

Cost-of-living/ cost of smoking: Cooperative learning on NCD health inequalities in deprived communities within the cost-of-living crisis

Smoking and smoking cessation in Scotland: secondary data analysis

Eilidh Cowan, Lead Research Fellow

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Background: Tobacco use is a leading cause of preventable death globally, responsible for over 8 million deaths per annum. Tobacco use, and tobacco harm disproportionately affect deprived communities, and there are few, effective interventions specifically tailored to these groups. Scotland has the worst health inequalities in Western Europe and smoking is a significant cause and effect of that inequality.

Methods: A descriptive analysis of smoking rates and smoking cessation in Scotland was performed using the Scottish Health Survey. This analysis aimed to:

- a) Quantify smoking rates by deprivation;
- b) Quantify attempts to quit smoking by deprivation;
- c) Quantify the success of attempts to quit smoking by deprivation.

Findings:

(a) Smoking in Scotland



Figure 1: Smoking status by percentage in Scotland 2008-2021 stratified by SIMD

Figure 1 details the smoking status of the Scottish population stratified by SIMD quintile. From 2008-21, the proportion of the Scottish Health Survey that smoke (the smoking rate) has decreased across all SIMD quintiles. Smoking rates are highest in the most deprived quintiles, decrease across quintiles, and are lowest in quintile 5, the least deprived. In quintile 1, rates have dropped from approximately 40% to 25% from 2008 to 2021. In Quintile 5, these have changed from 15% to 5%. Given Scotland's population and the trend observed here, we can estimate that in Scotland, Quintile 1 have around 250,000 smokers vs 25,000 in Quintile 5. The analysis indicates that Scotland's target of reducing smoking to 5% by 2034 will be hardest to reach in those from higher levels of deprivation.

(b) Smoking cessation in Scotland

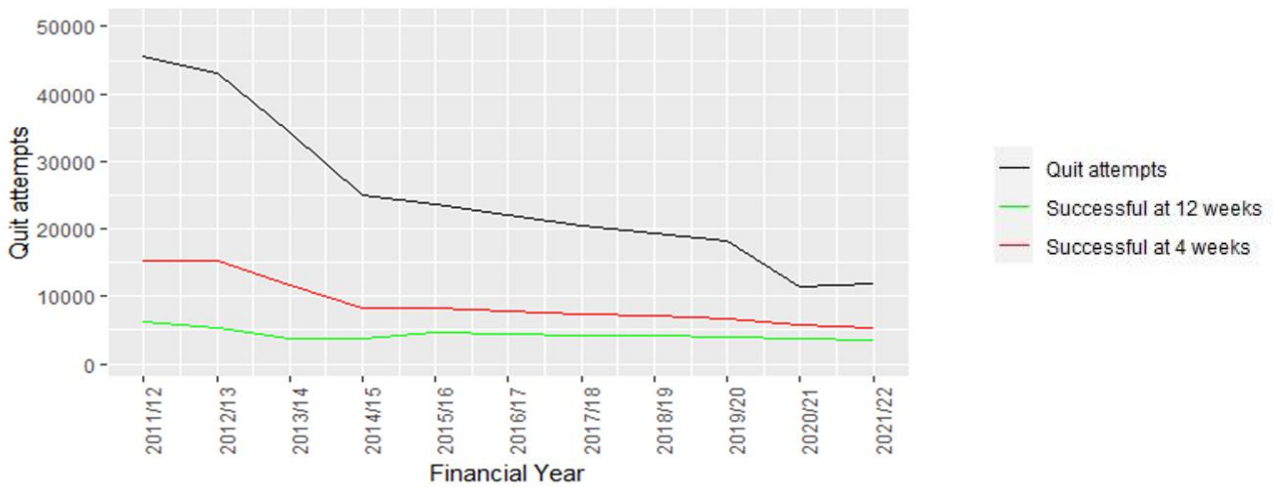


Figure 2: Number of smoking quit attempts in Scotland 2011-22 for SIMD 1 (most deprived)

