

Stop Smoking Services in Cornwall: Effect of 1999 Campaign on Awareness and Behaviour

Final Report

Alex Watt, BSc, MSc; Dr Jenny Morris, BSc, PhD; Dr Leo Salter, BSc, PhD

**Cornwall Health Research Unit
Penhaligon Building
Trevenson Lane
Pool
Cornwall TR15 3RG**

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1. Introduction

Each year in the UK smoking causes more than 120,000 deaths of people aged 35 or more, 20% of deaths at all ages, and more than 25% of deaths between 35 and 65. Smoking is reducing the female advantage in life expectancy and widening the social class divide in mortality, and it remains the largest single preventable cause of death and disability in the UK (Raw et al, 1999).

In April 1999 the Cornwall Health Action Zone (HAZ) was allocated £327,000 to support additional services on smoking cessation. Future funding is dependent upon evidence of effectiveness of this allocation for the services that are provided.

In order to provide this evidence and to provide information for the development of future strategies for smoking cessation the Cornwall Health Research Unit (CHRU) was approached by the Cornwall & Isles of Scilly Stop Smoking Co-ordinator to undertake an evaluation of the 1999 Stop Smoking Strategy.

This project focused on assessing how well the Stop Smoking Programme was promoted during 1999, in terms of impact upon levels of public awareness and smoking behaviour. The intention of this evaluation is to provide information to assist policy formulation for the forthcoming year.

2. Aims

The agreed aims of this project were:

- To assess the public awareness of the 1999 Stop Smoking Programme
- To assess the impact of the programme on smoking behaviour
- To assess whether people wishing to stop smoking are aware of where to go for guidance

2.1 Promotion of the Stop Smoking Programme

The 1999 Stop Smoking Programme used a number of promotions to increase public awareness of the help available for people who wished to stop smoking. These consisted of:

- Advertisements and interviews on local radio between September 1999 and January 2000
- Advertisements in local papers
- The distribution of 170,000 brochures in September 1999
- The distribution of 500 posters. These were distributed widely in the September to December period (1999)

3. Methodology

3.1 Design

A cross sectional survey was undertaken. This entailed the collection of data on the awareness of the Stop Smoking Programme and behavioural changes attributed to awareness at one point in time.

3.2 Data Collection

A questionnaire was developed, which built on existing national smoking and demographic surveys (British Household Panel Survey, 1995; Health Education Authority's National Adult Smoking Tracking Survey, Bolling, 2000, personal communication). The questionnaire aimed to assess awareness of the Stop Smoking Programme in Cornwall, its impact on smoking behaviour and awareness of what help is available by whom and from where. Data on age, sex, income, ethnicity and postcode were also collected to allow sub-group analyses to be undertaken. The final version of

the questionnaire was approved by the Stop Smoking Co-ordinator. A copy of the questionnaire is contained in Appendix 1.

3.3 Sample

A sample frame was drawn up which consisted of the electoral roll of Cornwall and the Isles of Scilly. The sample was taken from a database of the electoral roll that consisted of 380,000 people in Cornwall and the Isles of Scilly aged over 18. However, as 42% of the population were ex-directory this generated a list of 162,000 telephone numbers. From this a random sample of 2,500 telephone numbers were generated. Quota sampling was used to ensure adequate coverage of age and sex bands. The aim was to achieve a total of 500 completed questionnaires: 250 males and 250 females divided into five age groups (20-29, 30-39, 40-49, 50-59 and 60 –70 years).

3.4 Procedure

Telephone interviews were used to collect information. Four experienced telephone interviewers were employed over a consecutive 14-day period. The interviews started at 1500 hours and ended at 2100 hours during weekdays and 1000 to 1600 on weekends to ensure a representative sample of people both at home and away from home. Each person was called once and then every person not contacted in the first round was telephoned again at a different time from the first telephone call.

The interviewers were requested to read verbatim from the questionnaire to ensure questions were asked in a standardised manner.

For those individuals who did not wish to take part, the interviewers were asked to collect basic socio-economic data to enable comparisons to be made between responders and non-responders.

4. Results

A total of 2,500 people were phoned of which 1,164 (47%) were contacted and spoken to. Of these 434 (37%) did not wish to participate, 34 (3%) completed the basic socio-economic questions and 696 (60%) completed the full questionnaire. Thus the response rate was 60%.

