at 12 months.
- Those with a high body mass index - of more than 30 - were 3.3 times more likely to be smoke free after 12 months.
- Being employed increased the long-term success rate to 2.3, but marital status, education and living with a smoker had no significant bearing on abstinence rates at 12 months.
- The majority of the patients who took part completed the study - 87 per cent of the intervention group and 84 per cent of the control group.

Just over half of the 117 patients (53 per cent) were male and the average age was 56. Their average body mass index was just over 25. Median smoking levels were ten to 20 cigarettes a day and the median time since patients started smoking was just over 35 years. Just over a third (36 per cent) had a nicotine dependency score of less than four.

As well as the medical condition they were receiving surgery for, 15 per cent suffered from depression, 12 per cent from chronic obstructive pulmonary disease, nine per cent from chronic heart disease and two per cent from diabetes.

"Smokers are prone to developing a number of complications after surgery, ranging from impaired wound and bone healing to life-threatening pulmonary and cardiovascular problems" says Dr Sadr Azodi. "This is why it is so important to find feasible, financially attractive and effective ways to help patients stop smoking before surgery.

"Our study shows that providing support in the run up to surgery enabled a third of the patients who took part in the study to remain smoke free after a year.

"Lower nicotine dependence levels were significantly associated with long-term abstinence and we believe that high levels should be classed as a chronic disorder. Our intervention was for a fairly intense eight-week period, but we recognise that people with higher levels of dependency may need longer to help them stop smoking before surgery."

Source: Wiley ([news](#) : [web](#))

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