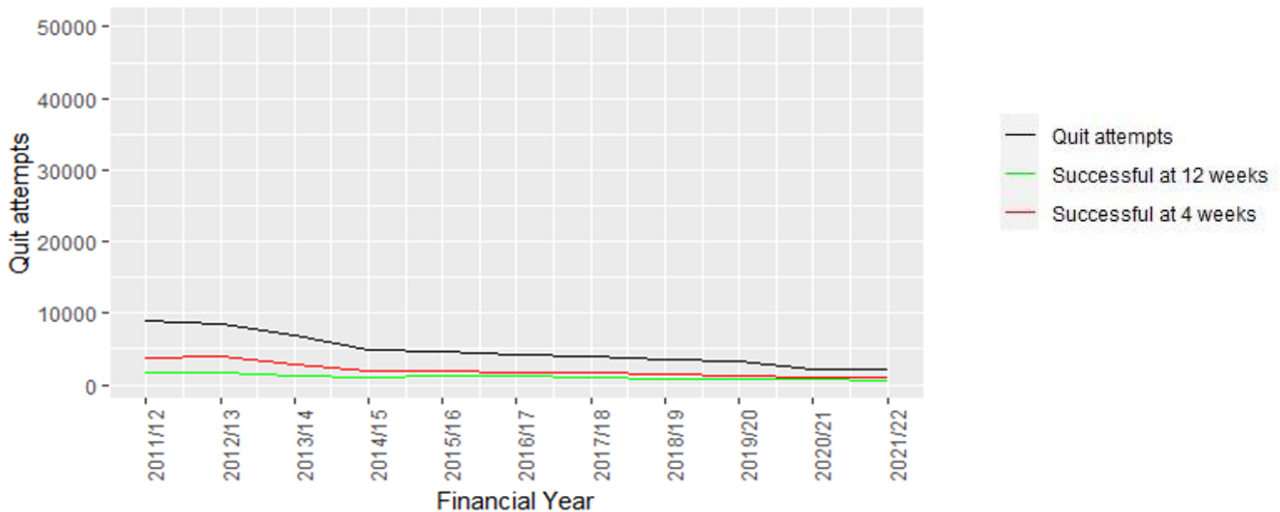


Figure 3: Number of smoking quit attempts in Scotland 2011-22 for SIMD 5 (least deprived)

Figures 2 and 3 present the number of smoking quit attempts in Scotland from 2011-22 by deprivation Quintiles 1 and 5 (most and least deprived). Smoking quit attempts are counted as the number of attempts to quit smoking using a cessation service. The black line describes the overall number of quit attempts, the red line those successful at 4 weeks and the green line those successful at 12 weeks.

Approximately 40% of smokers in 2021-2022 attempted to quit smoking in SIMD 1 and 50% of smokers in SIMD 5 attempted to quit. Data on individuals we attempted to quit more than once were not available, hence the approximation. We then considered the success of these quit attempts in Figures 4 and 5, by calculating a percentage of individuals who had successfully stopped smoking at 4 weeks and 12 weeks.

This chart demonstrates similar rates of successful attempts to quit smoking in the least and most deprived areas in recent years. Previously these attempts were moderately more successful in areas of lower deprivation, but since 2020 these appear to be more equal. Approximately 45% of those who attempt to quit are still successful at 4 weeks in 2022 with around 30% in both still being successful in 2022.