Appendix 2 contains the actual numbers of responses to each question broken down by age, sex, smoking status and postcode area.

Table 1 shows the age and sex breakdown for the completed questionnaire.

Table 1. Age and Sex of Respondents

	n	20-39	30-39	40-49	50-59	60-70
Female	403 (58%)	9%	15%	20%	24%	32%
Male	293 (42%)	10%	13%	16%	30%	31%

4.1 Non-Respondents

Although 468 people declined to be interviewed, 34 did agree to complete Section A of the questionnaire. From this data analysis shows that 62% of these non-respondents were non-smokers, 26% ex-smokers and 12% smokers (n=34). In terms of age breakdown 65% were aged >50 (n=34). There were no significant differences between the sexes.

4.2 Completed Questionnaires

All further analysis is based on the sample of 696 who completed the questionnaire.

4.3 Impact of Advertising Programme

4.3.1 Awareness

Section C of the questionnaire addressed public awareness of services that encourage and support those people wishing to stop smoking. Questions 16 and 17 covered public awareness whilst questions 18-20 covered the impact of the advertisements on behaviour.

Table 2. Percentage of respondents aware of advertisements supporting people to stop smoking by age and sex (n=696)

	20-29		30-39		40-49		50-59		60-70		Total
	M	F	M	F	M	F	M	F	M	F	
Aware	3%	4%	3%	6%	6%	8%	9%	10%	7%	11%	67%
Not aware	2%	1%	2%	2%	1%	3%	4%	4%	6%	8%	33%
Total	5%	5%	5%	8%	7%	11%	13%	14%	13%	19%	100%

Table 3. Percentage of respondents aware of advertisements supporting people to stop smoking by sex

	Male (n=292)	Female (n=404)
Aware	66%	69%
Not Aware	34%	31%

Table 4. Percentage of respondents aware of advertisements supporting people to stop smoking by age.

	20-29 (n=64)	30-39 (n=98)	40-49 (n=126)	50-59 (n=187)	60-70 (n=221)
Aware	69%	70%	78%	72%	57%
Not Aware	31%	30%	22%	28%	43%

The chi-square test indicated that there were no significant differences between male and females. However there was a significant association between age and awareness ($\chi^2 = 18.167$ df = 4 p < 0.001). This indicates that those in the older age group were more aware of advertisements offering support to stop smoking.

Table 5 shows the percentage of respondents aware of advertisements supporting people to stop smoking by smokers, non-smokers and ex-smokers.

Table 5.

	Smoker (n=151)	Ex-Smoker (n=244)	Non-Smoker (n=301)
Aware	74%	67%	66%
Not Aware	26%	33%	34%
Total	100%	100%	100%

There were no significant differences between these groups.

Those respondents who were aware of recent advertisements offering support in stopping smoking were then asked about the methods of advertisement (Question 17). The results are shown in Table 6.

Table 6. Summary Percentages of Respondents Who Remembered Specific Advertising (n=750)

Method of Advertising	%
Local Radio	5
Local Newspapers	12
National Television	50
National Newspapers	10
Leaflets Through Door	3
Information From Helpline	1
Information From GP/Nurse	3
Information From Pharmacist	2
Posters at Hospital/GP	7
Word of Mouth	1
Other	6
Total	100

As expected national television was the medium most respondents remembered followed by local newspapers. Leaflets through doors were as effective as receiving information from a GP or nurse. Notably, posters at hospitals or GP practices were recalled by 7% of respondents. (At the time the survey was undertaken no local radio advertising was active. Information from the Stop Smoking Unit suggests that this medium normally produces good results in terms of people phoning the helpline.)

Analysis of the data by smoker, non-smoker and ex-smoker status (Table 7)) revealed that 24% of smokers, 34% of ex-smokers and 41% of non-smokers recalled some method of advertising.

The full breakdown of data is given in Table 7.

Table 7. Method of Advertising Recalled by Smoking Status.

