Title: How does screening for the early detection of lung cancer facilitate smoking cessation? A qualitative study of screened smokers

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Background

There is little evidence that lung cancer screening prompts smoking cessation in screened populations overall. However, a more complex relationship is emerging where abnormal screening results appear to promote abstinence and those smokers who attend screening seem more motivated to stop smoking than those who do not. There is a need to understand how screening programmes can best facilitate reductions in smoking prevalence in screening populations. We aimed to investigate in the context of lung cancer screening i) facilitators to smoking cessation and continued abstinence and ii) attitudes to cessation support.

Methods

A qualitative sub-study to the Early Cancer detection test Lung cancer Scotland (ECLS) trial was conducted. We examined responses to ECLS questionnaires completed pre- and post-screening to sample smokers who had made a successful attempt to stop smoking, an unsuccessful attempt to stop or no attempt to stop since screening. Participants with positive and negative screening test results were sampled. Thirty-one in-depth semi-structured face-to-face interviews were conducted to investigate wider experiences of smoking in the screening context. Audio recordings were transcribed verbatim and thematically analysed. We present here a subset of data relating to the specific aims above.

Results
Participants reported receiving a ‘fright’ from positive test results and reassurance from negative results, both facilitating smoking cessation. Test results were seen as objective health feedback which could not be ignored. Recipients of positive test results were further motivated to remain abstinent by the prospect of future study-related CT scans. There was evidence that some had participated in screening with the intention of stopping smoking. Screening factors often acted in combination with other facilitators, including increasing smoking stigma, and life-stage changes such as becoming a grandparent. Attitudes to cessation support combined with a screening programme were mixed. Some felt they would be deterred from attending screening if they thought they would be targeted with cessation messages. Others were open to the idea of cessation support but doubted whether it could offer cessation strategies they had not already tried.

Conclusion

Smoking cessation support targeted at lung cancer screening groups should take into account ways that test results can facilitate cessation attempts, and the contributing social and life stage factors of older smokers. Some smokers eligible for screening may be deterred by the prospect of associated cessation interventions. Others who want to quit may have exhausted available cessation strategies and may be seeking something novel to help them quit.