Nicotine preloading for smoking cessation: the Preloading RCT

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Plain English summary

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N icotine preloading means using a nicotine patch before stopping smoking, while smoking normally. This may reduce a person's drive to smoke and weaken the addiction, thereby reducing cravings after stopping smoking and increasing the chance of stopping smoking successfully. As previous studies have reported conflicting outcomes, a new, bigger study was needed.

We decided by chance whether a person who wanted help to stop smoking should use a full-strength nicotine patch for 4 weeks or receive an extra preparation for their quit day. People then attended a NHS Stop Smoking Service and used medication and behavioural support to help them quit.

Altogether, 1792 people joined the study. On average, they were somewhat more deprived than the average English person and most of them smoked more than the average English person who smokes.

Of the people who used preloading, 18% stopped smoking for at least 6 months, compared with 15% of those who did not use it, a small difference that may be due to chance. More people who used preloading were prescribed nicotine to use after quit day, whereas more people who had not used preloading used varenicline (Champix[®]; Pfizer Inc., New York, NY, USA). Varenicline helps more people stop smoking than nicotine; taking account of this difference, preloading looks more effective, with a difference of 4 percentage points, and we can be more confident that this difference is not due to chance. Only about 6% of people stopped using preloading and it appeared to be safe and well tolerated.

Preloading slightly increased NHS costs in the first 6 months but reduced them in the longer term. Modelling predicted that preloading reduces the incidence of smoking-related illness and reduces overall health-service costs.

Our study also clarified that preloading works through reducing the drive to smoke; Stop Smoking advisors could monitor this in people who are using preloading and adjust the treatment according to the drive to smoke.

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