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Using social marketing to increase recruitment of pregnant smokers to smoking cessation service: a success story

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Summary *Objectives*. To explore what it is like to be a pregnant smoker in Sunderland and to inform the development of a Smoking Cessation Programme; to use qualitative techniques to develop a cessation programme tailored to pregnant smokers.

Study design. The intervention follows years of social marketing research and development in Sunderland, Wearside, UK.

Methods. Information derived from nine focus groups (mainly with women from deprived areas, social class C2D and E) provided insights into the issues facing smoking pregnant women. This information was then used to overcome barriers to smoking cessation using the principles of social marketing. The number of women recruited into a specially designed smoking cessation support initiative was compared with women recruited into comparable groups in the North East.

Results. Recruitment of pregnant (and non-pregnant) smokers to the new NHS smoking cessation programme in Sunderland has increased during the intervention phase compared with neighbouring Primary Care Trust areas (in which different smoking cessation interventions targeted at pregnant women were being undertaken).

Conclusions. This innovative intervention has been successful in generating ideas, guiding development of a customer-friendly service and encouraging women to come forward for smoking cessation support during their pregnancy. The target population have welcomed the approach, and health professionals have enjoyed and benefited from the role play with professional actors.

Introduction

The impact of smoking in pregnancy is well documented[1] and includes a higher rate of miscarriage, perinatal mortality, low birth weight and sudden infant death syndrome[2] to name but a few. About 30% of women who smoke in the UK continue to smoke during pregnancy.[3] The White-paper 'Smoking Kills' set a target to reduce the percentage of women who smoke during pregnancy from 23 to 15% by the year 2010, with a fall to 18% by 2005.[4]

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In order to achieve this target, the Department of Health allocated £3 million to develop smoking in pregnancy services in 2001/2002. A further £3 million was allocated in 2002/2003 for the continuation of the smoking in pregnancy initiative. The funding in Sunderland was used to appoint a local champion to co-ordinate services for pregnant women who want to give up smoking. Services are now available across the NHS in England, providing counselling and support to pregnant smokers. Services are provided in group sessions or on an individual basis, depending on local circumstances and client preferences.

In Sunderland last year, between April 2001 and March 2002, 19 women set a quit date and eight successfully quit smoking at the 4-week stage through the mainstream NHS smoking cessation service. Quit rates have significantly increased since the development of locally dedicated services for pregnant women. The research project was conducted using social marketing techniques to explore the needs of pregnant smokers in Sunderland and to devise a successful smoking cessation programme.

Social marketing is the art and science of promoting planned, targeted social change. The term 'social marketing' was first introduced in 1971 to describe the use of marketing principles and techniques to advance a social cause, idea or behaviour. 'Since then, the term has come to mean a social-change management system involving the design, implementation and acceptability of a social idea or practice in one or more groups of target adopters. It uses concepts of market segmentation, consumer research, product concept development and testing, directed communication, facilitation, incentives and exchange theory to maximize the target adopters' response. The sponsoring agency pursues the change goals in the belief that they will contribute to the individual's or society's best interests.[5] Social marketing is a recent newcomer to public health in the UK.[6–8]

Methods

Although it has long been known that smoking during pregnancy is undesirable, and that many women still find it difficult to abstain, many healthcare professionals are at loss to help. Therefore, to start the social marketing process, we undertook extensive market research with the target population. Extensive developmental work was undertaken with the Centre for Social Marketing, Strathclyde University. Under the auspices of the Northern Regional Health Authority, the social marketing process was applied to a number of issues, including smoking in pregnancy. Once the skills in social marketing had been acquired, formative research was initiated. The research adopted a qualitative focus group method. Subjects were recruited to take part in one of 12 focus groups on a door-to-door basis by trained and experienced market research interviewers according to a strict code of conduct. The research spans 10 years from 1992. Most of the focus groups took place at the beginning, and the final two more recently. A total of 12 groups were segmented in relation to age, social class, smoking behaviour/history and cohabitation status. In order to avoid any possible bias, participants were not informed of the exact nature of the research, but were told that the discussion would be centred on the topic of 'health and illness'. The moderator ensured that the aims of the research were covered, without restraining the discussion, with the help of a discussion guide. Data were analysed by the group moderators: an audio recording was made of each group and contemporaneous notes were made by a trained observer. Using the audio recordings as an aide-memoir, and with the observer and notes, key themes were extracted and developed. The findings were used to develop the intervention, with feedback from participating target women at each stage of development.

The market research identified a number of barriers women face in relation to smoking cessation during pregnancy: unsatisfactory information, lack of enthusiasm or empathy from healthcare professionals and short-term support, all showing as a reluctance to be recruited. A number of strategies were therefore devised to overcome these barriers (Table 1).

Difficulty in recruiting women to take part in smoking cessation meant that we had to

Table 1 Barriers to smoking cessation for pregnant women in Sunderland with corresponding element of intervention to overcome them.