Advertising Medium	Smoker n=184	Ex-Smoker n=258	Non-Smoker n=308
Local Radio	4%	5%	4%
Local Newspapers	13%	12%	12%
National Television	48%	50%	52%
National Newspapers	9%	11%	11%
Leaflets Through Door	5%	3%	3%
Information From Helpline	0%	0%	0%
Information From GP/Nurse	5%	2%	3%
Information From Pharmacist	4%	1%	2%
Posters at Hospital/GP	6%	8%	6%
Word of Mouth	1%	0%	1%
Other	4%	7%	6%
Total	100%	100%	100%

4.3.2 Behaviour

Question 18 focused on the impact the advertisements had on behaviour patterns.

Although this question was aimed at smokers some parts were relevant to ex-smokers and non-smokers.

Table 8 shows the impact on smokers' behaviour on seeing the advertisements broken down by sex.

Table 8. Percentage of Respondents by Sex

	Male n=94	Female n=121
Discussed giving up smoking with family and friends	20%	27%
Discussed giving up with my GP or other health professional	3%	13%
Phoned a helpline number shown in the advertisement	1%	3%
Obtained information about giving up somewhere else	18%	4%
I planned to give up smoking	16%	20%
I cut down on the amount I smoke	20%	26%
Other	21%	7%

Males answered the majority of the 'other' category and the majority of responses were that nothing was done as a result of the advertisements.

A separate question was read out to all respondents, (smokers' ex-smokers and non-smokers) which asked whether as a result of the advertisement they had tried to persuade relatives or friends, who smoke to stop smoking. 16% of smokers, 40% of ex-smokers and 29% of non-smokers had tried to persuade a friend or relative to stop smoking.

4.3.3 Attitude Towards Advertisements

Question 19 posed a number of statements to smokers and asked them whether they agreed or disagreed with the statement. The results are shown in Tables 9 and 10.

Table 9. Percentage of Smokers Who Agreed or Disagreed with Attitude Statements

Statement	n	Agree	Disagree
I am fed up with seeing these advertisements	108	18%	82%
These advertisements give smokers the confidence to give up	107	49%	51%
These advertisements made giving up smoking look easier than it is	104	61%	39%
These advertisements are unfair to smokers	107	19%	81%
These advertisements patronise or talk down to smokers	108	40%	60%
The advertisements offer sympathy and support to anyone giving up	104	74%	26%
The advertisements make me feel guilty about smoking	108	55%	45%
These advertisements made me believe I could give up smoking if I tried.	105	57%	43%

Table 10. Percentage of Smokers Who Agreed or Disagreed with Attitude Statements By Sex

Statement		Male	Female
I am fed up with seeing these advertisements	Agree	9%	25%
	Disagree	91%	75%
These advertisements give smokers the confidence to give up	Agree	55%	43%
	Disagree	45%	57%
These advertisements made giving up smoking look easier than it is	Agree	66%	57%
	Disagree	34%	43%
These advertisements are unfair to smokers	Agree	9%	26%
	Disagree	91%	74%
These advertisements patronise or talk down to smokers	Agree	32%	46%
	Disagree	68%	54%
The advertisements offer sympathy and support to anyone giving up	Agree	72%	76%
	Disagree	28%	24%
The advertisements make me feel guilty about smoking	Agree	51%	57%
	Disagree	49%	43%
These advertisements made me believe I could give up smoking if I tried.	Agree	58%	57%
	Disagree	42%	43%

Question 20 was aimed at smokers and attempted to assess whether the Stop Smoking advertisements had a negative impact on their behaviour. Table 11 shows the results for all respondents who were smokers.

Table 11. Percentages of Smokers Attitude to Changing Smoking Behaviour (n=151)

Statement	Percentage (n=151)
More determined to quit?	20%
More determined to continue?	4%
Less determined to quit?	4%
Less determined to continue?	8%
Indifferent?	64%

The same data is broken down by sex in Table 12.

Table 12. Percentages of Smokers Attitude to Changing Smoking Behaviour by Sex (n=151)

Statement	Male (n=74)	Female (n=77)
More determined to quit	15%	25%
More determined to continue	1%	8%
Less determined to quit	1%	6%
Less determined to continue	4%	12%
Indifferent	78%	49%

4.4 Behaviour and Demographic Data on Smokers, Ex-Smokers and Non-Smokers

4.4.1 Demographic Data (n=696)

Of the 696 respondents who completed the questionnaire 151 were smokers, 244 were ex-smokers and 301 were non-smokers. Table 13 shows the percentages breakdowns by age and sex.