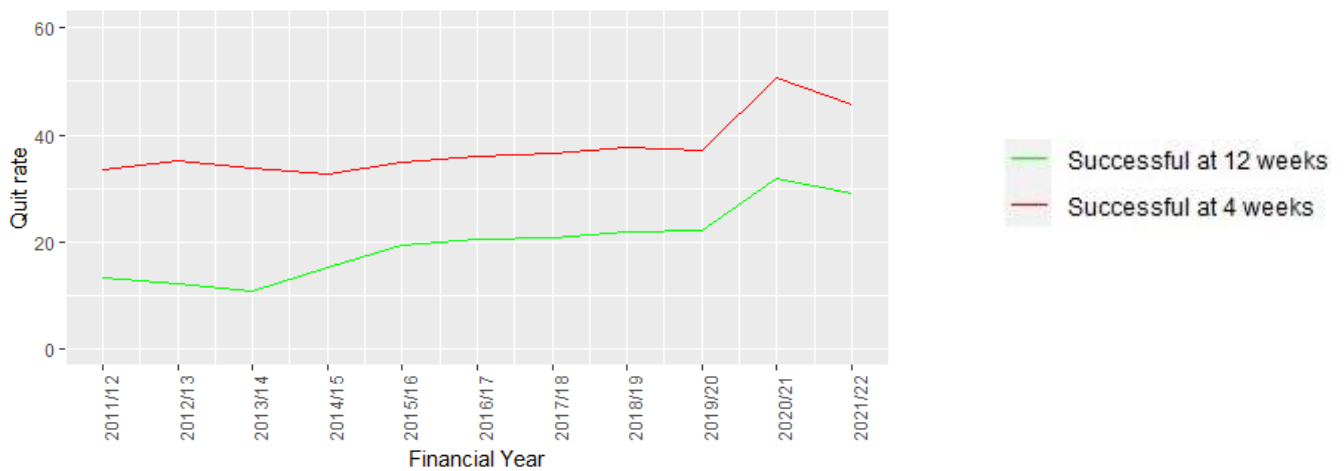


Figure 4: Smoking quit rates 2011-22 for SIMD 1

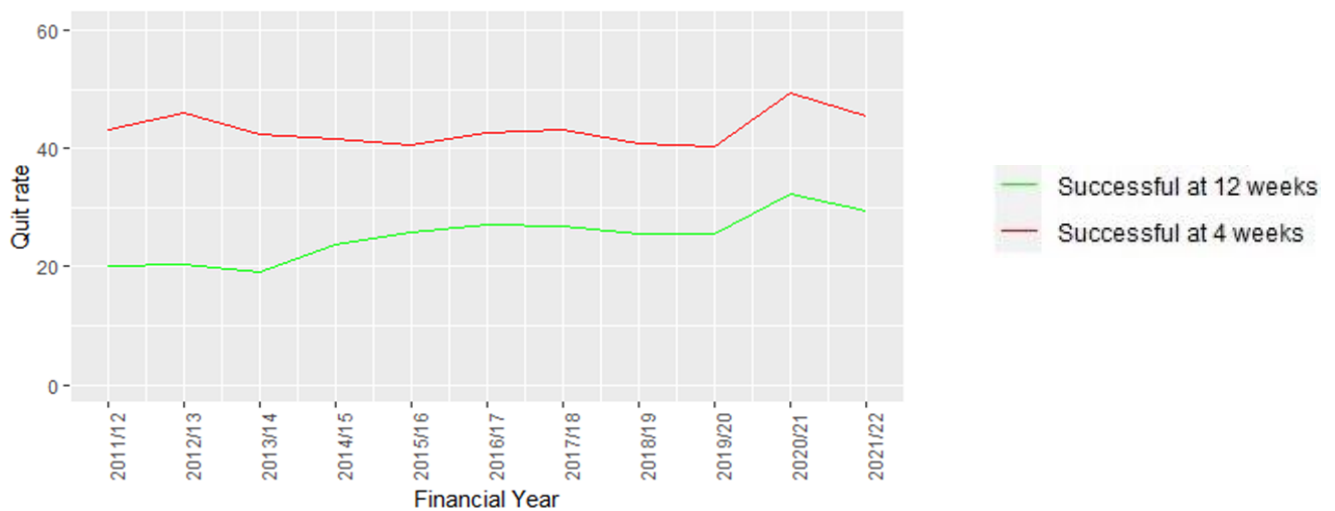


Figure 5: Smoking quit rates 2011-22 for SIMD 5

The main interpretations from this analysis are as follows:

1. Smoking is higher in areas of high deprivation.
2. A smaller proportion of smokers in areas of high deprivation attempt to quit smoking.
3. Attempts to quit smoking after 4 weeks and 12 weeks are equally successful across deprivation quintiles.
4. Smoking cessation is just as effective in areas of high deprivation.
5. Attempts to improve uptake of services in areas of deprivation may aid in reducing overall smoking numbers.

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