Barrier	Intervention
Difficulty in recruiting women	Proactive recruiting, dedicated worker, home visits
Poor existing information	Design and pre-test new marketing/information material with target population
Lack of enthusiasm from health professionals	Role play to engage health professionals
No nagging/make them feel worse	Consumer friendly cessation support (including dedicated worker)

concentrate efforts where women might be recruitable (in this case, in the antenatal clinic at first booking). Support was designed to be consumer friendly, using information from focus groups, recruiting skilled and empathic dedicated workers and using feedback techniques. Dissemination to professional stakeholders was an important role for the support worker. Apart from designing and pretesting posters and leaflets that would meet women's needs, a whole-time worker was specially recruited to provide long-term, home-based, user-friendly support. However, the major barrier to overcome was the lack of enthusiasm and empathy from the healthcare professional; to do this, we used professional actor/role-players.

By studying the transcripts of the focus groups, actor/role-players (part of a medical school repertory company specially recruited and trained for communication skills training) were able to bring to groups of healthcare workers the chance to interact with the target women as they had never before. Using active participation in group work, professional staff were able to obtain direct feedback on how it felt to be the target women, and what approaches might work more effectively. These sessions were evaluated highly by participants and proved to be effective in the intervention.

Smoking cessation activity was collected using paper forms (part of a wider monitoring system required by the Department of Health) and included numbers of women referred to the service, quit dates and numbers quitting at the 4-week point (a modest measure of success).* The data was collected for the intervention site and for services in neighbouring primary care trusts.

Results

Focus groups

Smoking behaviour

Smoking during pregnancy seemed to be less prevalent for women from ABC I backgrounds compared with C2DE backgrounds. The key target in terms of need therefore emerged as women from deprived areas (C2DE women).

Smoking motives

In addition to differences in lifestyle, there were also differences in motives for giving up smoking. For example, some women were motivated to give up for themselves and their baby, and so were more likely to stay off cigarettes after the birth.

> I thought if I do fall pregnant I'm going to stop and it was on my mind all the time. When I found out I was pregnant I thought, 'That's it, I'm not going to have another cigarette'. It was hard but I thought I'm going to put weight on anyhow, so I wasn't bothered about that. (Female, 26–32 years; ABC 1; long-term stopped smoking).

Some were motivated purely for the health of the baby and were more likely to return to smoking soon after the birth. This released the social pressure they had felt to give up during their pregnancy.

Understanding of the facts

In terms of their informational needs, women knew about the harmful effects that could result from smoking during pregnancy.

> They have mentioned that the smoke you're inhaling is going through to the baby's system. (Female; 26–32 years; ABC1; tried to give up)

> "They say when you smoke the baby can come out handicapped" (Female; 17–20; C2DE; Smoker).

Service issues

Any informational materials need to focus on solutions to giving up rather than the risks to their unborn child. Such solutions might include how to deal with cravings, how to cope with anxieties about weight gain or how to cope with mood swings. The women were dissatisfied with existing materials.

The relationships that women make with health professionals is crucial to how receptive they will be to messages and support, given that they are particularly sensitive to the approach and tone used. So, for example, they were disparaging of anything they saw as preaching to them or 'hard hitting'. They also picked up 'mixed messages': health professionals nagged them to quit, but did not follow through with enthusiasm or empathy. Ongoing support is what women need to help them give up (rather than ongoing 'nagging').

Supporting women also needs to take account of the contexts of their lives, particularly the importance that cigarettes hold on a daily basis (the routine of smoking, and how smoking helps women to cope with their problems, particularly boredom). This suggests that community-based