Table 13. Percentage Breakdown by Age and Sex by Smoking Category

Age Group	Smoker		Ex-Smoker		Non-Smoker	
	Male (n=74)	Female (n=77)	Male (n=116)	Female (n=128)	Male (n=103)	Female (n=198)
20-29	11%	19%	7%	2%	13%	9%
30-39	14%	21%	9%	13%	16%	15%
40-49	19%	16%	9%	26%	22%	17%
50-59	34%	21%	34%	29%	23%	23%
60-70	23%	23%	41%	30%	26%	37%
	100%	100%	100%	100%	100%	100%

Table 14 shows marital status broken down by the three smoking categories.

Table 14. Marital Status and Smoking Habit

Marital Status	Smoker (n=151)	Ex-Smoker (n=244)	Non-Smoker (n=301)
Married/Living with Partner	68%	81%	73%
Separated/Divorced	11%	9%	6%
Widowed	5%	5%	8%
Never been married	15%	5%	13%
Prefer not to say	1%	0%	0%
	100%	100%	100%

Table 15 shows the percentage of smokers, ex-smokers and non-smokers by income.

Table 15. Income and Smoking Habit

Income	n=	Smoker	Ex-Smoker	Non-Smoker
0-£5,000	131	26%	30%	44%
£5,001-£10,000	104	23%	42%	35%
£10,001-£15,000	76	23%	34%	43%
£15,001-£20,000	49	26%	41%	33%
£20,000+	54	11%	32%	57%
Prefer not to say	282	20%	35%	45%

Table 16 shows employment status by smoking status.

Table 16. Employment and Smoking Status

	Smoker (n=151)	Ex-Smoker (n=244)	Non-Smoker (n=301)
Self-employed	9%	12%	10%
In paid employment	43%	41%	38%
Unemployed	4%	1%	3%
Retired	23%	39%	38%
Looking after family at home	14%	5%	7%
Full time student	1%	1%	3%
Long term sick or disabled	5%	1%	1%
Other	1%	0%	0%
	100%	100%	100%

4.4.2 Ex-Smokers (n=244)

The following analysis is undertaken on those respondents who indicated they were ex-smokers (n=244).

The questions for ex-smokers were focused on length of time they had stopped smoking, the main factors that influenced their decision to stop smoking and the help they received.

Over 90% (225) of respondents had stopped smoking for over a year and 6% (14) had stopped smoking within the last year. Table 17 shows the main factors that influenced their decision to stop smoking; respondents were allowed to quote more than one factor.

Table 17. Influencing Factors in Stopping Smoking

Influencing Factors in Stopping Smoking (n=318)	%
Poor health	31%
GP advice	3%
Family	13%
Friends	3%
Information on local radio	1%
Information on national television	2%
Leaflet delivered to door	0%
Information in local newspaper	0%
Expense	20%
Other	27%

The main factors that made up the other categories (n=86) were health concerns (35%), pregnancy (17%) and not enjoying smoking (16%).

Question 10 focused on the factors that gave most help in stopping smoking and the results are shown in Table 18.

Table 18. Factors Which Gave Most Help in Stopping Smoking

Factor Which Gave Most Help (n=244)	%
Support from family and friends	19%
Support from GP	2%
Support from pharmacist	0%
Nicotine patches	2%
Stop smoking helpline	0%
Other	75%

The main factors in the other category (n=184) were willpower (59%) and ‘just gave up’ (17%).

Question 11 asked whether the ex-smokers had used any of the Stop Smoking services. Of the 244 ex-smokers 1% (2) had used the services, 93% (227) had not and 6% (15) didn’t know. The services the ex-smokers used were the telephone support line and group support. Respondents who used the Stop Smoking Services were either very satisfied or satisfied with the services provided but the sample size is too small to be meaningful.

4.4.3 Smokers (n=151)

Two questions were asked specifically of smokers which focused on their willingness to stop smoking and the type of factors that would help them stop smoking. Of the 151 respondents 59% (89) were interested in stopping smoking and 41% (62) were not.

Tables 19 and 20 show the percentages of smokers interested and not interested in stopping smoking broken down by sex and by age

Table 19. Stopping Smoking by Sex

	n	Male	Female
Interested in Stopping Smoking	89	44%	56%
Not Interested in Stopping Smoking	62	56%	44%

Table 20. Stopping Smoking by Age

	n	20-29	30-39	40-49	50-59	60-70
Interested in Stopping Smoking	89	13%	20%	18%	24%	25%
Not Interested in Stopping Smoking	62	18%	13%	16%	32%	21%

Females were more interested in stopping smoking than men. Those aged between 50-59 were the least interested in stopping smoking.