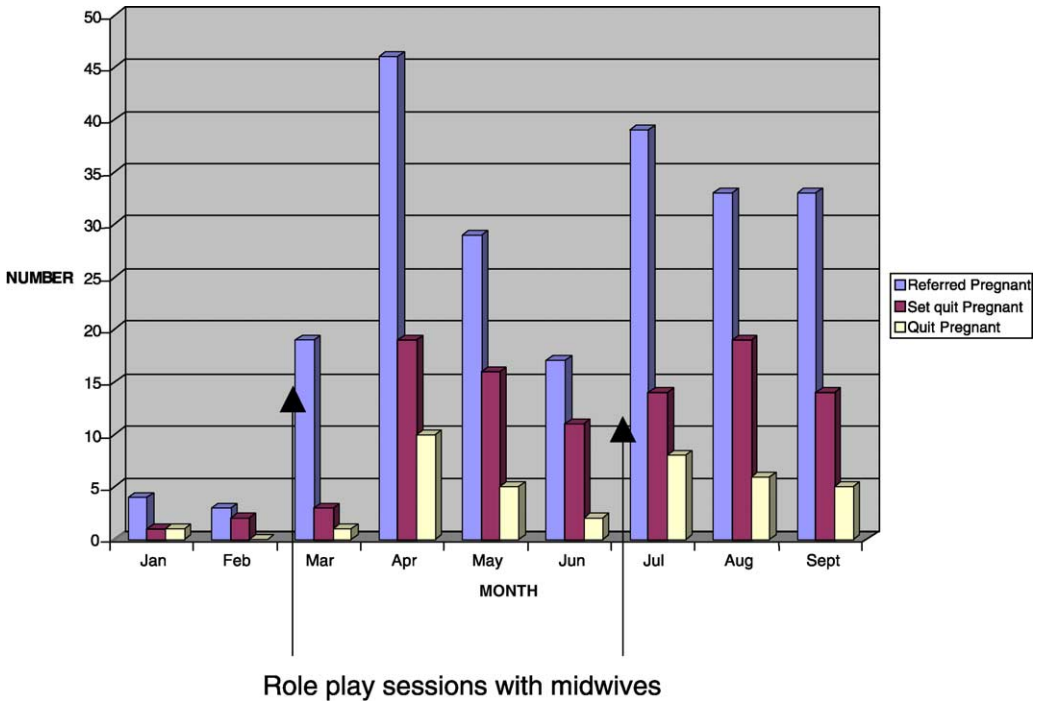

Figure 1 Sunderland smoking cessation activity (pregnancy) by month (referral to service, quit date and 4-week quit rates).

support (not overtly connected to the health service) may have a role to play.

Results after intervention

Recruitment of pregnant (and non-pregnant) smokers to the new smoking cessation intervention increased 10-fold during the intervention phase (Table 1).

Recruitment of pregnant smokers also increased after actor/role-play sessions with healthcare professionals (especially midwives) (Fig. 1), and was higher than the neighbouring services (in which different smoking cessation interventions targeted at pregnant women were being undertaken) in all the parameters measured (Table 2).

Discussion

Market research identified a number of barriers that women face in relation to smoking cessation during pregnancy: unsatisfactory information, lack of enthusiasm or empathy from healthcare professionals and short-term support, all showing as a reluctance to be recruited. Smoking during pregnancy also seemed to be less prevalent for women

Table 2 Sunderland smokers cessation support (January to August 2002) (pregnant and non-pregnant participants).

Progress	January	February	March	April	May	June	July	August	September
Referred P	4	3	19	46	29	17	39	33	33
Referred non-P	0	1	4	16	6	1	8	4	6
Set quit date P	1	2	3	19	16	12	15	20	14
Set quit date non-P	0	0	3	15	6	5	6	4	2
Four-week quit P	1	0	1	10	5	2	8	7	5
Four-week quit non-P	0	0	1	7	1	0	3	2	1
Four-week non-quit P	0	2	2	9	11	10	7	13	9
Four-week non-quit non-P	0	0	2	8	5	5	3	2	1

P, Pregnant; non-P, partner.

Table 3 Activity Sunderland smoking cessation support April to June 2002 compared with control areas (other primary care trusts in North East England chosen because of similar size/demographic mix).

Progress	PCT A	PCT B	PCT C	PCT D + E	Sunderland	North East
Set quit date	18	10	26	6	47	107
Success quit 4-weeks self-report	2	3	10	2	17	34
Not quit 4-weeks self-report	8	5	10	4	19	46
Not know/lost	8	2	6	0	11	27
Quit 4-weeks validated CO analyser	2	3	9	0	15	29

PCT, primary care trust, CO, carbon monoxide.

from ABC I backgrounds compared with C2DE backgrounds (borne out by the difficulties in actually recruiting pregnant women to come along to the group discussions).

A number of strategies were devised to overcome these barriers in the target population (Table 3).

The difficulty in recruiting women to take part in smoking cessation meant we had to concentrate efforts where women might be recruitable (in this case, in the antenatal clinic at first booking). Support was designed to be consumer friendly by using information from focus groups, recruiting skilled and empathic dedicated workers and using feedback techniques. Apart from designing and pretesting posters and leaflets that would meet women's needs, a whole-time worker was specially recruited to provide long-term, home-based, user-friendly support. The major barrier to overcome was healthcare professional enthusiasm/empathy, and to do this we used professional actor/role-players.

By studying the transcripts of the focus groups, actor/role-players were able to bring to groups of healthcare workers the chance to interact with the target women as they had never before. Using active participation in group work, professional staff were able to get direct feedback on how it felt to be the target women, and what approaches might work more effectively. These sessions were evaluated highly by participants and proved to be very effective in the intervention.

The modest success of the intervention shows how social marketing can bring about behaviour change in a hard-to-change population. Of course, longer follow-up studies are needed (and are being carried out) before a proper evaluation of this intervention can be made. These techniques are not fool-proof: it is only by diligent application and hard work by the participants that the success has been achieved.

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