All the respondents who were interested in stopping smoking (n=89) were then asked what they would do to get help in stopping smoking. The results broken down by sex are shown in Table 21. The sample size by age group was too small for any meaningful analysis.

Table 21. Help in Stopping Smoking

	n=118	Male (n=57)	Female (n=61)
Go to GP for advice	10%	11%	7%
Go to nurse at surgery for advice	4%	9%	0%
Go to pharmacist	7%	7%	7%
Buy nicotine patches	20%	25%	16%
Read stop smoking leaflets	9%	12%	7%
Use telephone helpline	3%	5%	2%
Others	47%	31%	61%

The largest single factor in the other category was will-power which accounted for 50% of the responses.

5. Discussion

5.1 Summary

Age and smoking status are important factors in awareness of Stop Smoking Programmes. National television was the most effective medium in communicating Stop Smoking messages. However, local newspapers and posters in hospitals and GP practices are relatively effective. Using leaflets does not appear to be an effective method.

The most common impact of seeing Stop Smoking campaigns is for smokers to discuss giving up smoking with family and friends as well as cutting down on the amount of cigarettes smoked. Smokers are not fed up with seeing advertisements on the risks of smoking and those offering support. The majority of smokers are indifferent to changing their behaviour as a result of seeing advertisements.

Poor health and the expense are the major factor in influencing smokers to stop smoking. The main factor which helped respondents stop smoking was willpower. Nearly 60% of all smokers interviewed were interested in stopping smoking.

5.2 Limitations

A key issue for this report is the representativeness of the sample. The percentage of people in the population of Cornwall and the Isles of Scilly who smoke (by age and sex) needs to be compared with the sample interviewed in this study.

Because the timeframe of the study was compressed by organisational demands a number of factors need to be taken into account. The number of respondents was restricted by the urgency with which the report was required and this resulted in a high refusal rate (40%).

Ideally a pilot study would have been undertaken to test the appropriateness of the questionnaire. Where possible, however, we used questions that had been validated for use in national studies thus minimising problems resulting from being unable to undertake a pilot study

Although there is a possibility of bias with a self-report questionnaire, or indeed any approach investigating behaviour such as smoking, this methodology has been used satisfactorily in national and international studies of a similar nature.

5.3 Implications and Findings

Several points emerge from the study

Without examining cost data it difficult to assess the cost-effectiveness of the strategies used in 1999, especially the use of leaflets. It would be useful to compare the use of resources for leaflets with that of resources for GP Practice nurse time or local newspapers since according to the data in Tables 6 and 7 these produced equal awareness. It is also worth considering whether these resources might be more effectively used to support the free provision of a complete nicotine patch intervention service. From the evidence available this is recognised as being highly effective and should be considered as policy for the forthcoming year. Table 17 also suggests that other factors are more important in producing smoking cessation. Additionally it is worth noting that the guidelines produced by Raw et al (1998) endorsed the use of group support and nicotine patches as interventions in smoking cessation.

The older age groups were more aware of advertisements offering support to stop smoking (p5, Table 4). There are several reasons for this, mostly linked to the fact that these cohorts are the ones most likely to see or experience the effects of long term tobacco addiction amongst their peer group. A greater focus on these groups may be rewarding and have important health benefits.

Ex-smokers are an important resource in proselytizing (p7). They may well be a group for whom extra targeting and support will be rewarded, especially if they are present in the smoker's home environment (see also p10, Table 17 and p11, Table 18).

Attitudes to advertisements show that their message is accepted as being essential correct (p7, Tables 9 and 10). However their message is not producing dramatic behavioral change (64% of smokers appear to be indifferent to the message, p8 Table11). This is consistent with models of health behaviour, which indicate that influencing *intentions* to change behaviour is the factor that is most important. Attitude change alone is unlikely to result in behavioral change. As with many other addictive behaviours motivation will-power is the most important element in cessation.

Differences between the sexes (p8, Table 12) suggest that some thought might be given to interventions that differentially target males and females.

References

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